

Energy Company Obligation (ECO) U-Value Consultation Questionnaire – Feb 16



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for energy consumers

Background

The questions below relate to the consultation on requirements for over-writing U-values for cavity wall insulation measures which can be found on our website :

<https://www.ofgem.gov.uk/publications-and-updates/eco2-consultation-requirements-overwriting-u-values-cavity-wall-insulation-measures>

Our proposals consist of three main parts:

- a. introducing an upper limit for overwritten U-values,**
- b. stipulating the evidence that we expect to be in place when a U-value is overwritten and how we expect inputs to be collected, and**
- c. a regime to monitor these measures; we suggest three approaches for implementing monitoring.**

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. If you do not wish to answer a question please select 'N/A'. The questionnaire should be completed in typeface and returned via email to eco.consultation@ofgem.gov.uk by close of play **7 March 2016**.

Respondent Details

Organisation Name:	E.ON
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1. U-value Limit

1.1 Do you agree that it is unreasonable for the U-value of a cavity wall measure to exceed 1.6 W/m²K in premises in the age bands B-K?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide details and supporting evidence for your response below.

The main reason for overwriting U-Values for properties built of cavity wall construction is for post 1983 construction types. RdSAP assumes that these properties were built with CWI installed, in reality a large proportion of these were not. Builders discovered that to achieve Building Regulations they could use thermalite low density block with no CWI at a significantly lower cost than traditional high density block.

Having reviewed internal historic U-values and by testing within the Stroma U-value editor, we have found that it is unlikely for any construction built post 1983 with a low density block to achieve a U-value of >1.6 W/m²K. Therefore for this construction type, we would be comfortable with an upper limit of 1.6 W/m²K.

However, we have discovered instances where the U-value could be higher than the proposed 1.6 W/m²K, for example, certain houses with sandstone walls built with a cavity. (see 6.2)

1.2 Do you agree that we should implement a limit of 1.6 W/m²K for overwritten U-values for cavity wall measures in premises in age bands B-K?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Dont Know
- N/A

Please provide details and supporting evidence for your response below.

E.ON have found evidence of archetypes that would have a U-value greater than 1.6 W/m²K. Therefore we would prefer either a series of 'bands' or tolerances for each property age band or some mechanism to amend a U-value above 1.6 W/m²K on a case by case basis. (see 6.2)

2. Evidence Requirements

2.1 Do you agree that relevant inputs should be collected for the U-value calculation via an intrusive inspection, using a borescope for example?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

E.ON's Installation Team already routinely collects this information in the form of a construction analysis, which details each element of the wall along with the depth of each element. We insist on borescopes being used with photos if possible of the internal empty cavity.

2.2 What types of evidence do you suggest would support the inputs used for a new U-value calculation?

Please provide reasons for your response below.

E.ON proposes the following evidence requirements should be provided when amending U-values:

- Site notes and justification for the amendment, with more detail than a "to get a more accurate U-value" response, for example "RdSAP does not support structure type".
- Date stamped photographs of the internal and external walls, and photographs of the house from a distance so the property type can be identified
- Date stamped borescope image showing all the elements of the internal wall
- Completed U-value calculation detailing individual elements and their corresponding k-values

- When using one calculation for multiple premises of the exact same construction type (archetype sampling) an appendix address list is to be quoted on the U-value certificate

It must be noted that unless any photographs are also GPS stamped, there is no way to be 100% certain that any photo relates to the actual property being assessed.

2.3 Do you agree that the types of evidence listed in paragraph 2.5 are practical to provide?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Yes, this information is already routinely collected by E.ON's Installation Team when amending U-values. All evidence is uploaded to our system for each measure.

In order to provide consistency and for the avoidance of doubt, Ofgem needs to ensure that any new guidance is very specific and prescriptive regarding the level of detail required within the site notes, particularly with regard to justification for the default U-value being overwritten and any assumptions made.

