

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:	Mineral Wool Insulation Manufacturers Association (MIMA)
Organisation type:	Trade Association
Completed By:	Sarah Kostense-Winterton
Contact Details:	sarah@mima.info

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.

We note the decision to go ahead with changing the U-value assumptions in RdSAP for uninsulated solid walls (and cavity walls). We recognise that these changes are being made in response to field trial evidence, and we agree it is important to ensure the deemed scores reflect the findings of new research. However, we also wish to confirm the extent to which In Use Factors will apply in ECO3 - for example, if an element of CERO is maintained (which MIMA is arguing should be the case). If so, we believe the In Use Factor for solid wall insulation already factors in the "better than assumed performance" of certain insulated solid walls. The IUF should be adjusted so the reduction in energy cost savings resulting from the altered U-values is not double counted.

On checking Ofgem's measures table (January 2018) it does not appear that the IUF for solid walls (brick, pre-1996/7) has been reduced to reflect the change in the U-value. In 2012 (as described in the Government's consultation on IUFs), the pre-1996 solid brick walls were given an IUF of 33% rather than 25% in lieu of the field trial evidence being finalised. This was done as an interim policy to avoid overestimating the energy savings. Now that the U-values have been adjusted, we believe the IUF, if still applied, should be reduced to 25% to match the other solid wall levels.

We note the deemed scores for CWI were not developed using RdSAP values for the pre-and post-installation position, but from installer data that the BRE hold. Therefore, this change does not directly impact the deemed scores for CWI measures. HOWEVER, we are concerned that a possible issue that might significantly impact the insulation market - initially corrected by Ofgem in the previous deemed scores - has been recreated in the current iteration. The issue relates to the possibility of choosing a 'cut-off' point at which CWI technologies become eligible for enhanced deemed score ratings. We've pasted Ofgem's response below, taken from p25 of Ofgem's deemed score consultation response. If however, the ranges set out below are still relevant, and "0.033" is being used as a proxy, then our point is moot.

"6.5. Some respondents also highlighted that our proposed method of selecting the appropriate deemed score for the variant of cavity wall insulation related to enhanced bead technologies (with a thermal conductivity of 0.033) unfairly disadvantaged enhanced mineral wool, which has a thermal conductivity of 0.034. Furthermore these responses were supported by calculations showing that products of these thermal conductivities achieved the same U-value.

6.6. We agree that our proposed method unfairly disadvantaged enhanced mineral wool technologies. We do not believe that generating a new score is necessary as the proposed score was developed by taking an average of the enhanced mineral wool and enhance bead technologies

available in the market. We have therefore revised the ranges of thermal conductivity values which are relevant for the CWI deemed score (see Table 3 below).

Cavity Wall insulation – All values given in units of W/mK

Thermal Conductivity input value 0.04 Associated range of thermal conductivity - 0.045 – 0.035

Thermal Conductivity input value 0.033 Associated range of thermal conductivity - 0.034 – 0.029

Thermal Conductive input value 0.027 Associated range of thermal conductivity ≤ 0.028

Regarding Party Wall Insulation, the U-value assumptions in the new Appendix S are the same as RdSAP 2012, and we are not quite clear if Appendix S has been used to create the PWI deemed score? The savings estimate in Appendix S is too low and does not reflect the field trial evidence MIMA submitted to BEIS.

Across a sample of properties, the un-insulated U-value aggregated to around 0.6 W/m²K while the insulated U-value aggregated around 0.05 W/m²K. In a report for MIMA, BRE calculated the impact of the decision to go with a change in U value of only 0.5 to 0.2 W/m²K in a typical home would wipe out up to 33% of the savings attributed to party wall insulation to both properties. If party wall insulation is to benefit fuel poor households in the Affordable Warmth segment (where IUFs are not applied), then it should be incentivized in line with robust in-situ data.

BEIS had suggested that changing the PWI U-values would be explored for SAP 2016, and we re-submitted our evidence. However, it does not appear that changes have been made and we would ask BEIS and Ofgem to clarify the position. Indeed, Ofgem committed to this in the paragraphs below taken from the response to the previous deemed scores consultation.

"Party wall insulation

5.7. Some stakeholders raised concerns that the U-values used in the deemed scores calculations did not reflect actual results for party wall insulation and some evidence was provided that demonstrated this.

5.8. After talking to relevant stakeholders including the BRE, we have concluded that the evidence provided does not sufficiently represent the UK housing stock and so cannot be taken into account for the deemed scores. We may review this decision if more substantial evidence becomes available in the future."

We understand a BEIS research project is underway exploring party wall bypass and U values - and has been for some time. Has this review been able to offer any definitive conclusions?

