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Energy Company Obligation 2015-2017 (ECO2): ECO2.2 Consultation

Publication:	4 December 2014	**Team:**	ECO
Response deadline:	21 January 2015	**Email:**	eco.consultation@ofgem.gov.uk

Overview:

The government is extending ECO, introducing an obligation period from April 2015 to March 2017 (termed 'ECO2'). The Electricity and Gas (Energy Company Obligation) Order 2014 (the 'ECO2 Order') sets out the requirements for ECO2.

This consultation seeks views on the policies we are proposing in relation to certain aspects of ECO2. These include policies where we are exercising our discretion in administering new legislative provisions for ECO2 or where we are making further improvements to our current policies.

To help maintain continuity for stakeholders involved in delivering ECO measures, where the ECO2 legislation reflects the ECO1 legislation, it is our intention to keep our policies and administrative processes largely unchanged. As such, rather than publishing full draft guidance alongside this consultation document, much of which will be very similar to that contained in the ECO Guidance for Suppliers (version 1.2), we have focussed on the areas where we plan to introduce new policies or make changes to our current policies and/or processes.

About this consultation

The ECO Order 2014 sets out the requirements for the ECO2 obligation period, which runs from 1 April 2015 to 31 March 2017. This consultation asks specific questions on areas of ECO2 where we will be exercising some degree of discretion in our administration, either where the law has changed or where we are proposing changes to our existing policies.

In developing our guidance for ECO2, we are running two separate consultations (ECO2.1 and ECO2.2). The first consultation (ECO2.1) was run separately in order to provide early certainty on the Home Heating Cost Reduction Obligation (HHCRO) requirements for ECO1 measures which suppliers may wish to carry forward to ECO2. The ECO2.2 consultation focuses on the other ECO2 changes.

- **ECO2.1** – The ECO2.1 consultation details how we propose to administer specific requirements of the HHCRO for ECO2, relating to non-gas fuelled premises, qualifying warranties for boiler replacements, and warranties for electric storage heater replacements. The ECO2.1 consultation closed on 1 December 2014. Once we have reviewed the ECO2.1 consultation responses, we will publish a guidance note in January 2015 on the ECO2 requirements for HHCRO measures and surplus actions.

- **ECO2.2** – The ECO2.2 consultation covers the remaining ECO2 legislative changes and areas where we would like to strengthen some of our existing policies. Following the ECO2.2 consultation, we will publish the final ECO2 guidance in late February/ early March 2015, which will also include the contents of the ECO2.1 guidance note.

Table 1 shows the ECO2 consultation process.

Table 1 ECO2 consultation process

	ECO2.1	**ECO2.2**
Consultation launch	17 October 2014	04 December 2014
Consultation close	01 December 2014	21 January 2015
Publications	January 2015 • *Guidance note on HHCRO requirements* • *Consultation response (2.1)*	Late February/early March 2015 • *Final ECO2 Guidance for Suppliers* • *Consultation response (2.2)*

ECO2.2 Consultation

This consultation consists of seven sets of questions on the following areas:

1. Pre-existing roof insulation requirements: Pre-conditions for district heating systems (DHS) under CERO and CSCO
2. Cavities which cannot be insulated: Pre-conditions for DHS under CERO and CSCO
3. Calculating the lifetime for multi-fuel upgrades of existing DHS connections
4. Qualifying electric storage heaters
5. Qualifying boilers: Not functioning efficiently
6. Virgin loft insulation: New requirements
7. Technical monitoring process: Revisions

Each section sets out the legislative requirements (where relevant), our proposals for consultation and the specific questions that we would like you to answer. We welcome your responses to these questions and your views on our proposals.

Appendix 1 includes our draft guidance for ECO2 on technical monitoring and score monitoring. This draft chapter is included as an appendix, alongside Section 7, to provide as much detail as possible on our proposals for revising the process. Appendix 1 should be used as the basis for answering the consultation questions in Section 7.

Appendix 2 provides information on responding to this consultation and lists all of the questions from each section.

Appendix 3 looks to gather stakeholder feedback on our consultation process to inform how we conduct future consultations.

Useful Links

Legislation:

- The Electricity and Gas (Energy Companies Obligation) Order 2012
- The Electricity and Gas (Energy Companies Obligation) (Amendment) Order 2014
- The Electricity and Gas (Energy Company Obligation) Order 2014
  http://www.legislation.gov.uk/all?title=energy%20company

Guidance:

- ECO Guidance for Suppliers (version 1.2)
  https://www.ofgem.gov.uk/publications-and-updates/energy-companies-obligation-eco-guidance-suppliers

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1. Pre-existing roof insulation requirements: Pre-conditions for DHS under CERO & CSCO

What are we consulting on? *Our proposed requirements for pre-existing roof insulation, in relation to connections to district heating systems for CERO and CSCO.*

Context

Legislative requirement

1.1. In both ECO1 and ECO2, for a connection to a district heating system (DHS) to be an eligible CERO or CSCO measure, the premises being connected must meet one of two insulation requirements, known as the 'insulation pre-conditions'.[1]

1.2. Pre-condition 1 applies to all premises, except premises in a multi-storey building that do not include the top floor of the multi-storey building. These premises must have either 'roof insulation'[2] or 'wall insulation'[3] in place.

Background to our proposal

1.3. The insulation in place can be new or pre-existing insulation, or a combination of both. Where there is pre-existing insulation in place, for the area to be considered insulated, certain standards should be met. In our Guidance for Suppliers (version 1.2) we detail the requirements for pre-existing wall insulation that must be met for the wall to be considered insulated. However, our guidance does not currently specify any minimum requirements in relation to pre-existing roof insulation.

1.4. To address this, we are proposing requirements that any pre-existing roof insulation must meet.

Proposal for consultation: Requirements for pre-existing roof insulation

1.5. Where a premises has pre-existing roof insulation, which is not being claimed as an ECO measure and which a supplier intends to use to meet pre-condition 1, we will judge that the insulated roof area is sufficiently insulated if:

a. the premises was built, or the pre-existing roof insulation was installed, during or after 1983 in England and Wales, or during or after 1984 in Scotland,

OR

[1] These conditions were introduced for ECO1 through the ECO (Amendment) Order 2014.
[2] 'Roof insulation' includes: flat roof insulation, loft insulation, rafter insulation or room-in-roof insulation.
[3] 'Wall insulation' includes: external wall insulation, internal wall insulation and cavity wall insulation.

b. the pre-existing roof insulation (where the premises was built or the insulation was installed before 1983 in England and Wales, or before 1984 in Scotland, or where the dates are unknown) achieves the required U-value for the relevant roof type. This is where:

(i) the premises has a flat roof and the existing flat roof insulation achieves a U-value of 0.40W/m^2K or lower

(ii) the premises has a pitched roof and the existing rafter insulation achieves a U-value of 0.40W/m^2K or lower

(iii) the premises has a room-in-roof and the existing room-in-roof insulation achieves a U-value of 0.50W/m^2K or lower, or

(iv) the premises has a loft and the existing loft insulation achieves a U-value of 0.40W/m^2K or lower (this will be considered achieved where the pre-existing insulation is installed to a depth of 100mm).

