

# Energy Company Obligation (ECO) Deemed Scores Consultation Questions

## Background

The questions below relate to the ECO2 consultation on deemed scores which can be found on our website :

<https://www.ofgem.gov.uk/publications-and-updates/eco2-consultation-deemed-scores>

## 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](mailto:eco.consultation@ofgem.gov.uk) by **close of business on 8 July 2016**.

## 1. Respondent Details

Organisation Name:	Bluewire Hub Ltd
Completed By:	John Allen
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## 2. Methodology

**Q1.** Do you agree with our selection of the key variables to use as the main inputs for calculating the deemed scores?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☒ Strongly Disagree
- ☐ Don't Know

If not, please clarify which aspect you do not agree with and suggest an alternative, with reasoning.

I strongly believe that there are various deficiencies in using deemed scores as compared with EPCs that I believe should be considered seriously.

I do agree that these few variables provide simplicity to the ECO process and could potentially reduce costs by not requiring a DEA to visit the property; and could reduce the opportunity for fraudulent activity associated with assessors choosing worst case values to increase savings.

But this simple approach removes all attempts to locate the most energy inefficient properties by treating the thermal characteristics of all property types the same and it does not take the existing boiler efficiency into account.

Will household income then become the only criteria for identifying those households most in need? This could lead to an already limited pot of money not being spent on those individuals in most fuel poverty.

Has a full assessment been made to consider the relative cost saved from not using a DEA as compared with the loss in cost and carbon emission savings due to using this over simplified approach?

It surely is not right that for example a 1980's cavity house built property will get the same score for a new boiler as a solid walled built pre-1900 property.

Nor is it right that, for a given income level, they would be deemed to have the same level of fuel poverty.

Nor indeed that all existing homes are assumed to have the same boiler efficiency before they are improved.

To summarise my comments in the rest of this document, regarding deemed scores.

- I am unconvinced about the choice of variables for defining property types
- There is a distinct lack of differentiation in some measures e.g. PV & roof rooms
- There are decisions to be made in data collection that are in many cases not easy for someone without training & experience. In particular
  - (a) for solid wall e.g. Age, Wall construction
  - (b) the definition of whether to select cavity or solid is not easy for mixed wall types
  - (c) % of property treated
  - (d) non standard construction types
  - (e) thermal differences between extensions
- There are still significant areas where fraud is possible with the limited deemed score dataset particularly when you consider that there will be no associated QA framework that EPCs provide. It is worth noting that all EPC schemes are now trailing the SMART Audit regime for the EPC

### 3. Property Archetypes

**Q2.** Do you agree with the method used in developing typical property archetypes in order to remove the need for measuring property dimensions?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☒ Strongly Disagree
- ☐ Don't Know

If not, please clarify which aspect you do not agree with and suggest an alternative, with reasoning.

It seems that the aim of the bedroom count is to estimate floor area, a key variable affecting the resulting Eco score. As there are so few variables in the proposed deemed score methodology, the floor area estimates need to be as accurate as possible and less prone to fraud as possible.

Although 'number of bedrooms' may appear on the surface to be more immediately understandable, I do not believe that this is a good indicator of floor area. A far better indicator of floor area would be the number of habitable rooms, as currently used in RdSAP.

Although not available from English Housing Condition Survey data, the EPC data on the Central Register could be used to create a relationship between number of habitable rooms and floor area.

With the proposed approach, an installer will have an incentive to maximize the floor area using the bedroom count, by including any additional rooms they can.

Although some rules are provided for what is allowable to include, this provides an increased opportunity for claiming a higher value than does the habitable room count approach used in RdSAP and for which there are established conventions.

The rules outlined in 3.8, for defining the number of bedrooms, do not address this issue in significant detail. For example, with these rules any room that is not a dining/kitchen or lounge could be considered a bedroom e.g. non-separated conservatory, study, play area.

If these are included by installers, the floor areas assumed in the deemed score calculation would be hugely inflated, as the inferences are based on the relationship between 'true' number of bedrooms observed in the EHCS data. (We say 'true' because in EHCS surveys neither the householder nor the person collecting the data has any reason to say there are more bedrooms in the home than there are present). Therefore any such action by installers could lead to hugely inflated scores.

As a key variable prone to fraud, how is the definition of number of bedrooms going to be audited? With the current EPC process, the site notes provide a standard way of enabling the number of habitable rooms to be checked, as well as the floor area. Also the measurement is made by someone who is routinely audited, and with a potential for enhanced auditing with the SMART audit regime. In addition there are established conventions for defining the number of habitable rooms that have been refined over the many years of RdSAP being used in practice.

#### 4. Primary Heating Sources

**Q3.** Do you agree with the approach to accounting for all primary heating sources present in the housing stock?

- ☐ Strongly Agree
- ☐ Agree
- ☒ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ Don't Know

If not, please explain your reasoning and evidence your preferred approach.

A DEA is a trained, accredited and audited individual able to determine which is the primary and which is the secondary heating. In most cases, it is obvious but it may not be so in dwellings without central heating. If installers are tasked with making this decision then there is an increased potential for fraud, as they will have a much stronger incentive than a DEA to choose the option giving the best score. Particularly when there is no regime in place to audit their findings.

**Q4.** Do you agree that we have appropriately accounted for heating systems present in the housing stock either as an input for the deemed scores or in Table 1?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☒ Strongly Disagree
- ☐ Don't Know

If not, please clarify which additional heating systems you believe need to be accounted for.