While MIMA's original research, questioned the BRE suggested U Values, we have not had sight of any of the output of the BEIS party wall research project.

Given the challenging insulation targets set, with a much decreased property sample, in ECO3, Party Wall Insulation could play a significant role. Yet the deemed scores do not reflect our field work. BEIS appeared to accept this principle and conducted their own party wall research but haven't yet reported the outcome of the field trial.

We would ask Ofgem to encourage the BEIS Science & Innovation team to report on that project and open up the methodology & results for peer review ASAP. That research needs to be examined and, if robust, feed in to this exercise. If it hasn't yet reached definitive conclusions, then what further research is required?

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.

The position sounds sensible.

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.

The current ECO2t deemed scores were developed based on the assumption that 100% of the property would be treated by a particular measure. Where this was not the case, the deemed score for the entire property would be scaled down on a pro-rata basis to reflect the proportion of the property which was actually treated.

Ofgem are instead proposing that an average treatable area 'factor' would be applied to the deemed scores to calculate the final scores, removing the need to calculate POPT for each measure installed.

The example of CWI is given, stating that it can be problematic to install insulation behind conservatories, or tile hung areas. If 10% of properties have conservatories, and, on average, conservatories restrict the installation of CWI across 25% of the total wall area, Ofgem would reduce the total average treatable wall area by a factor of $0.1 \times 0.25 = 0.025$ (i.e. 2.5%) for all properties. This reduction factor of 2.5% would then be applied to the deemed scores for CWI and this reduced deemed score would be claimed irrespective of whether there was a conservatory present at a particular property or not.

We understand that Ofgem is trying to simplify the process, but in our view it seems unfair to apply a reduction factor to every wall insulation upgrade when only a small proportion of them cannot be fully treated. In our view, calculating the percentage of the property actually treated, for all wall types, should be retained.

We believe, overall, that the ECO should adopt the principle that 100% of all cavity walls – external facing walls and those separating two premises - should be insulated unless there is a good reason not to insulate all of them.

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.

See our answer to Q3.

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.

See the answer to Q3

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.

On the basis that RIRI will continue to use the POPT methodology, we agree. See also our answer to Q3.

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.

On the basis that a POPT factor (or average treatable area factor?) will not be applied to PWI at all, we agree.

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.

Ofgem highlights a number of potential issues with the 'average treatable area' approach. These include:

- That there is a risk of gaming the system where a small portion of a property is treated but the whole score is claimed.
- That for certain measure types the average treatable area is very low and that this impacts the commercial viability of a measure to the extent that the measure is never installed (even where certain properties would benefit from it).

Ofgem is proposing to require that a minimum of 67% of a property be treated by a particular measure in order to claim the full deemed score.

Although we agree with the principle of having a minimum treatable area, and understand the reasoning for proposing 67%, at a practical level for walls, we would argue that 50% is a simpler test to apply.

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.

We note that Ofgem states: "We recognise that in some situations, it may not be possible to meet the minimum requirement. We do not want to discourage the installation in all of these situations as there may well be reasonable grounds for not treating at least 67% of the property. For example, for flat roof insulation where the flat roof is only associated with a property extension, or for party wall insulation if a property had two party walls and only one could be treated due to consent restrictions. In these situations we propose that the current ECO2t POPT approach is used."

We support the approach of applying the POPT where the minimum requirement cannot met.

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 agree with the principle of making the used of deemed scores simpler. However, the current deemed scores are subject to an uplift of 1.3. This was determined by BEIS to bring current deemed scores in line with average SAP and RdSAP based scores used during ECO2. In their current consultation, BEIS indicated that they do not propose to continue this for ECO3, except in certain cases e.g. an uplift of 1.35 for insulation measures installed in non-gas fuelled properties.

No explanation has been given for the proposed removal of the uplift, as far as we can see, and until we understand the reason and the impact, we cannot support this aspect of the consultation.

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.

Ofgem proposes that for the purposes of updating the RIRI deemed scores, the size of the 'typical' room-in-roof is increased from the current estimate of 50% to an assumed 59% of the floor area below.

MIMA agrees with this increase.

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.

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 do not have a specific comment on the pre-installation efficiency question, but MIMA strongly supports BEIS' proposal that under ECO3, inefficient heating systems can only be upgraded alongside insulation measures.

This policy aims to allow more costly, inefficient heating systems to be replaced through the scheme while encouraging a more multi-measure approach, a more complete package for households and greater improvements to the energy efficiency of those homes.

We therefore support the proposal to allow heating system upgrades through the scheme where the heating system is deemed inefficient and replaced alongside the installation of qualifying insulation measures.

