

Energy Company Obligation (ECO) consultation: Updating Deemed Scores for ECO3 Questions



Background

The questions below relate to the consultation seeking views on our approach to updating the deemed scores for ECO3, should it be introduced as set out in the Government consultation. The consultation can be found on our website.

This consultation is open for six weeks from 4 April to 16 May 2018.

Notes For Completion

Please complete all relevant sections of the document by selecting an answer for the question and then providing reasons/evidence for your response in the box provided. The questionnaire should be completed in typeface and returned via email to eco.consultation@ofgem.gov.uk by **close of business on Wednesday 16th May 2018**.

1. Respondent Details

Organisation Name:	Centrica plc
Organisation type:	Energy Supplier. British Gas is the obligated UK supply business, owned by Centrica
Completed By:	Jessica Binks
Contact Details:	jessica.binks@britishgas.co.uk

1. Updates related to RdSAP and Fuel Prices

Q1. Do you agree with our proposal to apply the RdSAP v9.93 updates across all wall types which currently use a pre-installation U-value of 2.1 W/m²K?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☒ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer and include as much detail and evidence as possible.

No – we do not agree with the complete removal of the 2.1 pre-installation u-value for solid wall. Starting u-values greater than 1.7 remain in RdSAP for system build and timber frame properties built before 1967 (1965 Scotland) as there is insufficient evidence to warrant their removal.

Whilst BRE analysis may indicate that there are “relatively few” of these wall types in GB housing stock, the incentive in ECO is to find the most cost effective opportunities, which for solid wall insulation, means finding the least efficient properties.

Of a sample of 10k SWI measures installed during ECO1 and ECO2, we notified over 3k non-solid brick properties dated pre-1967 (c30%), investigation on which identifies system build rather than timber frame (see table below for further details). What maybe “few” in the context of a population of 7m GB homes, is material in ECO terms.

Delivery of SWI under HHCRO will be difficult and expensive. We would recommend that in order to maximise opportunity to find cost effective schemes, the definition remains inclusive of ‘non solid brick’ and therefore include stone, cob, timber frame and system build as per ECO2t SWI minimum. If the intention is to continue to address the least efficient wall types, we recommend retaining the 2.1 deemed scores for system build and timber frame.

Table 1:

Measure Type Description	Property Age	Installs	Percent
Solid Brick pre1967 (1965 Scotland)	1900-1929	1521	14%
Solid Brick pre1967 (1965 Scotland)	1930-1949	2612	25%
Solid Brick pre1967 (1965 Scotland)	1950-1966	1009	10%
Non solid brick	Pre 1900	34	0%
Non solid brick	1900-1929	22	0%
Non solid brick	1930-1949	467	4%
Non solid brick	1950-1966	2868	27%
Non solid brick	1967-1975	1715	16%
Non solid brick	1976-1982	112	1%
Non solid brick	1983-1990	1	0%
Solid Brick post1967 (1965 Scotland)	1967-1975	136	1%
Total		10497	100%

Source: BG analysis, sample of SAP scored installs in period 2013-2016

PLEASE REFER TO TABLE 1 IN SUPPORTING PDF SUBMISSION

Q2. Do you agree with our proposal to use the most up to date fuel prices available from the Product Characteristic Database (PCDB) for the deemed scores throughout ECO3?

- ☒ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer and include as much detail and evidence as possible.

Yes – we agree that the most up-to-date PCDB fuel prices should be used when setting the new deemed scores, and to retain the same scores for the duration of the scheme. PCDB fuel prices are not reflective of current retail prices, and nor should they be, thus updating during the scheme adds little to the accuracy. Under SAP, regular price updates were automated but also masked by the complexity of the model. With deemed scores the updates would require the issue of new spreadsheets with potential unintended consequences e.g. notification mistakes in submission of savings, or deliberate phasing by installers to gain

2. Proposed Alternative to Percentage of Property Treated

Q3. Do you agree with our proposed approach to removing POPT for the majority of measures by identifying average treatable areas and adjusting the scores accordingly?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☒ Disagree
- ☐ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer, and if applicable provide an alternative approach including as much detail and evidence as possible.

No.

