

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:	Resourcematics Ltd
Organisation type:	ECO Compliance services
Completed By:	Zankhna Shah
Contact Details:	zs@resourcematics.com

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.

In our opinion this proposal of moving away from the U-value of 2.1 is a harmful oversimplification of the scoring calculations. Theoretically, BRE improved the energy efficient rating of millions of solid wall properties with a single research that didn't require any investment in applying the solid wall insulation! However, the reality is far different from BRE's research. Their research doesn't affect EPCs significantly because where required, the assessors can amend the starting U-value from default to actual calculations. Similar flexibility of using actual U-value for pre-install calculations must be given in ECO 3 if Ofgem wants to move away from the starting U-value of 2.1. After all, we do see evidences where the actual U-value calculations with the starting U-value of 2.1 or similar for a property that is supposed to have a pre-install U-value of 1.7 as per it's age of construction.

It is not unusual for us to find properties where the starting U-value often deviates from the default U-values assigned to them by BRE. Many stone built or system built properties fall into this category. Due to this properties in rural areas will get lower scores, and so, lower ECO funding.

Similarly, BRE's calculations for cavity walls are based on the assumption that the walls would have been constructed to meet the U-values indicated in Building Regulations of that year. However, these U-values are indicative and ultimately the construction can get approved even without achieving the indicative U-values. These is the reason why installers get significant properties constructed after 1980s and later with empty cavities.

BRE's selection of housing data and sources could be statistically bias. The English Housing Survey data do not cover Wales and Scotland, and so they should not be imposed to analyse the housing stock of the other two countries. BRE has also used ESH 2013 data instead of ESH 2015 simply on an assumption that dwelling dimensions are unlikely to show any significant change between these two datasets (footnote 1, page 2 of ECO3 Deemed Score Methodology: consultation version). Such baseless assumptions often have detrimental impact on the market. Surprisingly, BRE also preferred to rely on their own publication for comparing data in key areas from the three countries rather than investing resources in finding ways to comparing English, Scottish and Welsh housing Data (footnote 2, page 2 of ECO3 Deemed Score Methodology: consultation version)! These assumptions make BRE's work and conclusion of applying a blanket starting U-value to older solid wall properties and cavity walls unreliable.

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.

We often see fluctuations in the fuel prices and that is why BRE also amends their fuel price list at regular intervals. However, amending ECO3 scores every time the fuel prices are amended will cause a lot of confusion in the industry. Therefore, we agree with Ofgem's proposal to use the same set of fuel prices throughout ECO3.

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.

In our experience the industry has moved on and has got better understanding of the POMI and POPT calculations now and are settled with the existing method. We do not see any reason to move away from it. We also believe that the changes suggested in the POMI and POPT calculations will indirectly promote the method of partial measure install. For example, right now our supply chain is making an effort to insulate the wall above and around a conservatory by using a lance technique. The proposed changes will give them no incentive to take this extra step and ensure that the property is fully insulated. Similarly in case of heating system replacement, installers may have no incentive to extend the pipeworks to a previously unheated area of the property as they will still be able to claim 100% scores.

Instead we will recommend Ofgem to come up with an online POMI and POPT calculator that will give clear instructions on the methods and through which everyone can verify their calculations before hand. We think that such a move will resolve the confusion for about 99% measures.

So far we have found installers struggling with POMI and POPT calculations only while scoring wall insulation measures in flats. The current Guidance states that the corridor walls should not be included in the count of number of external walls, but they should be included while calculating POMI and POPT is contradicting and confusing to most installers. We understand that the rule is adopted from RdSAP, but RdSAP has various methods to incorporate the corridor walls in the calculations. This is not the case with the deemed scores. Therefore, it will be useful to have the rules around corridor walls amended and streamlined.

Another common issue that we often face is with identifying correct property types for flats and bungalows with room in roof. We often come across properties in rural areas whose upper floors would be classed as room in roof in RdSAP terms. However, these are two storey structures and are usually with more than three bedrooms. Considering them as a bungalow will cause significant reduction in ECO savings and financial support. Besides, most surveyors working in the field are not trained RdSAP assessors. It is difficult for them to decide whether such upper floors of a property be considered roof room or a normal storey. Clear guidance will certainly help.

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.

As the name suggests, English Housing Survey data are only for England. It does not represent the entire country. Wales and Scotland housing stock must not be 'judged' based on English data.

We also do not share the view that installers only install measures in a property where they see the possibility of installing 100% of a measure. May other factors, such as, eligibility of the customer, accessibility of the area, funding availability, customer's ability to contribute etc also play significant role in deciding which properties should be treated. Therefore, we think that any averages should be based on Ofgem's own data rather than other external sources.

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.

The proportion of properties off gas grid in Wales and Scotland is different than in England. The mix of fuel types being used in each country is also different. This will negatively affect installations in Wales and Scotland.

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.

With all the scandles and frauds done in the RIRI installations, the measure should either be taken out of the ECO measures table or be installed with much stricter rules. What your are proposing here would further promote fraud in this industry.

The uptake of parkhome has remained limited, in our experience, not because of the limited scope to insulate these properties. It is limited mainly because of the cost of installation and the funding availability under ECO. Insulating park homes are as expensive as an EWI job, however, they receive lower funding which makes the installation financially unviable. Ironically, most park home residents will not have enough resources available to fund these measures.

