ECO (Energy Companies
Obligation) participants and other
interested parties

*Promoting choice and value for
all gas and electricity customers*

Our Ref: 121/13

Email: ECO@ofgem.gov.uk

Date: 17 July 2013

Dear Sir/Madam,

**Ofgem's decisions and summary of responses following the consultation on how
to account for the percentage of a measure installed ('P') when calculating Energy
Companies Obligation (ECO) scores**

As part of Ofgem's ongoing administration of the Energy Companies Obligation (ECO), we
(Ofgem) invited stakeholders to express their views through a consultation on how to
account for the percentage of a measure installed, described as 'P', when calculating ECO
scores. The deadline for responses was 20 June 2013. This letter summarises the
consultation responses, and our reasons for removing 'P'. It also states how we addressed
the key issues raised and incorporated additional proposals submitted in response to the
consultation.

In summary, we had sixteen responses, ten of which agreed with the proposal to remove
'P'. Based on this feedback we consider it appropriate to update our Guidance so that 'P'
will be removed from the formulas for calculating ECO scores. Suppliers can use other
methods to calculate the scores for partial insulation as long as they meet the U-value
calculation requirements of SAP/RdSAP. These amendments are effective from 1 August
2013 onwards.

Background to the consultation

On 15 March 2013 we published the *Energy Companies Obligation (ECO): Guidance for
Suppliers*. In Chapter 8 we discussed how to score measures under ECO. In particular, at
paragraph 8.13 we set out the formulas for calculating carbon savings and cost savings
using the Standard Assessment Procedure (SAP) and Reduced Data Standard Assessment
Procedure (RdSAP). These formulas include an element identified as 'P'.

The ECO order requires that where possible, measures are scored using SAP or RdSAP. SAP
and RdSAP can take account of the actual extent of a measure installed. However, this can
be complex, in particular for wall insulation where there is more than one wall type. In
these cases the assessor can use alternative walls and extensions within the SAP/RdSAP
calculations to accurately model the achieved savings.

With the intention of simplifying this process, we introduced an alternative method where
an assessor carries out the SAP/RdSAP calculation assuming 100 percent installation of the
measure, which would subsequently be multiplied by the actual percentage of measure
installed to calculate the ECO score. Accounting for the percentage of measure installed
outside of the SAP/RdSAP calculation was called 'P'.

After publication of the Guidance we received analysis which showed that, depending on the measure type, using 'P' could lead to unacceptable levels of inaccuracy. As a consequence we proposed to remove 'P' from the formulas for calculating savings. The consultation set out the reasons for removing 'P' from the formulas for scoring measures under ECO, instead requiring suppliers to take into account the extent of the measure installed within the SAP/RdSAP calculation.

Summary of responses and our decisions

We received sixteen responses to the consultation. Responses were received from five energy suppliers, five software providers and six other stakeholders. A full list of consultation respondents can be found in Annex 1. Their responses are published on our website[1].

Ten of the sixteen respondents agreed to the proposal to remove 'P' from the formula, and five disagreed. One respondent was neutral to the proposed changes on the grounds that SAP/RdSAP experts and software providers are best placed to suggest the changes.

Therefore, based on the responses and the evidence presented, we have decided to remove 'P' from the formula for scoring measures under ECO. Instead of 'P', suppliers can use the methods of alternative walls and extensions for calculating the scores for partial insulation. Suppliers may also calculate scores for partial insulation using area-weighted U-values.

All of the amendments discussed in this letter are reflected in the updated *Energy Companies Obligation (ECO): Guidance for Suppliers, Version 1.1*[2] published on the same date as this letter. Amendments are also listed in Annex 2 below.

Key issues raised by respondents

Responses to this consultation related to five key issues:

- accuracy of scores;
- the challenges of using alternative walls and extensions in SAP/RdSAP;
- possible additional methods such as the use of area-weighted U-values;
- date of effect of the updated Guidance; and
- changes to ECO software requirements.

We consider each of these themes below.

<u>Accuracy of scores</u>

All of the respondents who support the proposal to remove 'P' agree that its removal will improve the accuracy of scoring.