Were Ofgem to produce a list of the evidence required, including specific levels of detail as mentioned above, E.ON feel that this could deter most potential fraudsters as it would be difficult to fabricate all of the evidence requirements.

2.4 Do you agree that the evidence listed in paragraph 2.5 is sufficient to support an overwritten U-value?

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

N/A

Please provide reasons for your response below.

In conjunction with the requirements in paragraph 2.5 we would suggest:

- Date stamped photographs of the internal and external walls, and photographs of the house from a distance so that the property type can be identified, clearly showing the house name/number
- Date stamped borescope images showing all the elements of the internal wall

In addition to the specific and prescriptive guidance as detailed in our response to 2.3.

2.5 Do you agree that the inputs for a U-value calculation should be collected by an independent person to increase confidence in the accuracy of overwritten U-values for CWI measures?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

E.ON believes that logistically this would be very difficult to implement and the costs and administrative burden would be prohibitive. We would also question if there are enough OCDEA's or suitably qualified people who are independent from the supplier or supply chain to fulfil the industry requirements on a national level.

2.6 Do you agree that an independent person collecting the inputs for a U-value calculation would be practical to implement taking into consideration cost, time and customer journey implications?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree

Don't Know

N/A

Please provide reasons for your response below.

No, logistically this would be very difficult to implement, and the cost and administrative burden would be prohibitive. We would also question if there are enough OCDEA's or suitably qualified people which are independent from the supplier or supply chain to fulfil the industry requirements on a national level.

3. Option 1 – Additional Monitoring Questions

3.1 Do you agree that option 1 would increase confidence in the accuracy of overwritten U-values for CWI measures?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Generally E.ON is not in favour of adding additional questions for score monitoring, as this will impact on existing systems and will therefore necessitate system changes. This will have an associated cost element and it will take time to develop the changes and implement them.

However, there is the potential that the additional questions as laid out in option 1 could provide additional confidence, although there are alternatives as set out below:

- Upfront verification of OCDEA data by another qualified OCDEA which we believe should be the certifying body's responsibility
- Introduction of a CWI Stage 1/pre-check inspection, which should include these questions alongside scoring and installation questions
- Further evidence requirements imposed on installers/OCDEA (e.g. through PAS2030 development) to allow for an effective desktop verification process to be undertaken

3.2 Do you agree that option 1 would be practical to implement, taking into consideration cost and time implications?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

No. E.ON feels that the increased time implications would lead to a lower volume of scoring inspections being carried out by the Technical Monitoring Agent on a daily basis, making it harder to reach the 5%/3% targets already laid out for Technical Monitoring.

Secondly, there would be a need for additional training to upskill DEAs to carry out OCDEA calculations to a competent standard, resulting in an increased cost per inspection. We are in danger of providing a process in which a lesser qualified person is verifying the work of a higher qualified person.

E.ON feels that this is the remit of the OCDEA Accreditation body, and represents a further example of where Suppliers are expected to effectively "police" another industry with the compliant delivery of their ECO. In E.ON's view, this is another area that should be considered by the ongoing Bonfield/"Every Home Matters" Review.

3.3 Do you agree that a score monitoring agent is suitably qualified to answer the proposed questions relating to the U-value inputs?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

E.ON doesn't believe a Technical Monitoring Agent accredited to DEA standards is qualified or competent to undertake the invasive checks required to complete this works. It also raises the issue of who checks the Technical Monitoring Agents work in terms of making good of the invasive works.

Technical Monitoring Agents are required currently to carry out only "head and shoulders" checks in the loft space in order to minimise risks of working at height and potential damage to the customer's property. Therefore inspecting the cavity from within the loft is not feasible, especially if the loft is fully insulated.

3.4 Do you agree that the proposed additional score monitoring questions are appropriate for identifying where overwritten U-values are incorrect?