We agree with the proposed simplification of removing POPT for measures where at least 67% of the property has been treated, and the methodology that has been used to determine average treatable areas (and hence POPT).

We do not agree with the application of the same POPT across all archetypes.

The proposed POPT values are lower than those applied to our ECO2t installs across the board.

Analysing by archetype however, we observe that smaller properties (flat and mid terraces) fare far worse than detached houses. This is particularly notable for wall insulation where the main drivers for a POPT less than 100% will be extensions and conservatories.

We recommend varying POPT by archetype. This will not add complexity (para 2.6 consultation document) as the POPT value is integrated into the deemed score, which are already separated out for different archetypes. If left as-is, flats and mid-terraces will become less attractive to installers which we do not believe aligns with the Government's policy intent.

PLEASE REFER TO FIGURE 1 IN SUPPORTING PDF SUBMISSION

Q4. Do you agree with our use of English Housing Survey data to identify average treatable areas for SWI, CWI, loft insulation, flat roof insulation and underfloor insulation?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☒ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer, and if applicable suggest an alternative source of data with justification including as much detail and evidence as possible.

No.

The proposed POPT values are lower than those applied to our ECO2t installs. We refer to our response to question 3, where we challenge the application of a single POPT per measure.

We are also aware that Scottish properties do not follow the English model. This would make a small impact if delivery in Scotland was proportional across all measures. However, we know that this is not the case, and most SWI during ECO2t has been installed in Scotland. Therefore, if an accurate calculation is sought, Scottish housing stock should be considered, specifically for SWI.

Q5. Do you agree with our use of English Follow up Survey data to identify average treatable areas for heating measures?

- ☐ Strongly Agree
- ☒ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer, and if applicable suggest an alternative source of data with justification including as much detail and evidence as possible.

Yes – but to build on Question 4, in the case of heating measures, we suspect that smaller properties will be unfairly disadvantaged by the application of a single average across all archetypes.

As is the case currently, there should be no need to calculate POPT for heating controls and no POPT factor should be applied to the available score. This will continue to support customers being left with a full set of controls.

Q6. Do you agree with our use of Ofgem data and industry opinion to identify average treatable areas for RIRI and park home insulation measures?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☒ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer, and if applicable an alternative approach with justification including as much detail and evidence as possible.

No.

We have limited experience of park home insulation but it has been noted in industry meetings that the average treatable area put forward has been based on a very small sample. We would therefore suggest taking the same approach as advocated in Question 7 and use 100% as default. There has been such low uptake of park home insulation to date (due to poor cost effectiveness and installation complexity) that 100% POPT is unlikely to lead to sudden and disproportionate delivery.

--

Q7. Do you agree with our proposed approach for measures for which there is insufficient data available to identify treatable areas?

- ☐ Strongly Agree
- ☒ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer, and if applicable suggest an alternative source of data with justification including as much detail and evidence as possible.

Yes – we agree that provided at least 67% is treated as minimum, that in the absence of other data, it is sensible to scores these measures 100%.

Q8. Do you agree with our minimum requirement that at least 67% of the property is treated in order to qualify for the full ECO3 deemed score?

- ☐ Strongly Agree
- ☒ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer, and if applicable an alternative approach including as much detail and evidence as possible.

Yes – we agree that a minimum requirement should be set and are happy with the 67% (two thirds) proposed.

Q9. Do you agree with our proposed approach of using POPT to score measures which do not meet the 67% minimum requirement?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☒ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer, and if applicable an alternative approach including as much detail and evidence as possible.

No.

We agree that a POPT approach should be used to score measures which do not meet the 67% minimum requirement, but we do not agree that the current ECO2t POPT approach is used. We propose that for these measures, the deemed score should be calculated based on the actual POPT – without any rounding - multiplied by the score allocated for treating 100% of the property. During score monitoring a tolerance of 10% should be allowed when the actual POPT is assessed, which would be a pragmatic approach.