Ofgem has stated that they received feedback from park home insulation industry, but their feedback is not publish for review. We are also not sure who these people are and therefore cannot rely on their feedback. Based on our limited experience with the insulation of park homes we believe that it is possible to treat a park home between 91% to 100%.

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.

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.

This will only promote partial installations. We understand that ECO rules require installers to mention the reason for not installing 100% of a measure. However, it is not always possible to verify these reasons through desktop audits or through post-install technical monitoring.

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.

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.

We do not see any problems with the existing format of the deemed score matrix and therefore, do not see any need for a revised format.

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.

We do not see how English Housing Survey data can be considered 'more representative of the GB housing stock'.

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.

We have not installed any room in roof insulation so far and intend to stay away from it due to the rampant fraud issues in installation of these measures.

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.

We disagree with the assumptions for several reasons. We do not see the need or relevance of using English Housing Survey data for the whole country where the PCDB database is available and which is more accurate, covers almost 100% heating systems installed in the UK (and not just England) and is updated more frequently than the English Housing Survey. BRE's analysis is focusing only on gas and LPG boilers and ignores the possibility of a fuel change for an inefficient oil, coal or biomass boiler. The proposed assumptions also do not clarify whether other inefficient heating systems, such as range cookers, warm air units, CPSUs and electric underfloor heating will be allowed to be replaced under this approach? These systems are highly inefficient and should be replaced. The proposed baseline of 72% seems to be too high for the above mentioned inefficient system examples as well as for back boilers.

The entire approach is based on the efficiency of a heating system, and the fuel costs are ignored. This is contradicting with the purpose of HHCRO where the focus is on reducing heating bills and fuel poverty. This will also make electric underfloor and electric warm air units look highly efficient which they are not.

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.

Please see our response to Q 13 above. We believe that heating system efficiency alone will not be good enough for identifying certain inefficient systems, for examples, those running on electricity. Therefore, in such cases the heating fuel prices should also be taken into account.

We believe that PCDB is a more reliable source than English Housing survey as a database for this purpose.

Many systems like range cookers and back boilers have much lower efficiency than the proposed 72%. Their efficiency range from 47% to 66% across different fuel types. Replacing these systems is also more labour and resource intensive. Setting up the baseline at 72% will reduce the funding availability to replacement of such systems.

The assumed efficiency of 88% for new boilers is also unfair to those who install a higher efficiency boiler after the heat demand calculations. We understand the logic behind Ofgem's proposal to develop the deemed scores based on 88% efficiency, but any assumptions set by Ofgem actually become the norm. It leaves no incentive for installers to go an extra mile and then they install something that meets both Ofgem's requirement and building regulations rather than something that is more suitable to the property and the users. We found 508 mains gas combi boilers on PCDB with efficiency of 88% and above. The average efficiency of these boiler comes out to be 89.02%. So 89% is a more reliable and fair assumptions for the replacement boilers. Note that most gas boilers can be converted in to LPG, and therefore this analysis is applicable to LPG boilers as well.

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.

There are several contradictions in this section. Para 6.6 states there is insufficient data available on park homes but Ofgem is reluctant to accept the analysis available from Alba Building Sciences done under it's own previous scheme. In para 6.4 Ofgem is proposing the pre-installation U-value of 1.2 based on the information they have gathered. But then para 6.9 suggests that the 1.2 U-value is based assumed based on the RdSAP age band G. If there are limited data available on park homes, the RdSAP

assumptions would also be based on those limited data. Then on what basis does Ofgem believe that RdSAP analysis is more accurate than the one done under Demonstration Action? It is surprising that Ofgem is reversing the decision from November 2017 on park homes. We do not see how the updated assumptions make a case to replace the park home insulation II deemed scores. You have justified this decision in para 6.14 by stating the average approach taken in designing deemed scores. Please note that this average approach is not taken in case of solid wall insulation measures. The same, as a minimum, should be applied to park homes insulation. This is because the park home insulations is not too different from EWI installation. There relevance has increased now that the entire ECO3 is going to be about fuel poverty reduction.

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.

Please see our comments below:

- Footnote 18 indicates that certain measure types have not been delivered and approved under ECO2t. This list of measures include microgeneration. Please note that we have delivered and notified heat pumps under ECO2t. The measures have been installed either as a replacement boilers or as district heating schemes.
- Para 5.8 refers to the changes in the lifetime of a broken boiler following the BEIS consultation. Please clarify how would Ofgem address measures where a boiler installed in ECO1 or ECO2 will be replaced in ECO3 after serving for 3 years?
- English Housing Survey cannot and does not represent Scotland and Wales and it should not be used to represent the other two countries.
- If the proposed suggestion of POMI and POPT calculations is finalised then please provide guidance on how to monitor partial installations to make sure that reason provided for <100% install is appropriate.
- BRE's latest assumptions have reduced the default U-values for solid and cavity walls. However, U-value calculations for individual walls of these construction types often show a much higher (worse) U-value. This is particularly common in stone construction properties and system built houses.
- Some of the assumptions used in the consultation documents as well as in BRE's calculations are not fully justified. We have highlighted some of the issues in previous sections. Overall, we think that any assumptions made by Ofgem and BRE must be fully explained and justified. BRE restrained itself from using the 2015 EHS data just because they 'thought' it is not going to be any different than the 2013 data!
- Bungalows with room in roof should be considered as houses.
- The discrepancy between inclusion of flat corridor walls for POMI and POPT and their exclusion from the count of external walls for wall insulation measures should be removed.