1.6. For point **a.** above, it is assumed that the pre-existing roof insulation meets the building regulations in place at that time. As with our current requirements for pre-existing wall insulation, we have aligned our proposed requirements for pre-existing roof insulation with the age band G values set out in RdSAP.[4] These defaults provide the assumed U-values for buildings of different ages including the roof insulation standards in place in certain years.

Question 1:

a) Do you agree with our proposed requirements for pre-existing roof insulation? Please provide reasons for your answer.

b) Do you have any further comments or suggestions relating to this policy area?

[4] Standard Assessment Procedure for Energy Rating of Dwellings (2012), Appendix S Table S10: Assumed roof U-values.

2. Cavities which cannot be insulated: Pre-conditions for DHS under CERO & CSCO

What are we consulting on? *Our proposed reasons for judging that a cavity in a wall cannot be insulated, in relation to connections to district heating systems for CERO and CSCO.*

Context

Legislative requirement

2.1. For a connection to a district heating system (DHS) to be an eligible CERO or CSCO measure, the premises being connected must meet one of the two insulation pre-conditions,[5] as discussed in Section 1 of this document.

2.2. For ECO2, the insulation pre-conditions are set out in the ECO Order 2014 ('the ECO2 Order'). Only pre-condition 2, which relates to premises in a multi-storey building (except those which include the top floor of the building), is changing.

2.3. In the ECO Amendment Order 2014 (ECO1.2), pre-condition 2 sets out the insulation conditions which must be met by the individual premises in a multi-storey building, for a connection to a DHS at that premises to be an eligible CERO or CSCO measure. In the ECO2 Order, pre-condition 2 now specifies the insulation conditions which must be met by the entire multi-storey building in which that premises is located, for a connection to a DHS at that premises to be an eligible CERO or CSCO measure.

2.4. **Pre-condition 2 for ECO2:** this pre-condition applies to premises in a multi-storey building (except those which include the top floor of the building). There is no requirement for roof insulation to be installed as this is not possible. However, all exterior-facing walls of the multi-storey building must be insulated except for walls which have:

a. one or more parts which are of solid wall construction, or

b. a cavity which *cannot be insulated*.

2.5. As defined in the ECO2 Order, a solid wall includes brick walls, metal or timber-frame walls and walls of pre-fabricated concrete construction. In line with pre-condition 2, these walls, being of solid wall construction, do not need to be insulated.

2.6. Exterior-facing walls are those which are fully exposed. This does not include party walls or walls facing enclosed passageways.

[5] Article 2 of the ECO2 Order.

Background to our proposal

2.7. A premises in a multi-storey building (except those which include the top floor of the building) is eligible for a connection to a DHS if all the exterior-facing walls of the multi-storey building are insulated,[6] except walls which have one or more parts of solid wall construction or have a cavity that cannot be insulated.

2.8. In our Guidance for Suppliers (version 1.2) we set out reasons for judging that an exterior-facing wall of a premises (or part of it) cannot be insulated.[7] For example, where it is not possible to access the wall to install the insulation; where it is unlawful to install the insulation; or, where the occupier of the premises refuses to consent to installing the insulation on grounds other than cost. These reasons are still applicable for pre-condition 2; however, for ECO2 they will need to be considered in relation to the entire multi-storey building rather than the individual premises.

Proposal for consultation: Reasons for judging that a cavity wall cannot be insulated

2.9. Given part of pre-condition 2 now relates directly to cavity walls, we are proposing additional reasons, relating to specific technical conditions, under which we will judge that a cavity wall *cannot be insulated*.

2.10. We will judge that an exterior-facing cavity wall of a multi-storey building cannot be insulated where cavity wall insulation[8] cannot be installed because:

a. the wall has a section of cavity which is less than 40mm, or

b. the wall adjoins an exterior-facing wall (of the same building) which cannot be insulated.

Where the wall has a section of cavity which is less than 40mm

2.11. Where a cavity is narrower than 40mm there is a risk of mortar bridging the cavity, which may cause damp issues in affected properties. The narrow width of these cavities also makes them difficult to fill evenly and any voids left between insulated areas within the cavity could also cause damp problems.

2.12. This includes where a cavity is partially filled with pre-existing insulation fixed to the inner leaf in the vertical plane, reaching the full height of the cavity. Measurement of the cavity width should be carried out taking into account the partial fill. For example, if an 80mm cavity already contains 50mm of cavity wall insulation, the residual cavity is 30mm and we will judge that the cavity cannot be insulated.

[6] Where a wall has pre-existing insulation that meets certain standards, as specified in our Guidance for Suppliers (version 1.2), it will be considered insulated.
[7] Chapter 4, paragraph 4.66.
[8] Where cavity wall insulation refers to filling the cavity of the wall.

Where the wall adjoins an exterior-facing wall which cannot be insulated

2.13. This addresses technical issues which are more prevalent in buildings that are not fully insulated, such as moisture issues which can result from increased heat loss through uninsulated walls. Where a cavity wall (Wall A) adjoins a wall (Wall B) that we judge cannot be insulated, we will also judge that Wall A cannot be insulated.

Question 2:

a) Do you agree with our proposal that a wall with a section of cavity narrower than 40mm cannot be insulated? Please provide reasons for your answer.

b) Do you agree with our proposal that a wall which adjoins a wall which cannot be insulated also 'cannot be insulated'? Please provide reasons for your answer.

c) Are there any other scenarios where a cavity wall cannot be insulated? Please provide reasons for your answer.

d) For compliance purposes, how can suppliers demonstrate that a cavity wall cannot be insulated?

e) Do you have any further comments or suggestions relating to this policy area?

3. Calculating the lifetime for multi-fuel upgrades of existing DHS connections

What are we consulting on? *Our proposed options for calculating the lifetime for multi-fuel upgrades of existing DHS connections.*

Context

Legislative requirement

3.1 As the ECO administrator, we have a statutory duty to attribute carbon savings and cost scores to ECO measures. To do this, we must be satisfied that the carbon savings or costs scores notified by a supplier are correct.

3.2 For ECO measures, the carbon savings and cost scores include the expected lifetime of the measure. Therefore, in order for us to be satisfied that the carbon savings or cost scores are accurate, we must also be satisfied that the lifetime for each measure is appropriate.

3.3 Our measures table provides standard lifetimes for suppliers to use when calculating the carbon savings and cost scores for measures, including connections to a DHS.

Background to our proposal

3.4 We recently gathered views through a call for evidence on DHS lifetimes and, based on the views of industry and additional evidence gathered, we have standardised lifetimes for new connections to a DHS and updated some of the lifetimes for single-fuel upgrades of a DHS connection.[9] We have published an updated measures table which includes these changes.[10]

3.5 Where a multi-fuel upgrade of a DHS connection consists of heat generating technologies which have the same lifetime, this lifetime can be used when calculating the carbon saving or cost score for this measure. However, the measures table does not provide specific lifetimes for multi-fuel upgrades of DHS connections where the upgrade includes heat generating technologies which have *different* measure lifetimes.