- Strongly Agree

- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

In principle yes, the questions would allow the overwritten U-values to be verified. E.ON has concerns regarding some of the questions as set out below:

- Is the age band stated in the xml files the same or within one age band of the premises? This is attainable from the XML and EPC and should be subject to the existing monitoring regimes for these industries. It's not for Suppliers to police the compliance of a legal document created and signed off as accurate by a competent person.
- Is there evidence of any pre-existing wall insulation?

As the main opportunity for ascertaining if there is pre-installed cavity wall insulation will be during the Technical Monitoring Agent's site visit, E.ON propose that the question includes comparing what is actually in situ on site to the input in the xml using wording such as:

'Does the cavity wall insulation stated in the xml file match the wall insulation at the property?'

For the questions:

- Does the wall thickness shown in the evidence match the property to a +/- 10% tolerance?
- Does the density of the inner block match that used in the U-value calculation?
- Do any of the inputs in the U-value calculation differ from those identified on site?

It is felt that invasive techniques will be required to verify the answers to these questions. This is currently outside the remit of the current score monitoring regime. The invasive nature of these inspections will also lead to an extended customer journey with more visits and disruption to the customer's home.

Timing of these checks would need to be aligned pre-installation to ensure a like for like picture was seen by both verifying OCDEAs. This has always proven difficult for contractors and suppliers as work schedules change dynamically, therefore this would be extremely difficult to administer. One option would be to delay the install until this 'pre-check' has taken place. However this has implications for the customer journey.

If the inspection were to be a preinstall check, E.ON would recommend that:

- Technical Monitoring questions CWI.2 & CWI.3 are included
- Verification that the customer is aware that core vents were included
- All scoring questions with the exception of questions SMQ.24 & SMQ.25 are included

E.ON's overriding concern is the impact on the customer and their experience throughout what will be an extended delivery process.

3.5 Are there any additional questions that you think would help to identify inaccuracies in overwritten U-value calculations?

Please provide reasons for your response below.

The current Technical Monitoring questions cover the main inputs, i.e. dimensions and materials, however there is ambiguity in what the consequences are. For example, the final proposed question asks if any of the U-value inputs differ from those identified on site. This could easily create an answer of "no" in the following circumstances:

- If the original U-value calculation was completed on a different wall or different part of that wall
- The original U-value used a default building element such as "Brickwork Outer Leaf BRE" but on site the actual brick had a thickness that was 1mm different etc
- The original U-value was a "pre" U-value calculation but the Technical Monitoring Agent is doing their check post insulation therefore they could misinterpret the newly installed insulation as evidence of pre-existing insulation and create a false fail

Clarity would need to be provided by Ofgem regarding how they will treat responses to the fourth proposed new question, as suppliers may need to re-score the measure depending upon the findings of the Technical Monitoring Agent. However, as the question stands, a simple yes/no response could be given without any information about which inputs differ. Therefore, we propose a revision of this question as follows:

"Do any of the inputs in the U-value calculation differ from those identified on site?"

If yes, please provide a description of which input(s) are different together with what the value(s) should be. Please provide evidence to support your answer.

3.6 Can you please estimate how long you think it will take for these new questions to be implemented into your systems?

Please provide reasons for your response below.

E.ON believes it would take between 6-12 months to implement this due to:

- Availability of OCDEA courses for Technical Monitoring Agents to become qualified
- Design specification, development, testing and implementation of IT systems to manage the new questions at suppliers
- Design specification, development, testing and implementation of IT systems to manage the new questions at Technical Monitoring Agents
- Training requirements in-house, with installers and Technical Monitoring Agents to brief and determine technical competence in delivering the new requirements
- Significant changes to internal/external processes and timeframes to ensure delivered effectively

3.7 Do you foresee any issues if the questions were implemented during a monitoring quarter?

- Yes
- No
- Don't Know
- N/A

Please provide reasons for your response below.

