



## Ofgem Deemed Score Consultation Response

**Submitted by:** Adrian Wright  
**Company:** Happy Energy Ltd  
**Contact:** [Adrian@happyenergy.co.uk](mailto:Adrian@happyenergy.co.uk)

**Q1.** Do you agree with our selection of the key variables to use as the main inputs for calculating the deemed scores? If not, please clarify which aspect you do not agree with and suggest an alternative, with reasoning.

Strongly agree

**Q2.** Do you agree with the method used in developing typical property archetypes in order to remove the need for measuring property dimensions? If not, please clarify which aspect you do not agree with and suggest an alternative, with reasoning.

Strongly agree

**Q3.** Do you agree with the approach to accounting for all primary heating sources present in the housing stock? If not, please explain your reasoning and evidence your preferred approach.

Strongly agree

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

Agree

In 4.6 you say that where a heating system is identified which is not included in the deemed scores that the energy supplier should contact Ofgem. There would appear to be a number of heating systems that can currently be selected in an EPC which are not present on the deemed score list or the conversion table in 4.5, we would suggest that all heating sources be added

to the table now to avoid Ofgem having to deal with multiple requests from suppliers later for heating fuel types that do not appear on the list.

Such examples of unknown heating types would include but not be limited to:

- Electric underfloor heating
- Warm air heating
- Gas/oil/electric range
- Micro CHP etc

We would also suggest producing a guidance document about which deemed scores should be selected depending on the exact heating system present. Whilst it may seem self explanatory, it would be best to avoid any potential ambiguity both to prevent fraud and to make it simpler for the entire supply chain to select the correct score. This table could also clarify some of the heating systems which at present are not listed. For example

Type of heating system:	Deemed score to use
Solid fuel fire with back boiler and radiators	Solid fossil fuel boiler
Solid fuel range with radiators	Solid fossil fuel boiler
Biomass wood pellet boiler	Solid fossil fuel boiler
Electric under floor heating	Storage heaters

We note that currently in table 4.5, where the home has heat pump heating, the deemed score for mains gas should be selected. This would not appear to be a like-for-like comparison as typically a heat pump would have higher running costs and CO2 emissions than a mains gas boiler. We would suggest that either a different comparison is used such as storage heaters or oil, or alternatively that a separate heat pump deemed score is provided or that a conversion factor is used, e.g. Use mains gas with an uplift of 20%. As a large number of heat pumps were installed in social housing properties this could be important in properly scoring homes which may contain fuel poor households.

**Q5.** Do you agree that the deemed scores include all main measure types? If not, please clarify which additional measure type you expect will be installed.

Agree

**Q6.** Do you agree with our proposals for differentiating within measure types? If not please clarify where alternative differentiation should be applied.

Agree

**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.

Potentially heat pumps as per question 4.

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

We would seek further clarification on the following measures:

### **Heating Controls**

Currently there is a rather crude definition for a heating system having controls or not having controls and the additional saving could make it appealing for the supply chain to always attempt to claim for the controls savings. Some examples of ambiguity and areas for potential fraud include:

- What is the definition of a home having TRVs? 1 TRV? 2? 50%?
- What percentage of radiators will need to have TRVs on to be able to claim controls?
- How will you be able to evidence whether a home already had the full set of heating controls or not? What is to prevent an installer from simply replacing the room stat or programmer with a new version and claiming the full controls when in fact all 3 key controls were already in place at the start?

### **Room In Roof Insulation**

Guidance should be provided to clarify what represents a 100% insulated room in roof to ensure that all heat loss areas are treated or excluded if not insulated.

### **Cavity Wall Insulation**

Some guidance should be provided about when you can claim for a full cavity wall insulation job. It is not unheard of for a property to just have one wall or an extension which is cavity so clarity on how this should be scored and when it can be claimed should be produced to avoid people claiming for a whole home when they have only insulated a small percentage of the external envelope of the property.

### **Loft Insulation**

We believe it should be made clear what the maximum depth of loft insulation can be before the loft insulation score can be used. It is important to prevent companies installing insulation across large housing estates which

already have high levels of loft insulation in, so we would recommend a cap of no more than 150mm above which lofts cannot be insulated. This could be simplified by stating that any loft which has benefited from cross laid insulation is not eligible as it would be likely to have more than 200mm of insulation already.

**Q9.** Do you agree with the deemed scores produced? If not please clarify which particular score(s) that you believe do not accurately reflect the savings for a measure.

Strongly disagree

We believe that the following scores require changes for the following reasons.