3.6 Based on our engagement with industry during ECO1, we have identified the need to develop a methodology for calculating the lifetime for a multi-fuel upgrade of a DHS. Therefore, we are proposing four possible options (including our preferred option) for calculating the lifetimes for these measures for ECO2.

[9] DHS connections can be supplied by either single-fuel or multi-fuel technologies. Multi-fuel systems are those that have more than one heat generating technology.
[10] https://www.ofgem.gov.uk/ofgem-publications/83100/energycompaniesobligation-measures.pdf.

Proposal for consultation: Options for calculating the lifetime for multi-fuel upgrades of existing DHS connections

3.7 Below we set out our four options for calculating the lifetime for multi-fuel upgrades of existing DHS connections:

Option 1 weights the individual lifetimes of the DHS heat generators based on the proportion of CO_2 savings achieved by each generator.

Option 2 weights the individual lifetimes of the DHS heat generators based on the proportion of the heat supplied by each generator.

Option 3 assumes the lifetime is equal to the shortest lifetime of the DHS heat generators.

Option 4 proposes that lifetimes for multi-fuel upgrades are calculated and awarded on a case-by-case basis.

3.8 Our preferred option is **Option 1.** This option calculates a weighted measure lifetime based on CO_2 savings. The expected lifetime of a measure represents the period of time over which the measure might reasonably be expected to deliver savings. Option 1 best reflects this as it is weighted towards the heat generator that achieves the greatest savings in the DHS upgrade.

Option 1: *Weighted lifetime based on the proportion of CO_2 savings from each heat generator*

3.9 Our preferred approach takes into account the CO_2 emissions of a DHS (before and after the upgrade) and the proportion of the total savings each heat generator is responsible for.

3.10 To avoid adding burden, we have kept this calculation as simple as possible by using values that are already available from calculations in the Standard Assessment Procedure (SAP).

3.11 Below we provide an example using values for a theoretical multi-fuel upgrade of a DHS connection. Table 2 contains the input data for the calculations. Table 3 details the calculation steps that result in the weighted lifetime.

Table 2 Input data for calculating the weighted lifetime for a multi-fuel upgrade

Label	*Description*	*Units*	*Example Value*
A	System emissions before upgrade	$kgCO_2/kWh$	500
B	Heat generator X emissions after upgrade	$kgCO_2/kWh$	100
C	Heat generator Y emissions after upgrade	$kgCO_2/kWh$	300
D	Heat supplied by heat generator X	kWh/year	500
E	Heat supplied by heat generator Y	kWh/year	300
F	Lifetime of heat generator X	Years	30
G	Lifetime of heat generator Y	Years	25

Table 3 Steps to calculate the weighted lifetime for a multi-fuel upgrade

Label	*Description*	*Units*	*Calculation*	*Example Value*
H	Emissions saving for heat generator X	$kgCO_2/kWh$	A-B	400
I	Emissions saving for heat generator Y	$kgCO_2/kWh$	A-C	200
J	Total emissions saving for heat generator X	$kgCO_2$/year	H*D	200,000
K	Total emissions saving for heat generator Y	$kgCO_2$/year	I*E	60,000
L	Proportion of savings for heat generator X		J/(J+K)	0.77
M	Proportion of savings for heat generator Y		K/(J+K)	0.23
N	**Weighted lifetime for multi-fuel upgrade**	**Years**	**(L*F) + (M*G)**	**29**

Worked example for Option 1:

Step 1: Calculate the total emissions saving for heat generator X

H (Emissions saving for heat generator X) x **D** (Heat supplied by heat generator X)
= **J** (Total emissions saving for heat generator X)

400 x 500 = **200,000kgCO_2/year (J)**

Step 2: Calculate the total emissions saving for heat generator Y

I (Emissions saving for heat generator Y) x **E** (Heat supplied by heat generator Y)
= **K** (Total emissions saving for heat generator Y)

200 x 300 = **60,000kgCO_2/year (K)**

Step 3: Calculate the proportion of savings for each heat generator

J (Total emissions saving for heat generator X) / (**J** (Total emissions saving for heat generator X) + **K** (Total emissions saving for heat generator Y))
= **L** (Proportion of savings for heat generator X)

200,000/ (200,000 + 60,000) = **0.77 (L)**

Therefore:

The proportion of savings from heat generator Y **(M)** = **0.23 (M)**

Step 4: Calculate weighted lifetime for multi-fuel DHS upgrade

(**L** (proportion of savings from heat generator X) x **F** (Lifetime of heat generator X)) +
(**M** (proportion of savings from heat generator Y) x **G** (Lifetime of heat generator Y))
= **N** (Weighted lifetime for multi-fuel DHS upgrade)

(0.77 x 30) + (0.23 x 23) **= 29 years (N)**

Option 2: *Weighted lifetime based on the proportion of heat supplied by each heat generator*

3.12 Option 2 takes into account the proportion of the heat supplied by each heat generator to calculate a weighted lifetime for the upgrade. This is calculated using the formula below:

(A*X) + (B*Y) = multi-fuel DHS lifetime

Where:

'A' = upgrade lifetime when single fuel

'X' = proportion of heat supplied by generator A

'B' = upgrade lifetime when single fuel

'Y' = proportion of heat supplied by generator B

Example:

3.13 A multi-fuel upgrade has biomass and gas heat sources with lifetimes of 30 years and 25 years respectively. Biomass provides 60% of the heat and gas 40%. The weighted lifetime is calculated as follows:

(30*0.6) + (25*0.4) =28 years

3.14 While this approach gives a good approximation of the lifetime for the multi-fuel upgrade as it is weighted towards the main heat source, we are concerned that it does not take into account the proportion of CO_2 savings that each heat source has achieved. Therefore, the lifetime derived does not necessarily reflect the expected time for which the measure will deliver emissions savings.

Option 3: *Shortest lifetime approach*

3.15 In this option, where there is more than one heat generator lifetime, the lifetime for the multi-fuel upgrade is equal to the shortest of these lifetimes. For example, the lifetime for a multi-fuel upgrade which includes two heat generators with lifetimes of 25 years and 30 years respectively, will be 25 years.

3.16 This approach does not account for the potentially large differences in generator lifetimes and assumes that the system is limited to the technology with the shortest lifetime. Based on this assumption we also do not think it is appropriate for the lifetime of the multi-fuel upgrade to equal the longest of the heat generators lifetimes.

Option 4: *Bespoke, non-standard approach*

3.17 This approach requires suppliers to submit non-standard lifetime applications for each multi-fuel upgrade in order for us to determine a bespoke lifetime. This is our least

preferred option as each multi-fuel upgrade has to be assessed on a case-by-case basis, increasing the burden on both the supply chain and us, as the administrator.