We believe this approach will offer further simplification:

- It is unlikely to require additional calculation from the installer since we anticipate they will in any case calculate the actual POPT – either to support their decision that the measures is above the 67% threshold, or to support the calculated score where it is below that threshold
- It recognises that there is potential for different parties to arrive at a different value, but that this is acceptable within an agreed tolerance – like the principle of rounding that is in place currently
- It removes the requirement for rounding and for the collection of two POPTs (actual and rounded)
- It enables the supplier and installer to get credit that is directly proportionate to what has been installed and avoids unintended consequences which could result from rounding – which will always produce “winners and losers”
- It removes complexity where POPT is close to the 67% threshold and how this would be managed if rounding were used

To facilitate this proposal, we ask that Ofgem publish in their deemed score tables the 100% score for each measure, in addition to the score adjusted by the POPT factor. We would also ask that Ofgem provide a clear methodology for how the score for <67% POPT measures is to be calculated, stipulating the order of calculation and application of rounding at appropriate points.

3. Updates to the format of deemed scores

Q10. Do you agree with our proposed format for deemed scores?

- ☒ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer, and if applicable alternative suggestions with justification including as much detail and evidence as possible.

Yes – we agree.

The proposed format is simpler for systems and administrative updates and could also facilitate removal of proxies, as set out in our response to Q16i.

4. Updates to Room-in-Roof Insulation Scores

Q11. Do you agree with our proposal to update the assumed size of the floor area of the room-in-roof used to develop the RIRI score?

- ☐ Strongly Agree
- ☒ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer, and if applicable please suggest an alternative approach including as much detail and evidence as possible.

Yes –we prefer that floor area appropriate to age of properties treated is used instead (see question 12), but given that such granular data does not exist, we support this calculation.

Q12. Do you agree with our proposal relating to the assumed levels of insulation in the elements of the room-in-roof used to develop the RIRI score?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☒ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer, and if applicable an alternative approach including as much detail and evidence as possible.

No.

There has been a significant change in building standards over the last 50 years and properties renovated from the 1990s onwards are significantly more insulated than earlier conversions. The averaging of the data across all age groups incorrectly means that the measure is no longer considered cost effective; ruling this measure out on commercial grounds would place excessive pressure on remaining loft and cavity opportunities. We consider RIRI a key insulation measure for those households most in need, to deliver savings to their bills and comfort levels. Normal loft insulation is not applicable in many of these households.

Properties built from the 1980s onwards should not be the highest priority and we suggest a weighted average pre-1983 as shown in the table below. Specific age bands will be difficult to evidence but a common-sense approach can distinguish between pre- and post-80s. The use of a uValue of 2.0 instead of 2.3 would reduce scores by 14% (over and above all the other changes) instead of the 50% impact of the proposed calculation. This would enable RIRI to continue as a viable ECO measure in the most-needed circumstances.

Table 2:

Age	Proportion of RIR in age band	U-value
pre 1966	35%	2.3
1967-1975	8%	1.5
1976-1982	5%	0.8
Weighted Average	2.0	

Source: Deemed scores consultation document, table 5 (page 29), Ofgem, April 2018

PLEASE REFER TO TABLE 2 IN SUPPORTING PDF SUBMISSION

We recommend that age bands could be evidenced by use of a declaration by the householder, confirming to the best of their knowledge whether the conversion was completed before or after 1983, and the addition of C2 inspections for RIRI, enabling the TMA to assess the level of existing insulation. The householder declaration could be added to the existing RIRI checklist.

5. Updates to scores for heating measures

Q13. With regard to upgrades for inefficient mains-gas and LPG boilers, do you agree with the assumptions we have used to identify the pre-installation efficiency for non-condensing boilers?

- ☐ Strongly Agree
- ☒ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer, including as much detail and evidence as possible.

Yes – we agree with the assumptions.

However, we are concerned that the score changes made to heating measures and particularly the replacement of inefficient boilers are such that they are no longer commercially viable. Uplifts should be added to the scores if it is BEIS's policy intent that inefficient heating systems continue to be upgraded under ECO. Please see our response to Q16ii.

Q14. Ofgem are responsible for determining what constitutes a similar efficiency rating to non-condensing boilers and for electric storage heating with a responsiveness rating of 0.2 or less. We are in the initial stages of developing our position on this area and we welcome views from stakeholders. In responding you may have regard to the following non-exhaustive examples of issues to consider;

- (i) A methodology for determining this rating for each heating type
- (ii) Data sources that we could use

Please provide reasons for your answer, including as much detail and evidence as possible.