### Room in roof insulation

The majority of room in roof insulation installations take place in older properties, built before building regulations required any loft insulation. The starting u-value for room in roof deemed scores has been set by the BRE at 0.696 which presupposes that there is around 50mm of insulation across all areas which is completely wrong. The argument is that there is not a large enough evidence base to say otherwise, but our belief is that instead of using the default u-value for all lofts, the default starting u-value table should be taken from Table S10 from Appendix S of RDSAP 9.12 as below, the same as has been used for flat roof insulation. This would provide a much more accurate starting position for homes built before 1966 when roof insulation became mandatory.

**Table S10 : Assumed roof U-values when Table S9 does not apply**

Age band	Assumed Roof U-value (W/m²K)						
	Pitched, slates or tiles, insulation between joists or unknown	Pitched, slates or tiles, insulation at rafters	Flat roof <sup>(a)</sup>	Room-in-roof, slates or tiles	Thatched roof <sup>(b)</sup>	Thatched roof, room-in-roof	Park home
A, B, C, D	2.3 (none)	2.3 <sup>(1)</sup>	2.3 <sup>(1)</sup>	2.3 <sup>(1)</sup>	0.35	0.25	-
E	1.5 (12 mm)	1.5 <sup>(1)</sup>	1.5 <sup>(1)</sup>	1.5 <sup>(1)</sup>	0.35	0.25	-
F	0.68 (50 mm)	0.68 <sup>(1)</sup>	0.68 <sup>(1)</sup>	0.80 <sup>(1)</sup>	0.35	0.25	1.7
G	0.40 (100 mm)	0.40 <sup>(1)</sup>	0.40 <sup>(1)</sup>	0.50 <sup>(1)</sup>	0.35	0.25	0.6
H	0.30 (150 mm)	0.35 <sup>(1)</sup>	0.35 <sup>(1)</sup>	0.35 <sup>(1)</sup>	0.35	0.25	-
I	0.26 (150 mm)	0.35 <sup>(1)</sup>	0.35 <sup>(1)</sup>	0.35 <sup>(1)</sup>	0.35	0.25	0.35
J	0.16 (270 mm)	0.20	0.25	0.30	0.30	0.25	-
K	0.16 (270 mm)	0.20	0.25 <sup>(2)</sup>	0.25 <sup>(2)</sup>	0.25 <sup>(2)</sup>	0.25 <sup>(2)</sup>	0.30
L	0.16 <sup>(3)</sup> (270 mm)	0.18	0.18	0.18	0.18	0.18	-

Room in roof is currently one of the most popular measures amongst the supply chain as it gives a good carbon or savings score and the work is easier to find than cavity wall insulation which is now becoming harder to find. If the proposed u-values are used for room in roof insulation, they will not accurately reflect the correct saving due to the erroneous starting u-value and the low scores could also see an end to room in roof works, potentially pushing up the cost of delivering ECO for the energy suppliers.

## Loft Insulation

Whilst we believe that the starting u-value is not unreasonable for loft insulation given the mix of loft depths around the UK, we believe that the end u-value is too high and should be based on an installed depth of 300mm. This would provide for an end u-value of 0.14 as below rather than 0.185.

**Table S9 : Roof U-values when loft insulation thickness at joists is known (for insulation between joists including insulation at flat ceiling of a roof room)**

Insulation thickness at joists (mm)	Assumed roof U-value (W/m²K)	
	Slates or tiles	Thatched roof
None	2.3	0.35
12	1.5	0.32
25	1.0	0.30
50	0.68	0.25
75	0.50	0.22
100	0.40	0.20
150	0.30	0.17
200	0.21	0.14
250	0.17	0.12
270	0.16	0.12
300	0.14	0.11
350	0.12	0.10
>= 400	0.11	0.09

## Cavity Wall Insulation

We believe that the starting u-value for a pre 1976 home used in the weighting of the cavity wall insulation score in 2.4.2 of the BRE document conflicts with the table of default u-values in RDSAP which states that the starting u-value should be 1.6. not 1.435 as per the BRE proposal. This has led

to scores for cavity wall being lower than anticipated which will in turn push up delivery costs.

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

Strongly agree

**Q11.** Do you agree with the proposal to use 'percentage of property treated' to identify whether 100% of a score should be claimed? If not, please explain your reasoning.

Strongly agree

**Q12.** Do you agree with our proposed approach for applying for a new score from April 2017? If not please explain your reasoning, which specific parts of the process you do not agree with and inform us of your preferred approach.

Agree

**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? If not, please provide reasoning and an alternate approach.

Agree

We would suggest that other organisations in addition to energy suppliers are allowed to submit proposals for new scores, otherwise the energy suppliers may choose not to take forward an innovative product due to the time and effort when any supplier can then benefit from the product afterwards.

**Q14.** Do you agree that a DEA is not required to check inputs used when identifying a deemed score for a measure? If not, please clarify why you do not agree and provide an alternative approach with your reasoning.

Strongly agree