3.18 Suppliers would have to provide additional evidence to support each non-standard lifetime, which we would then need to assess against the non-standard lifetime criteria.[11] As such, this bespoke approach may delay DHS projects depending on the time required to assess non-standard lifetime applications. It also risks introducing inconsistency in DHS scores due to the lack of a standard methodology for calculating lifetimes.

Question 3:

a) Do you agree with our preferred approach (Option 1) for calculating the lifetime for multi-fuel DHS upgrades? Please provide reasons for your answer.

b) If you do not agree with Option 1, do you agree with any of the other proposed options for calculating the lifetime for multi-fuel upgrades? If not, can you propose an alternative approach for calculating the lifetime for multi-fuel DHS upgrades?

c) Do you have any further comments or suggestions relating to this policy area?

[11] Refer to Chapter 8 of the Guidance for Suppliers (version 1.2) for more information on non-standard lifetimes.

4. Qualifying electric storage heaters

What are we consulting on? *Our proposed definitions for 'broken down' and 'cannot be economically repaired', in relation to qualifying electric storage heaters.*

Context

Legislative requirement

4.1 In ECO1, electric storage heater (ESH) replacements are eligible HHCRO measures, however, ESH repairs are not.

4.2 The ECO2 Order introduces the concept of qualifying electric storage heaters (QESHs) for HHCRO. The scoring methodology for a QESH is different to the methodology used for an ESH measure in ECO1, as a QESH can be scored from a baseline of 'no heating present', similar to a qualifying boiler. To be considered a QESH, the existing ESH must meet certain conditions, as detailed in the ECO2 Order. Both replacements and repairs of QESHs are eligible ECO2 measures. The ECO2 Order defines a QESH as:

a. in the case of an electric storage heater to be repaired, an electric storage heater which the Administrator is satisfied has broken down and has a responsiveness rating, when assessed against the Standard Assessment Procedure, of more than 0.2, and

b. in the case of an electric storage heater to be replaced, an electric storage heater which:

(i) the Administrator is satisfied has broken down and cannot be economically repaired, or

(ii) is located at the same premises as an electric storage heater which falls within paragraph (a) or sub-paragraph (i) and has a responsiveness rating, when assessed against the Standard Assessment Procedure, equal to or less than 0.2.

Background to our proposal

4.3 The above definition states that the responsiveness rating of an ESH must be determined using the Standard Assessment Procedure (SAP).[12] The responsiveness rating reflects the ability of the heater to match the heating needs of the premises. Responsiveness ratings are defined by the Building Research Establishment (BRE) and documented within SAP. Typically the responsiveness rating of older ESHs is lower.

[12] Table 4a in the Government's Standard Assessment Procedure for Energy Rating of Dwellings (2012).

4.4 To be satisfied that an ESH meets the definition of a QESH for repair or replacement, we also need to determine when an ESH is 'broken down' or 'cannot be economically repaired'.

4.5 Following this consultation, and once we have finalised our policy on QESHs, we will produce an ESH checklist which will be used by operatives to determine whether an ESH should be repaired or replaced.

Proposal for consultation: Defining when an ESH is broken down or cannot be economically repaired

An ESH which is broken down

4.6 We are proposing the following definition of 'broken down' for QESHs being repaired or replaced:

'An ESH is broken down if, when connected to an electric supply, it does not deliver any heat.'

4.7 As per standard industry practice, the assessor must make sure that the ESH is connected to an active electricity supply, and the unit is switched on, to verify that the ESH is broken down.

An ESH which cannot be economically repaired

4.8 Where an ESH is broken down, we will judge that it cannot be economically repaired where:

a. the ESH has a responsiveness rating less than or equal to 0.2 (when assessed against SAP 2012), or

b. the ESH has a responsiveness rating of more than 0.2 and:

(i) the required replacement parts for the ESH are not available on the market, ie parts needed for the repair are no longer produced,

(ii) the actual cost of repair is greater than the cost of replacing the ESH, or

(iii) the actual cost of repair is greater than the relevant threshold in the 'Economic Repair Cost Comparison Table'.

4.9 The Economic Repair Cost Comparison Table (Table 4 below) should be used to determine whether an ESH with a responsiveness rating of more than 0.2 can be economically repaired.

4.10 Table 4 shows the maximum repair costs for ESHs of different types and ages. If the actual cost of repair is higher than the relevant maximum cost outlined, it is considered

more economical to replace the ESH than repair it and as such it is judged that it *cannot be economically repaired*.

4.11 The maximum cost of repair for an ESH is derived from the type of ESH, the estimated average installation cost of replacing the ESH and the age of the ESH. These costs have been developed in association with industry. The estimated installation cost includes the cost of the ESH, fittings, sub-contracted electrician (if needed), quotation, labour and a warranty of at least one year.

4.12 From our engagement with industry, we understand that there are no slim line storage heaters on the market with a responsiveness rating of more than 0.2. As such, we will always judge that slim line storage heaters cannot be economically repaired and we have therefore not included them in the Economic Repair Cost Comparison Table.

Table 4 Economic Repair Cost Comparison Table[13]

Maximum repair cost for electric storage heaters			
	Types of electric storage heaters[14]		
Age of heater (years)	Integrated storage+ direct acting heater (£)	Fan storage /high heat retention storage heater (£)	Convector storage heater (£)
1 - 4	460	715	584
5	422	656	535
6	383	596	487
7	345	536	438
8	307	477	389
9	268	417	341
10	230	358	292
11	192	298	243
12	153	238	195
13+	115	179	146

[13] We judge that the electricity tariff, responsiveness and controls have no impact on repair cost.
[14] ESH types are defined as per Table 4a in the Government's Standard Assessment Procedure for Energy Rating of Dwellings (2012).

Question 4:

a) Do you agree with our proposed definition of a 'broken down' ESH? Please give reasons for your answer.

b) Do you agree with our proposal for judging that an ESH cannot be economically repaired? Please give reasons for your answer.

c) Do you agree with the thresholds given in the ESH Economic Repair Cost Comparison Table? Please give reasons for your answer.

d) Do you have any further comments or suggestions relating to this policy area?

5. Qualifying boilers: Not functioning efficiently

What are we consulting on? *Our proposed amendments to the boiler fault list and additional information on when certain faults would result in the boiler requiring repair or replacement.*

Context

Background to our proposal

5.1. Appendix 2 of our Guidance for Suppliers (version 1.2) provides information on when a boiler meets the definition of a 'qualifying boiler'[15] and when we will consider that a boiler is 'broken down', 'not functioning efficiently' and 'cannot be economically repaired'.

5.2. We do not intend to make any changes to the definitions for 'broken down' and 'cannot be economically repaired'. However, based on the results to date from the ECO1 HHCRO audit[16] and evidence from industry, we have reason to believe that the current indicators of 'not functioning efficiently' should be revised.

5.3. Under ECO1 we developed a list of faults which indicate that the boiler is not functioning efficiently and which are used as the criteria for determining whether a boiler should be repaired or replaced.