We would like to establish that non-condensing boilers of any fuel type, and any electric heating system with a responsiveness rating equal or less than 0.2 should be considered "inefficient", in accordance with wording provided in the draft Statutory Instrument.

By extension we propose that any central heating system that has a manufactured energy efficiency that is no better than a non-condensing boiler should likewise be considered "inefficient", in accordance with wording provided in the draft Statutory Instrument. Analysis of PCDF shows that the range of annual efficiency of a non-condensing boiler (gas / LPG / oil) is 55-85% (SAP 2012). Hence, any central heating system with efficiency less than or equal to 85% (taken from either PCDB or SAP Tables 4a-e) should be considered inefficient.

To target replacement of heating systems towards the most inefficient, we recommend 2 sets of uplifts for inefficient heating:

- 1) 8 x uplift for "open flue" systems. This includes back boilers and other very old and very inefficient systems. These are rare; EHS data suggests fewer than 500k private sector dwellings have a back boiler and there are probably fewer than 100k in the Affordable Warmth group. These

systems are very expensive for the householder to run and replacement is significantly more complex and costly than replacement of closed flue boilers; typically £1000+ additional cost to account for upgrading the system to meet regulatory requirements of the new boiler (e.g. upgrading gravity-fed tanks and systems to fully pumped, likely re-location of boiler etc). We propose a high uplift to reflect both householder benefit and full cost of install. Eligible systems can be identified by use of a simple checklist completed by an appropriately qualified person (as with the current boiler assessment checklist).

2) 4 x uplift for all other inefficient heating. As stated elsewhere in the consultation document, the scores for inefficient heating replacements are so low, the measures will not be cost effective, placing too much pressure on remaining measures of limited availability, driving up lead generation costs, and reducing the efficiency and deliverability of the obligation. We strongly support BEIS intent to promote multiple measures. A significant uplift is necessary to make heating measures reasonably cost-effective

PLEASE REFER TO TABLE 3 PROVIDED IN SUPPORTING PDF SUBMISSION

6. Updates to scores for Park Home insulation measures

Q15. Do you agree with the proposed update to the park home insulation deemed scores?

- ☐ Strongly Agree
- ☒ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ N/A

Please provide reasons for your answer, including as much detail and evidence as possible.

Yes.

--

7. Invitation to Provide General Comments

Q16. We are also interested in high-level and material issues which are relevant to and likely to have a substantive impact on our approach to improving deemed scores for ECO3, for example, you may have views on:

- (i) How could we streamline our administrative processes to further the main objectives of the deemed scores;
- (ii) How could we amend the underlying assumptions or methodology to improve the deemed scores.

Please provide as much evidence and detail as possible in your response.

- (i) We have the following suggestions to make:

Remove concept of proxies for heating and simply publish scores for all heating systems

The new flat file format proposed for scores would facilitate scores being listed against all heating systems, with scores copied from the appropriate proxy.

This would provide simplification for suppliers and installers and a richer data set for Ofgem as the pre-main heating type specified will be reflective of the actual pre-main heating type, rather than a proxy. This may also support resolution of duplicate cases.

Remove concept of proxies for non-EWI installed in a Park Home

Currently whenever a non EWI measure is installed in a Park Home it uses a bungalow proxy. This wouldn't be necessary if all the bungalow rows in the flat file were copied and renamed to park homes.

We would then no longer need to report Park Homes as bungalows. This would provide simplification for suppliers, installers and TMAs and a richer data set for Ofgem as the property type will accurately indicate either bungalow or Park Home.

Amend measure names for non-brick solid wall and boiler upgrades

- "XXX_non_solid_a_b" should be "XXX_solidnonbrick_a_b" to avoid confusion with walls that do not meet the ECO definition of solid and to be consistent with XXX_solidbrick_pre/post_a_b" and "XXX_cavity_a_b"
- Remove the pre/post element of "XXX_solidbrick_pre/post_a_b" as this does not convey any additional information and is not used for any other kind of solid wall name
- Boiler upgrades should be "B_Upgrade" not "B_Upgrades", consistent with "B_Broken" and "B_Repair"

Guidance on ESH and new POPT

We recommend that the advice on calculating POPT for ESH is reviewed and clarification provided on whether direct acting heaters should be installed when they are recommended by the manufacturer as top-up for rooms heated by drift heat. Additionally, any implications for how the 67% POPT threshold should be met must be specified.