Yes, we believe this would lead to:

- Significant manual work around to reconcile data between the two question formats
- The need for IT development with in-house systems and those of Technical Monitoring Agents
- Uncertainties in timeframes to acquire training for existing employees or employing new suitable qualified employees. This will be dependent on the availability of training courses
- Significant changes to internal/external processes and timeframes to ensure delivered effectively
- Unnecessary administrative burden of tracking two different regimes within a single quarter

If Ofgem were to implement the new questions, E.ON believe that the most sensible and least complex/costly option would be to introduce any new technical monitoring questions to address any concerns about U-values at the beginning of a technical monitoring reporting quarter. This will give suppliers sufficient time to ensure that Technical Monitoring Agencies contracted by suppliers can implement any changes, which as mentioned above in 3.6 will take between 6-12 months to implement.

4. Option 2 – Ongoing Monitoring

4.1 Do you agree that option 2 would increase confidence in the accuracy of overwritten U-values for CWI measures?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

This option could be open to 'cherry picking' by Suppliers as any measures found not containing full supporting evidence could be deliberately overlooked and the 5% sample made up by using measures where evidence does exist. As a result it would not necessarily improve confidence in the accuracy of the amendments and just become another 'tick box' exercise. This could be mitigated by Ofgem stipulating which measures were to be included within the sample.

We would also question how Ofgem intends to verify U-values from photographs and site notes provided. Ofgem themselves would not necessarily be suitably qualified to perform this operation, therefore will Ofgem be appointing qualified OCDEA's to recreate the calculation based on the information provided, or other suitably qualified individuals to verify the construction elements?

4.2 Do you agree that option 2 would be practical to implement, taking into consideration cost and time implications?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree

- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Option 2 would result in an extra administrative burden along with the associated costs for Suppliers. Secondly, from the information provided it is unclear how Ofgem would expect the documentary evidence to be supplied and when Suppliers would know the results of Ofgem's findings. Suppliers would need a quick turnaround by Ofgem as there is the potential that replacement ECO Credits may be needed if measures are removed.

Consideration must also be given to expectations placed upon Suppliers by Ofgem depending on the outcome of Ofgem's assessment of any evidence. This could potentially require Suppliers to "re-process" measures (eg re-notify, re-score, reject etc) on a monthly basis which will add complexity to notification processes and will likely be resource intensive.

Additionally, unless Ofgem commit to very tight timelines themselves to evaluate evidence and provide a response to Suppliers within the same month, tracking individual monthly batches would again add considerable administrative burden and would require potentially significant system development which will have an associated cost.

A further unintended consequence of this option might be that Suppliers decide to hold back payment for the measures submitted to Ofgem until assurance that there are no issues has been received by Ofgem. This could lead to cash-flow issues within the supply chain which in turn, could result in some installers going out of business.

4.3 If we were to implement a new monitoring regime in order to verify the accuracy of overwritten U-values for CWI measures, do you agree with the sample size and reporting timeframes outlined in paragraph 2.12?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

As mentioned in our response to 4.2 above, requiring Suppliers to provide evidence every month, which could then require some further corrective action for measures, could become unnecessarily burdensome from an administrative and complexity perspective especially if Ofgem can not commit to responding with their assessment within the same month.

The sample size of 5% appears a little arbitrary and lacks statistical significance, (but on a monthly basis could highlight any systemic issues or trends). Downloading documentary evidence from our system will necessitate a manual process, so any determination of an appropriate sample size will need to take into consideration the additional resource and administrative requirements and associated costs.

5.1 Do you agree that option 3 would increase confidence in the accuracy of overwritten U-values for CWI measures?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Before any kind of monitoring is to take place there must be clear guidance regarding evidence requirements and the level of detail required. Even then Suppliers are reliant upon the integrity of the supply chain to correctly identify the property fabric and record them correctly. If thicknesses and densities are misreported then there is little chance of discovering this from drawings and a photograph as part of a desktop exercise.