5.4. The ECO1 boiler fault list is as follows:

a. boiler heat exchanger corrosion or fouling

b. no boiler ignition or unstable firing

c. flue gas analyser combustion results outside boiler manufacturer tolerance

d. gas supply rate outside boiler manufacturer tolerance

e. gas supply pressure outside boiler manufacturer tolerance

f. burner pressure outside boiler manufacturer tolerance

g. boiler and system sludge

h. poor flue condition

i. primary flow rate outside boiler manufacturer tolerance or unsatisfactory

[15] The definition for 'qualifying boiler' is not changing for ECO2.
[16] Conducted to assess the compliance of measures notified as "qualifying boilers" under HHCRO.

j. primary flow temperature outside boiler manufacturer tolerance or unsatisfactory

k. for combustion boilers only, unsatisfactory hot water flow rate or temperature.

5.5. The fault list is included in the Boiler Assessment Checklist which is used by operatives to assess whether a boiler is broken down or not functioning efficiently and subsequently whether it should be repaired or replaced.

Proposal for consultation: Revision of the boiler fault list

5.6. Based on the audit results and industry feedback, we are proposing changes to this fault list and adding information on when certain faults would result in the boiler requiring repair or replacement.

5.7. We propose the following changes:

1. 'Boiler and system sludge' and 'unstable firing' alone are insufficient reasons to replace a boiler. If these are the only faults, the boiler should be repaired. However, where there are additional faults, such as corrosion of the boiler heat exchanger, the combination of faults may result in the boiler needing to be replaced. The fault list is contained within the Boiler Assessment Checklist which will be updated to reflect that these faults should not be the sole reason for a boiler to be replaced.

2. 'No boiler ignition' and 'unstable firing' are two separate faults. 'Unstable firing' alone is a fault which should result in the boiler being repaired rather than requiring replacement. 'No boiler ignition' could result in either repair or replacement of the boiler depending on the nature of the fault. As such these two faults should be considered separately.

3. The fault list has been updated to ensure fault descriptions are relevant to all types of boilers. References to 'gas' are replaced with either 'fuel' or 'fuel/electric' as applicable.

5.8. Taking the above into account, we propose the following revised boiler fault list (with revisions in bold) to be used in determining whether a boiler can be repaired or replaced:

a. corrosion or fouling of the boiler heat exchanger

b. no boiler ignition

c. unstable firing

d. results of the flue gas analyser combustion are outside the manufacturer tolerance

e. **fuel/electric** supply rate outside the manufacturer tolerance

f. fuel supply pressure outside the manufacturer tolerance

g. burner pressure outside the manufacturer tolerance

h. boiler and system sludge causing failure

i. poor flue condition

j. primary flow rate unsatisfactory or outside the manufacturer tolerance

k. primary flow temperature unsatisfactory or outside the manufacturer tolerance

l. for combination boilers only, unsatisfactory temperature or hot water flow rate.

Question 5:

a) Do you agree that 'boiler and system sludge' and 'unstable firing' alone are insufficient reasons for a boiler to be replaced? Are there any other faults which on their own are insufficient reasons for a boiler to be replaced? Please give reasons for your answers.

b) Do you agree that 'no boiler ignition' and 'unstable firing' should be considered separately? Please give reasons for your answers.

c) Do you agree that the boiler fault list is suitable to identify faults with non-gas fuelled boilers? Please give reasons for your answers.

d) Do you have any further comments or suggestions relating to this policy area?

6. Virgin loft insulation: New requirements

What are we consulting on? *Proposed changes to our requirements for virgin loft insulation measures.*

Context

Background for our proposal

6.1. Loft insulation as a CERO primary measure is a cost-effective and therefore attractive measure. This is particularly true of virgin loft insulation. We have been made aware that there may be instances where installations are being falsely claimed as virgin loft insulation measures when they should in fact be claimed as loft top-ups. These instances relate to where:

- an installer tops up existing loft insulation but calculates the ECO score as if no existing loft insulation was present, or
- an installer (or a person under the instruction of the installer or associated with the installation) removes existing loft insulation, which was not posing any health and safety risks, and calculates the ECO score as if no loft insulation was present.

6.2. In both of these instances, the total savings claimed should only relate to the difference in savings between the existing insulation and the new insulation installed under ECO. Scoring such measures without taking into account the existing insulation may be fraudulent and we are keen to ensure that this does not happen under ECO. As for all ECO measures, we carry out a number of compliance checks on loft insulation measures, however, we do not currently verify the pre-installation condition of the premises through our monitoring or auditing processes.

Proposal for consultation: Changes to our requirements for virgin loft insulation

6.3. For ECO2, we are proposing changes to our requirements which should give us greater confidence that loft insulation measures being installed are as notified.

6.4. For ECO2, to claim virgin loft insulation, a supplier must be able to demonstrate that there was no insulation present in the loft before the measure was installed.

6.5. To claim virgin loft insulation we propose that:

1. A supplier is able to demonstrate that the person recommending the loft insulation and/or the person scoring the measure was able to gain access to the loft during their assessment of the property,

***AND* (one or more of the following):**

2. A declaration is obtained from the occupier or the landlord, as applicable, by the installer at the time of installation or handover to confirm that no insulation was present, in all or part of the loft area, before the loft insulation was installed.

3. An additional question is included for loft insulation in our technical monitoring questions, which will require the customer to confirm to the monitoring agent that no insulation was present before the loft insulation was installed.

4. Pre- or mid-installation loft insulation inspections are carried out by the technical monitoring agent.

6.6. Currently for ECO1, for the purposes of reporting, a virgin loft insulation measure relates to a loft with existing insulation up to 60mm (although the score reflects the actual level of existing insulation). For ECO2, for the purposes of reporting, we will only consider a virgin loft insulation measure as relating to a loft where there is NO existing insulation present.

Question 6:

a) Do you think the proposed changes to our requirements will be effective in reducing false claims of virgin loft insulation? Please provide reasons for your answer in relation to each change.

b) Do you see any difficulties in implementing these changes? Please provide reasons for your answer.

c) Do you have any suggestions for other controls or requirements we could introduce to reduce or prevent such false claims? Please provide reasons for your answer.

d) Where existing insulation is removed because it is posing health and safety risks and new insulation installed, should the measure be claimed as virgin or top-up loft insulation? Can you provide examples of health and safety risks that would require insulation to be removed and how a supplier could demonstrate these risks?

7. Technical monitoring process: Revisions

What are we consulting on? *Our proposed changes to the technical monitoring process.*

Context

7.1. As the ECO administrator we can require a supplier to provide us with evidence to demonstrate that it is complying with, or has complied with, any requirement under the ECO Order. For technical monitoring, this takes the form of reports detailing the results of monitoring undertaken.

7.2. Technical monitoring verifies whether a measure has been installed to the relevant installation standards, by a person of appropriate qualification and expertise, and complies with the eligibility requirements for that measure. It also verifies whether certain inputs, relating to the characteristics of the premises or measure, used to calculate the carbon saving or cost score are accurate.