Electric heat pumps and Gas Heat pumps need to be distinguished  
Community Heating Warm Air Systems – gas and electric

You are asking installers to follow RdSAP Conventions to select the primary heating system, but you are reducing the available number of heating system options to choose from. There would need to be some Ofgem Conventions available for installers to know which primary heating system to select.

## 5. Measure Types

**Q5.** Do you agree that the deemed scores include all main measure types?

- ☐ Strongly Agree
- ☒ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ Don't Know

If not, please clarify which additional measure type you expect will be installed.

**Q6.** Do you agree with our proposals for differentiating within measure types?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☒ Strongly Disagree
- ☐ Don't Know

If not, please clarify where alternative differentiation should be applied.

If wall type is not included as an option then perhaps it should be a differentiation within a measure. It really does not seem right that a 1980's cavity house will get the same score for a boiler (and be in the same amount of fuel poverty) as the solid walled pre-1900 property.

**Q7.** Are there any measure types where you think that further differentiation is warranted? If so, please clarify which measure type could benefit from further differentiation and suggest an approach.

Heating measure scores should differentiate between wall types.  
Our own analysis of submitted scores under ECO2 found a significant difference between scores for cavity wall properties and solid wall properties.  
Roof Room size estimates are small and starting U values are low and so insulation of roof rooms will be discouraged; whereas recently in ECO there has been an upsurge in this measure being installed.  
There is no incentive to go beyond the minimum Regs requirement for heating controls. There should be an option for time and temperature zone control.  
All installed PV is assumed to be 2.5kWp; In reality the available suitable roof space of the eligible properties may not allow systems of this size.  
Installers will be happy to install < 2.5 Kwp as it would costs them less for the same score; however they will not over specify as it will affect their margins. If % of measure is to be used for PV, how will that be audited? Differentiation of this measure would enable different sized systems to be scored.

**Q8.** Are there any areas where you could benefit from further guidance in using deemed scores?

## 6. Scores

**Q9.** Do you agree with the deemed scores produced?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☒ Strongly Disagree
- ☐ Don't Know

If not, please clarify which particular score(s) that you believe do not accurately reflect the savings for a measure.

I believe that the deemed scores produced will be true only to the input data.

As indicated in other responses the proposed methodology is seriously lacking and far too simplistic.

I have carried out a comparison of the proposed deemed scores vs RdSAP based scores for a sample of dwellings where I have been involved at some point in the process of installing qualifying boilers where I had the RdSAP xml files available (99).

When comparing the ECO2 deflated score to the proposed deemed score for each of these the overall deemed scores were disturbingly 27% lower than the actual submitted scores for these qualifying boilers.

**Q10.** Do you agree that it would be useful to also provide the deemed scores as lifetime savings (i.e. after applying all relevant multiplication factors), to make the relative value of each measure easier to identify?

- ☒ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ Don't Know

## 7. Percentage of property treated

**Q11.** Do you agree with the proposal to use 'percentage of property treated' to identify whether 100% of a score should be claimed?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neither Agree Nor Disagree
- ☒ Disagree
- ☐ Strongly Disagree
- ☐ Don't Know

If not, please explain your reasoning.

When an EPC is carried out, the % is easy to calculate as the detailed information has been collected and only part of the dwelling can be selected for the measure.  
It may not always be easy for installers to estimate the percentage of the property treated and by nature installers will always estimate high.  
As an example how would a property with 2 extensions and 3 different wall types be assessed and audited?

## 8. New Scores

**Q12.** Do you agree with our proposed approach for applying for a new score from April 2017?

- ☐ Strongly Agree
- ☒ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ Don't Know

If not, please explain your reasoning, which specific parts of the process you do not agree with and inform us of your preferred approach.



**Q13.** Do you agree that we should determine whether or not to accept an application, and specifically what is a 'significant' improvement in score, on a case-by-case basis?

- ☐ Strongly Agree
- ☐ Agree
- ☒ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ Don't Know

## 9. Score Monitoring

**Q14.** Do you agree that a DEA is not required to check inputs used when identifying a deemed score for a measure?

- ☐ Strongly Agree
- ☒ Agree
- ☐ Neither Agree Nor Disagree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ Don't Know

If not, please clarify why you do not agree and provide an alternative approach with your reasoning.

The deemed scores, as proposed, have so few data items to collect that it would not be a cost effective solution to use a DEA to check this.

The proposed approach is so simplistic that any money saved by not using a DEA spent on improvements will most likely not go to the properties and people that need them the most.

Any measures installed will get cost scores that in many cases will not accurately reflect the true carbon saved.

It is apparent that using deemed scores, albeit that are slightly more accurate, is a backward step. Deemed scores may well have been appropriate in the days of EEC, CERT & CESP, when most properties were uninsulated and energy inefficient.

The issue now is that it is increasingly harder to find properties in which to install cost effective measures.

It must be acknowledged that the EPC, due to the far greater sensitivity of the RdSAP methodology and the training and auditing regime involved, is a much more appropriate tool to measure carbon reduction than an over simplistic deemed score.

As demonstrated in my response there is scope for fraud in whatever approach is taken, including deemed scores.

EPCs though have the advantage that there is an existing audit regime, which is in the process of being refined and improved. There are various areas where an installer will have no training in making decisions e.g. primary heating, is this a roof room (often not obvious), determining property age and other data items for solid wall insulation and cavity walls. In our view, the best approach to address the above issues is to retain the EPC as the basis for calculating the ECO score.