We also broadly agree with the plan that installing heating measures alongside insulation will follow a similar process to that currently in place for CERO primary and secondary measures. For ECO3, insulation measures will constitute the qualifying primary measure, and heating installations, the qualifying secondary measure.

However, we recommend that the heating system upgrade should be delivered alongside ALL available cost-effective primary insulation measures needed in a property rather than a single primary insulation measure. The ambition on fuel poverty is expressed in terms of a whole-house target linked to the property EPC. Given this whole-house ambition there seems little logic to focus only on a single insulation measure.

Of the primary insulation measures listed in the draft ECO Order, the home, and fuel poor occupant of the home, may well benefit from a package of several insulation measures such as;

- Loft top up
- Adjacent property wall cavity fill – or “party wall insulation”
- External ‘easy-to-treat’ cavity fill for empty or partial fill cavities

In a fuel poverty focused scheme – with high search costs to find those properties - there is a stronger argument for completing all cost-effective measures where they are available. Without such a multiple measure obligation linked to heating requirements, the ECO scheme will drive the minimum number of insulation measures (one in the case of the current consultation). The possible exception to this ‘all cost-effective primary measure’ approach might be higher cost insulation measures such as ‘room-in-roof’, floor and SWI.

Government has often tried to tackle the issue of a low number of measures being installed per property. Adjusting the requirement, as set out above, has the potential to drive 3 or even 4 measures per property for fuel poor occupants without onerous cost to the scheme as multiple search costs are avoided to deliver equivalent LBS.

As a result, we would wish to see Ofgem's deemed scoring methodology set out how such multi-measure approaches would be scored. Ofgem says: "In a property where an insulation and heating measure are installed together, the scores should be selected as outlined in the ECO2t guidance."

And:

"In our previous consultation on deemed scores, some respondents requested guidance on accounting for multiple installations of ECO measures to a single property using deemed scores. Some respondents noted that where multiple measures were installed in one property the overall savings were likely to be artificially high.

We considered the issue at the time and chose not to implement a methodology for the following reasons which still apply;

- calculating the varied impacts of existing measure types would be highly complex which would result in a huge number of scores and in turn increase the risk of error,
- introducing a requirement for identification of existing energy efficiency measures in a property would reduce the supply chain's ability to calculate savings before visiting the property."

However, this reasoning appears to relate to existing measures rather than new "packages". We would be happy to work with Ofgem to develop options for scoring and using deemed score to drive a multi-measure approach.

Second, in BEIS's ECO consultation the proposed eligible primary insulation measures are:

- flat roof insulation;
- loft insulation;
- rafter insulation;
- room-in-roof insulation;
- wall insulation (insulation of a cavity wall or solid wall insulation);
- insulation of a mobile home; and
- under floor insulation

The "wall insulation" primary measures list appears to be missing party wall insulation – an existing primary measure under the ECO. We ask Ofgem to ensure PWI is in their guidance as a primary measure (and we also asked BEIS to ensure it is clearer in the ECO Order).

Third, the consultation states:

In order for the primary insulation measure to be eligible to support a secondary heating system upgrade, we propose that the primary insulation measure must be:

(a) Installed to at least 50% of:

- i. the total exterior-facing wall area of the premises;
- ii. the total roof area of the premises;
- iii. the total floor/under floor area; or
- iv. each of the ceiling, floor and wall area of a mobile home.

See our answers above on POPT. Also, we are not quite clear how this requirement for primary measures matches up with the 67% minimum treated area proposal. Hence, there is a case for aligning both at 50%.

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.

N/A

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.

No comment.

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.

MIMA has accepted that deemed scores have a role in reducing the administrative costs associated with ECO scoring, however we have also stressed the need for proper technical assessments of buildings and the careful specification of measures. On the basis that the updated PAS's will require such assessments, we supported the move to deemed scores.

However, we would like to see a thorough evaluation conducted of how the use of deemed scores is impacting both the choice of homes being treated and the quality of installations. We are keen to understand how the removal of EPCs, resulting from the use of deemed scores, is working at a practical level and whether householders/suppliers are getting EPCs in any event. For example:

- Are deemed scores creating a barrier to closing the performance gap as no one knows what the energy performance of the building actually is?
- How will suppliers know what EPC rating social housing being targeted has?
- How will householders wanting to claim the FITs, RHI would know what their EPC rating is?
- How will householders/landlords know the EPC rating for properties potentially needing an upgrade under the MEES regulations?
- How will BEIS know whether the fuel poverty/EPC target of C is being met?
- How will the CCC know the amount of carbon that is "really" being saved through energy efficiency measures if deemed scores only give a rough approximation?
- How will measures be scored cumulatively?