Background for our proposal

7.3. Over the course of ECO1, we have updated the technical monitoring process in response to new challenges and issues that have arisen. ECO2 offers an opportunity to consolidate these updates, further enhance our technical monitoring process and update our guidance to help suppliers achieve the technical monitoring requirements.

7.4. Appendix 1 of this consultation document includes the draft guidance on *Technical monitoring and score monitoring,* which sets out the proposed process for technical and score monitoring for ECO2.

7.5. The draft guidance currently does not provide information relating to required qualifications for monitoring agents. This will be included in our final ECO2 guidance based on the responses to Question 7c of this consultation.

7.6. The draft guidance also does not include the technical monitoring questions to be used by monitoring agents. We will be engaging further with stakeholders on these questions ahead of ECO2 and are also considering how these questions could be used to promote high quality installations. We are considering whether 'best practice' questions should be introduced alongside the core questions.

Proposal for consultation: Changes to the technical monitoring process

7.7. The main changes we are proposing for technical monitoring for ECO2 are:

1. splitting the monitoring process into technical monitoring and score monitoring
2. limiting monitoring to measures installed in a specific quarter

3. basing monitoring levels on a supplier's performance in previous quarters ('reactive'), and

4. requiring specific qualifications for technical and score monitoring agents.

Question 7: (NB: Please see Appendix 1 before answering any of the below questions)

a) Do you agree it is more appropriate to assess quality of installation and the accuracy of scores separately?

b) Do you agree with the proposed reactive monitoring process described in paragraphs 1.45 to 1.56 of Appendix 1? Do you think the monitoring rates are appropriate?

c) Do you agree that technical monitoring agents should have certain qualifications as explained in paragraph 1.15 of Appendix 1? Can you suggest which qualifications are most appropriate for different categories of measure?

d) Are the qualifications listed in paragraph 1.16 of Appendix 1 appropriate for score monitoring agents? Are there any other qualifications that you would suggest?

e) Do you agree with the proposed timescales for remedial works and re-scoring to be conducted outlined in paragraphs 1.58 and 1.59 of Appendix 1?

f) Do you have any further comments or suggestions relating to this policy area?

Appendix 1 – DRAFT ECO2 GUIDANCE: Technical monitoring and score monitoring

Introduction

1.1. This chapter sets out the monitoring requirement we have established to ensure that ECO measures are installed in accordance with the relevant standards and that the premises and measure are as notified. The monitoring processes are known as technical monitoring and score monitoring.

1.2. Technical monitoring verifies whether a measure has been installed to the relevant installation standards, by a person of appropriate qualification and expertise, and complies with the eligibility requirements for that measure.

1.3. Score monitoring verifies whether certain inputs, relating to the characteristics of the premises or measure, used to calculate the carbon saving or cost score are accurate.

1.4. This chapter sets out the following:

a. the monitoring requirement

b. the monitoring process

c. how to deal with monitoring fails

d. the impact of monitoring results on future monitoring rates, and

e. our response to poor performance.

The monitoring requirement

1.5. By the end of the second month following a quarter, a supplier must report the results of monitoring conducted on at least the 'required monitoring rate' of all measures, of a particular measure type, installed by the supplier during the quarter. The required monitoring rate is 5% unless this rate is reduced or increased in accordance with paragraphs 1.45 to 1.56 below.

1.6. A supplier's overall monitoring sample (ie all measures, of any type, monitored in relation to a quarter) must be representative of all installers responsible for the measures installed in a quarter. Generally we will deem the overall monitoring sample representative if it includes at least 3% of the measures installed by each installer in that quarter (where the overall required monitoring rate is 5%). We refer to this as the 'installer rate'.

1.7. Where a supplier's required monitoring rate reduces or increases, the installer rate will also change accordingly. These rates are shown in Table 2.

1.8. Where the number of measures of a particular type or installed by a particular installer is less than 100, monitoring should be conducted on at least one measure of each measure type and installed by each installer.

1.9. The monitoring requirement applies to both technical and score monitoring. Technical monitoring and score monitoring can, but do not have to, be conducted on the same measure.

1.10. Where several suppliers are members of the same group of companies ('energy group') we will be satisfied that each supplier within the group has met the monitoring requirement if the group as a whole has achieved the required monitoring rate, and the associated installer rate, for that quarter.

1.11. The monitoring requirement applies irrespective of the way in which a supplier acquires the measure (eg through a bilateral contract, brokerage or in-house installer).

1.12. The monitoring requirement does not apply to measure types that do not have monitoring questions.[17]

The monitoring process

Who conducts monitoring?

1.13. Monitoring inspections must be conducted by a suitably qualified monitoring agent who is independent from:

a. the supplier

b. the installer

c. any party involved in the assessment of the measure, and

d. any party that has control or ownership of the premises.

1.14. We will be satisfied that a monitoring agent is independent if they are not an employee of any of the parties listed above.[18]

1.15. For technical monitoring, the monitoring agent must hold qualifications that demonstrate they are suitably qualified to assess a particular measure type. For example, gas fuelled

[17] The technical monitoring questions are available on our website.
[18] This may be subject to audit.

boiler repair or replacement measures must be inspected by a person who is Gas Safe registered. Table 1 lists the qualifications for each category of measures.[19]

Table 1 Required qualifications for monitoring agents by measure category

Measure category	Relevant qualification
Boiler	Eg Gas Safe registered
Wall insulation	?
Roof insulation	?
Other insulation eg glazing, draft proofing etc.	?
Micro-Generation	?
Other heating	?

1.16. For score monitoring, the agent must either be a qualified Domestic Energy Assessor (DEA) or On Construction Domestic Energy Assessor (OCDEA) or, in Scotland, members of Approved Organisations.[20]

How is monitoring conducted?

1.17. We provide a list of monitoring questions to be used by the monitoring agent. These questions can be found on our website.[21]

1.18. The required monitoring rate is split between mid and post-installation inspections, depending on the measure type being monitored. Details of this split can be found alongside the relevant monitoring questions for that measure type.

1.19. Monitoring agents must select a random sample of measures for monitoring, and must not choose measures that have been recommended to them by the installer or supplier.

1.20. Monitoring agents should submit inspection results, including answers to all relevant monitoring questions, directly and unaltered to the supplier.

[19] We are consulting on which qualifications should be required for monitoring agents to ensure that the standard of installation is sufficiently high. See Question 7c in the consultation document.
[20] Approved Organisations are those that have entered into protocols with Scottish Government to deliver Energy Performance Certificates.
[21] https://www.ofgem.gov.uk/ofgem-publications/86418/tmqsv211final-07052014.pdf.

The 'monitoring reports'

1.21. Suppliers should collate the inspection results submitted by monitoring agents in the technical and score monitoring templates provided by us. These templates will be emailed to suppliers at the end of every quarter.

1.22. Once completed, the templates, known as 'monitoring reports', will contain the required information on the monitoring carried out in the previous quarter. This information should include details of any fails from that quarter that have been overturned, remediated or re-scored (discussed in the next section: *Monitoring fails*).

1.23. If the results of monitoring cause a supplier not to notify a measure, the supplier must include it in its monitoring report and indicate that they have not notified the measure. The inspection of this measure will still contribute towards the monitoring requirement.