Carry Over

We would welcome early insight into the methodology to be applied to ECO2 measures to be carried into ECO3, as it is crucial to the delivery of the obligation to understand the interactivity between this and ECO3 scores.

- (ii) How could we amend the underlying assumptions or methodology to improve the deemed score

British Gas support simplifying the administration of the Energy Company Obligation and under ECO2t the introduction of deemed scores has been a welcome step in helping to achieve this. We appreciate this opportunity from Ofgem to provide comments on proposed scoring changes for ECO3.

That said, we have concerns that overall scores for ECO3 will be reduced significantly, undermining the commercial viability of many measures. This becomes particularly problematic when applied to a narrow obligation such as Rural. Outside the heating cap and SWI sub-target, ECO3 will be restricted to delivery by loft and cavity insulation which will require significant penetration of remaining technical potential, as illustrated below:

PLEASE REFER TO FIGURE 2 IN SUPPORTING PDF SUBMISSION

To counter this, we recommend that a link is developed between scoring and what BEIS are trying to achieve. The above impacts, which may not have been fully incorporated into assumptions to date, have been signalled to BEIS for further consideration.

Deemed scores have a scientific basis but many adjustments are applied on top and variances averaged out:

- Deemed scores apply many assumptions - base case conditions and average floor area
- POPT averaging as put forward in this consultation
- Non-gas uplift of (1.35) for HHCRO insulation
- Lifetime adjustment for broken boilers
- Lack of "in-use factors"

It has long been recognised that there is a difference between modelled and actual savings of insulation measures. In ECO, this has been addressed by applying "in-use factors" to reduce the scores for CERO and CSCO. These are not applied to HHCRO.

We would therefore suggest Ofgem revisit the policy intent with BEIS to ensure scoring is absolutely aligned with and supports the delivery of the policy objective – alleviating fuel poverty. Holding firm to the science and striving for 'accurate data sources' to make small adjustments loses sight of the overall objective. We recommend:

1. Uplifts for Inefficient Heating Measures

Heating plays an important role in the day-to-day reality of fuel poverty and there has always been a high demand in the Affordable Warmth Group (AWG). In recognition, BEIS have put forward an option to allow delivery outside of the 'broken heating systems cap' if accompanied by insulation. This also accords with the desire to undertake multiple measures. The scores for inefficient heating replacements however are so low, the measures will not be cost effective. We recommend uplifting the scores to make the 'heating and insulation' multiple measure install an attractive package. We have recommended 4x to BEIS in the ECO3 consultation. In this consultation response, we recommend that two bands of uplifts are provided (4x and 8x) to incentivise replacement of open flue systems that have higher replacement costs.

2. Uplifts for smaller properties

It is to be expected that installers and suppliers will target the most cost-effective measure / property combinations. This places smaller properties at an inherent disadvantage, where the reduction in score available is not proportionately matched by reduced installation fixed costs and overheads. With the BEIS consultation indicating that ECO3 will focus solely on fuel poverty, it would make sense to provide an uplift to smaller properties so that households meeting the ECO3 eligibility requirements that live in smaller properties are not overlooked.

As set out in more detail in our response, we also ask for:

- ☐ Retention of the 2.1 pre-installation u-value for solid wall insulation
- ☐ Varying average treatable area (or "POPT factor") by archetype to avoid flats and mid-terraces becoming less attractive to installers
- ☐ Accounting for Scottish Housing stock in the average treatable area for SWI
- ☐ Increasing the average treatable area for Park Homes to 100%
- ☐ Where <67% of the property is treated, that the score is based on the actual percentage of property treated and a tolerance provided in score monitoring
- ☐ Separate scores for room-in-roof-insulation where the room in roof was built before or after 1983, to allow for differences in building standards
- ☐ A definition of "inefficient" that will bring all heating systems of comparable efficiency into scope

--