5.2 Do you agree that option 3 would be practical to implement taking into consideration cost and time implications?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Option three would cause less disruption than option two. However, we would want Ofgem to specify which measures were going to be audited to prevent cherry picking and ample notice must be given to enable Suppliers to obtain the relevant information from the supply chain.

This option could cause uncertainty within the supply chain as Suppliers would not know if measures were going to be rejected/revoked by Ofgem potentially until after the Obligation period has closed. If the audits were left too late it could prevent suppliers obtaining replacement ECO Credits and depending on the size of the issue could endanger a Supplier's successful completion of the Obligation.

Therefore, if Option 3 were to be adopted, E.ON would prefer that this takes place at the earliest opportunity in order to identify any potential issues that may need corrective action or replacement; and to provide us with an opportunity to review and improve processes to avoid any further potential

exposure.

6. Additional Questions

6.1 Do you have concerns with U-values being overwritten for other ECO measure types?

Please provide details and supporting evidence for your response below.

We consider solid wall measures to be at risk of U-value overwriting especially as suppliers have a Solid Wall Minima to achieve and the amount of solid wall measures being completed throughout the industry will increase.

6.2 If you do not agree with any of proposals outlined, could you please suggest an alternative approach which you consider would provide assurance that U-values are being accurately overwritten for CWI measures?

Please provide details and supporting evidence for your response below.

E.ON agrees in principle with the proposal made at the U-value consultation workshop on 1st March 2016 of implementing new default U-values by age band for use in situations where a cavity wall is not insulated. As stated within section 1.1, this is one of the main reasons for amending U-values. However it is not clear how this could be implemented within the conventions of SAP/RdSAP and we would question how the new default values would trigger a recommendation within RdSAP for a cavity wall measure. RdSAP would need to be amended to incorporate these new default values and as far as E.ON are aware, there are no current plans to amend SAP/RdSAP within the timescales that would be required by this option.

E.ON has conducted its own analysis and has discovered instances, where the U-value could be higher than the proposed 1.6 W/m²K in particular with houses with sandstone walls containing a cavity and therefore the 1.6 W/m²K originally proposed would not be suitable for age bands for all property types. Therefore, a tiered grouping of age bands with more suitable revised default U-values could be an alternative option. For example:

- 1.8 for property age bands B to E,
- 1.6 for property age bands F G & H
- For more modern houses would expect more lightweight internal wall so we suggest a lower limit of 1.0

However, as with Ofgem's newer proposal, it is unclear how this could be implemented within the current conventions of SAP/RdSAP.

A further alternative could be for Suppliers to conduct internal assurance activity by carrying out additional quality assurance checking through sample testing of U-value calculations as a desk-top exercise or by performing periodic internal audits of their own measures to verify the accuracy of overwritten U-value calculations.

6.3 Do you agree that the proposals outlined above will enable U-values to continue to be overwritten for CWI measures where this is appropriate?

Please provide reasons for your response below.

It is unclear whether the proposals within this consultation would achieve the assurance that Ofgem intends within the timescales of the remainder of ECO2.

Any changes to systems or processes will have a cost implication and depending on the scale could take at least 6 months to develop and implement.

Whilst we appreciate that Ofgem have "concerns" regarding over-written U-values for CWI measures, it is unclear whether there are any genuine "issues" that need to be rectified have been specifically identified, and Ofgem need to ensure that they are not introducing a "sledgehammer to crack a nut" to rectify an industry that should be effectively governed by the accreditation bodies that regulate it.

Introduction of clear, specific and prescriptive guidance on the details required in any supporting justification would have the biggest impact in terms of reducing potentially fraudulent activity as this would enable Suppliers to reject surveys with insufficient documented justification before the measure is Notified and paid for.

Whilst additional score monitoring questions may go some way to identify any issues, there remains the conundrum of adding additional layers of "suitably qualified individuals" to check the work of professionals who work within an already established governance framework.

Effort could be better spent by Ofgem by using their influence to ensure that the industries that Suppliers are expected to engage with during the discharge of their ECO are fit for purpose.