1.24. The monitoring reports must be submitted to us by the end of the second month following the quarter in which the monitoring was carried out (the 'submission deadline').

Monitoring fails

1.25. If a measure fails monitoring, this suggests that the measure has not been installed in accordance with the eligibility requirements for that measure (technical monitoring fail) or that the inputs used to calculate the carbon saving or cost score are incorrect (score monitoring fail). This will mean that we are unable to attribute savings unless the supplier is able to demonstrate that the measure is eligible.

Remediating technical monitoring fails

1.26. To avoid losing the savings for a measure, a supplier must ensure that remedial works are carried out to address the areas where that measure failed technical monitoring. A supplier should re-inspect the installation after remedial work is completed and confirm to us that the remedial work is complete and that the measure now meets the relevant standards of installation.

1.27. Re-inspections must be carried out by monitoring agents that hold relevant qualifications (as listed in Table 1).[22] The re-inspection should establish that the fail has been remediated and that the measure has now passed technical monitoring.

1.28. Monitoring agents should submit the results of re-inspection, detailing that remediation work has successfully addressed the fail, directly and unaltered to the supplier.

[22] Re-inspections can be carried out by the same monitoring agent that conducted the original monitoring inspection.

1.29. If a measure fails re-inspection, a supplier may continue to attempt remedial works until the measure is successfully remediated.

1.30. Re-inspections are in addition to the normal technical monitoring process and do not contribute to a supplier's monitoring requirement.

1.31. We expect a supplier to make reasonable efforts to contact the occupant in order to conduct remedial work or re-inspection. In some instances a supplier may be unable to access a premises, known as 'non-access'. Full details of how a supplier can evidence instances of non-access can be found in our supplementary guidance note.[23]

Re-scoring score monitoring fails

1.32. Where a potential error in the inputs used to calculate the score of a measure is identified through score monitoring, a supplier must correct and/or verify the score to avoid losing savings for that measure.

1.33. A supplier may correct and/or verify the inputs to which the error relates by:

a. using evidence provided by the score monitoring agent

b. using additional documentary evidence provided by the original assessor, or

c. conducting an additional inspection of the premises to establish the correct inputs (using a score monitoring agent).

1.34. A supplier may re-score the measure in-house or have another third party re-score the measure.[24] The supplier must be satisfied that the score they re-submit is correct.

1.35. If an incorrect score is based on a lodged energy performance certificate (EPC), the supplier may inform the accreditation body of the DEA who originally scored the measure, of the error. Once a score has been re-calculated for ECO, we do not require another EPC to be lodged. It is the responsibility of the accreditation body to ensure that lodged EPCs are correct.

Challenging a monitoring fail

1.36. A supplier may challenge the outcome of a monitoring inspection with the monitoring agent. If the monitoring agent accepts that a measure should not have failed, this will be deemed an 'overturn'. A supplier should retain written evidence from the monitoring agent detailing why the result of an inspection has been overturned. We may require such evidence at audit.

[23] This will be published on our website before the final ECO2 guidance is available.
[24] See Chapter 8 of our Guidance for Suppliers (version 1.2) for details of our current approach to scoring.

1.37. Monitoring fails that have been overturned will no longer be considered a fail and, therefore, do not require remediation or re-scoring.

1.38. At the end of each quarter we will issue suppliers with a 'failed measures report' that lists all failed measures that have not yet been successfully remediated or re-scored. Suppliers should use the failed measures report to update us on the progress they have made remediating, re-inspecting and re-scoring failed measures or indicate where a fail has been overturned.

1.39. Suppliers should return the updated failed measures report to us when they submit their monitoring reports for the subsequent quarter.

Monitoring Rates

1.40. A supplier's required monitoring rate for a quarter is determined based on the results contained in the monitoring reports submitted in the previous quarter.

1.41. Where a monitoring fail is overturned *before* the submission deadline and is contained in the monitoring report, this **will** be taken into account when determining the required monitoring rate for the subsequent quarter.

1.42. Where a monitoring fail is overturned *after* the relevant submission deadline, this **will not** be taken into account when determining the required monitoring rate for the subsequent quarter. However, where the required monitoring rate is determined based on the failure rate for two consecutive quarters, the overturns for the first of these quarters **will** be taken into account.

1.43. We will notify suppliers of their required monitoring rate for each quarter before the beginning of that quarter.

1.44. Where a supplier's required monitoring rate reduces or increases based on their monitoring results, the installer rate will also change, as shown in Table 2.

Table 2 Required monitoring rates and associated installer rates

Monitoring rate	Required monitoring rate	Installer rate
Reduced	1%	1%
Baseline	5%	3%
Increased	10%	6%

Technical monitoring rates

1.45. The baseline technical monitoring rate is set at 5%. All suppliers commence technical monitoring at the baseline rate on 1 April 2015.

Reduced technical monitoring rate

1.46. If, for two consecutive quarters, a supplier achieves an average failure rate for the overall monitoring sample of *below 5%*, the required technical monitoring rate will be reduced to 1%. The new reduced technical monitoring rate will take effect from the quarter following the submission deadline.

1.47. The required technical monitoring rate will remain at 1% for subsequent quarters until either of the following occurs:

a. a supplier achieves an average failure rate for the overall monitoring sample of between 5% and 10% for two consecutive quarters, or

b. a supplier achieves an average failure rate for the overall monitoring sample of more than 10% for any one quarter.

1.48. If either one of the above occurs, the required technical monitoring rate will return to the baseline rate of 5% for subsequent quarters.

Increased technical monitoring rate

1.49. If, for two consecutive quarters, a supplier achieves an average failure rate for the overall monitoring sample of 20% or above, the required technical monitoring rate for subsequent quarters will increase to 10%. The new increased technical monitoring rate will take effect from the quarter following the submission deadline.

1.50. The required technical monitoring rate will remain at 10% for subsequent quarters unless a supplier achieves an average failure rate for the overall monitoring sample of less than 10%. In this case the required technical monitoring rate will return to the baseline rate of 5% for subsequent quarters.

Score monitoring rates

1.51. The baseline score monitoring rate is set at 5%. All suppliers commence score monitoring at the baseline rate on 1 April 2015.

Reduced score monitoring rate

1.52. If, for two consecutive quarters, a supplier achieves an average failure rate for the overall monitoring sample of *below 5%*, the required score monitoring rate will be reduced to 1%. The new reduced score monitoring rate will take effect from the quarter following the submission deadline.

1.53. The required score monitoring rate will remain at 1% for subsequent quarters until either of the following occurs:

a. a supplier achieves an average failure rate for the overall monitoring sample of between 5% and 10% for two consecutive quarters, or

b. a supplier achieves an average failure rate for the monitoring sample of more than 10% for any one subsequent quarter.

1.54. If either one of the above occurs, the required score monitoring rate will return to the baseline rate of 5% for subsequent quarters.

Increased score monitoring rate

1.55. If, for any one quarter, a supplier achieves an average failure rate for the overall monitoring sample of 25% or above, the required score monitoring rate for subsequent quarters will increase to 10%. The new increased score monitoring rate will take effect from the quarter following the submission deadline.

1.56. The required score monitoring rate will remain at 10% for subsequent quarters unless a supplier achieves an average failure rate for the overall monitoring sample of less than 15%. In this case the required score monitoring rate will return to the baseline rate of 5% for subsequent quarters.

Our response to poor performance

Where a supplier fails to achieve the monitoring requirement

1.57. Where a supplier fails to meet the monitoring requirement for a particular quarter, we will not have sufficient confidence in the accuracy of the measures installed in that quarter. This may lead us to refuse or revoke approval of these measures. In addition, the supplier will have breached the monitoring requirement and we may consider taking enforcement action.

Where individual measures fail monitoring

1.58. We expect measures to be remediated or re-scored within three months of the last day of the month during which the fail was discovered.

1.59. If a measure is not remediated or re-scored within six months of the last day of the month during which the failure was discovered, we will revoke an earlier decision to attribute savings to the measure or refuse to attribute savings to the measure where it has been notified but not yet approved.

Where the failure rate is high

1.60. If the failure rate for a particular subset of measures causes us to have concerns that these are not eligible ECO measures, we will undertake one or more of the following actions on that subset of measures installed in that quarter:

a. require the supplier to conduct additional monitoring

b. require the supplier to conduct a document review

c. initiate an audit, and/or

d. suspend approval of all measures of that subset.

1.61. If, as a result of any of the actions listed above, we remain concerned that the measures under consideration are not eligible ECO measures, we will continue to take one or more actions, as listed in paragraph 1.60, until we have sufficient confidence in the accuracy of these measures.

1.62. If, for any one quarter, the technical monitoring failure rate of all measures of the same subset (eg measure type, installer or measure type per installer) within a sample is more than 20%, we may suspend assessment of these measures and all other measures of the same subset in that quarter, until the relevant actions required by us listed in paragraph 1.60 have been completed.

Appendix 2 - Consultation Response and Questions

We would like to hear the views of anyone interested in the issues in this document.

We especially welcome responses to the specific questions at the end of each section and which are also below.

Please send us your responses by 21 January 2015 to:

ECO Consultation
Ofgem
9 Millbank
London
SW1P 3GE

eco.consultation@ofgem.gov.uk

Unless you mark it confidential, your response will be put in Ofgem's library and on our website www.ofgem.gov.uk. You can ask for your response to be kept confidential, which we will respect, subject to any obligations to disclose information, such as under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

If you want your response to remain confidential, please clearly mark this on the document/s and include the reasons for confidentiality. Put any confidential material in the appendices.

Next steps: Having considered the responses to this consultation, we will publish a summary of the responses received, and our ECO2 guidance document in February/March 2015.

Please send any questions on this document to:

ECO Consultation
Ofgem
9 Millbank
London
SW1P 3GE

eco.consultation@ofgem.gov.uk

Question 1:

a) Do you agree with our proposed requirements for pre-existing roof insulation? Please provide reasons for your answer.

b) Do you have any further comments or suggestions relating to this policy area?

Question 2:

a) Do you agree with our proposal that a wall with a section of cavity narrower than 40mm cannot be insulated? Please provide reasons for your answer.

b) Do you agree with our proposal that a wall which adjoins a wall which cannot be insulated also 'cannot be insulated'? Please provide reasons for your answer.

c) Are there any other scenarios where a cavity wall cannot be insulated? Please provide reasons for your answer.

d) For compliance purposes, how can suppliers demonstrate that a cavity wall cannot be insulated?

e) Do you have any further comments or suggestions relating to this policy area?

Question 3:

a) Do you agree with our preferred approach (Option 1) for calculating the lifetime for multi-fuel DHS upgrades? Please provide reasons for your answer.

b) If you do not agree with Option 1, do you agree with any of the other proposed options for calculating the lifetime for multi-fuel upgrades? If not, can you propose an alternative approach for calculating the lifetime for multi-fuel DHS upgrades?

c) Do you have any further comments or suggestions relating to this policy area?

Question 4:

a) Do you agree with our proposed definition of a 'broken down' ESH? Please give reasons for your answer.

b) Do you agree with our proposal for judging that an ESH cannot be economically repaired? Please give reasons for your answer.

c) Do you agree with the thresholds given in the ESH Economic Repair Cost Comparison Table? Please give reasons for your answer.

d) Do you have any further comments or suggestions relating to this policy area?

Question 5:

a) Do you agree that 'boiler and system sludge' and 'unstable firing' alone are insufficient reasons for a boiler to be replaced? Are there any other faults which on their own are insufficient reasons for a boiler to be replaced? Please give reasons for your answers.

b) Do you agree that 'no boiler ignition' and 'unstable firing' should be considered separately? Please give reasons for your answers.

c) Do you agree that the boiler fault list is suitable to identify faults with non-gas fuelled boilers? Please give reasons for your answers.

d) Do you have any further comments or suggestions relating to this policy area?

Question 6:

a) Do you think the proposed changes to our requirements will be effective in reducing false claims of virgin loft insulation? Please provide reasons for your answer in relation to each change.

b) Do you see any difficulties in implementing these changes? Please provide reasons for your answer.

c) Do you have any suggestions for other controls or requirements we could introduce to reduce or prevent such false claims? Please provide reasons for your answer.

d) Where existing insulation is removed because it is posing health and safety risks and new insulation installed, should the measure be claimed as virgin or top-up loft insulation? Can you provide examples of health and safety risks that would require insulation to be removed and how a supplier could demonstrate these risks?

Question 7: (NB: Please see Appendix 1 before answering any of the below questions)

a) Do you agree it is more appropriate to assess quality of installation and the accuracy of scores separately?

b) Do you agree with the proposed reactive monitoring process described in paragraphs 1.45 to 1.56 of Appendix 1? Do you think the monitoring rates are appropriate?

c) Do you agree that technical monitoring agents should have certain qualifications as explained in paragraph 1.15 of Appendix 1? Can you suggest which qualifications are most appropriate for different categories of measure?

d) Are the qualifications listed in paragraph 1.16 of Appendix 1 appropriate for score monitoring agents? Are there any other qualifications that you would suggest?

e) Do you agree with the proposed timescales for remedial works and re-scoring to be conducted outlined in paragraphs 1.58 and 1.59 of Appendix 1?

f) Do you have any further comments or suggestions relating to this policy area?

Appendix 3 - Feedback Questionnaire

We believe consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the way this consultation has been conducted. We are also keen to receive your answers to the following questions:

- Do you have any comments about the overall process adopted for this consultation?
- Do you have any comments about the overall tone and content of the consultation?
- Was the consultation easy to read and understand? Could it have been better written?

Please add any further comments and send your feedback to:

Andrew MacFaul

Consultation Co-ordinator
Ofgem
9 Millbank
London
SW1P 3GE

andrew.macfaul@ofgem.gov.uk