One respondent argued that inherent inaccuracies in SAP and RdSAP undermined our reasons for removing 'P', as (in the respondent's view) the scale of inaccuracy within 'P' is lower than that within SAP and RdSAP. SAP and RdSAP are the legislated methodologies for ECO scoring, and our legal requirement for accuracy is to the SAP/RdSAP score, not the building performance. As the score for a partial installation calculated using 'P' could vary considerably from a score calculated using only standard SAP/RdSAP practices, we do not view its use as meeting the requirements of the legislation.

One respondent felt that as the error 'P' could be plus or minus, it would largely even out over the course of the programme. However, the use of 'P' is optional, and assessors

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would be able to ascertain in advance which method of scoring would produce the higher score, and therefore (legitimately) use that method. This would artificially inflate carbon savings. Therefore, we do not agree that the errors would even out.

One respondent suggested that we should allow the use of 'P' for calculating partial cavity wall insulation scores, for which the error level is lower. However, we think that allowing 'P' in some situations and not others would add complexity to the scheme, rather than reduce it. Furthermore, one of the principal reasons for introducing 'P' was to reduce complexity when scoring properties with multiple wall types. If restricted to cavity wall insulation only, this benefit would be lost.

It was also recognised that the current 'P' method does not easily permit the calculation of carbon/cost baselines for the scoring of subsequent measures. We agree that this is a problematic consequence of using 'P'.

Six respondents stated that improved accuracy outweighed the potentially increased complexity of the assessment and scoring process. We agree, and this supports our proposal to remove 'P'.

The challenges of using alternative wall and extensions in SAP/RdSAP

Six stakeholders raised concerns with the use of the existing 'alternative walls and extensions' method within SAP/RdSAP, which can adequately score partial wall measures in most situations, but may not be practical in certain circumstances. Concerns included:

a) The method has shortcomings in respect of roof and floor insulation measures.

b) Only one alternative wall can be defined in SAP/RdSAP, so if it is already defined it cannot be used again.

c) In many cases assessors during their initial survey may not be able to determine whether the property can only be partially insulated. Assessors are unlikely to take sufficiently detailed measurements on site to retrospectively break down the property accurately. Therefore, a subsequent visit to site may be required to calculate savings, which will add time and cost to the process (the counter-view was that, in these circumstances, re-assessment of the property would improve accuracy).

We agree with the respondents that suggested that the concerns at points a) and b) can be overcome using alternative methods within SAP/RdSAP (see next section). We acknowledge the concerns raised in point c) however only in a proportion of cases requiring partial installation will an assessor i) not be able to account for the extent of the installation at point of initial assessment *and* ii) need to return to site post-installation to reassess the property. We believe that the inaccuracies inherent in 'P' outweigh this issue.

Possible additional methods for scoring partial measures such as the use of area-weighted U-values

Six respondents suggested that we should allow the use of other simplified SAP/RdSAP scoring methods aside from the alternative wall / extensions method. Four of these respondents specifically recommended the use of area-weighted U-value calculations.

We support the use of any calculation method as long as it forms part of SAP/RdSAP standard practices. The use of area-weighted U-values is standard industry practice for SAP assessments. It is also standard practice in RdSAP assessments for calculating U-values for loft insulation of variable thicknesses. Moreover, this method is currently being included in a new draft convention in RdSAP for all other insulation measures. Calculations for area-weighted U-values could in principle be carried out manually or within ECO software tools as long as they meet the U-value calculation requirements of SAP/RdSAP.

Date of effect of the updated Guidance

Six respondents expressed views that sufficient time should be provided to accommodate changes in the calculation methodology. Ofgem is aware of the reporting requirements of the obligated parties. We are also aware that ECO software tools are currently under development. Since the removal of 'P' does not introduce any new requirements, **we expect suppliers to follow the amendments in scoring calculations from 1 August 2013 onwards**. This means scores calculated for measures completed from 1 August 2013, which will be notified to us by the end of September 2013, must not be calculated using 'P'.

Two respondents suggested that changes in the calculation methodology should be retrospective and suppliers should resubmit any calculations done using 'P'. For the avoidance of doubt, we can confirm that we do not expect suppliers to recalculate scores already submitted under ECO using the 'P' method. These scores are valid because they were calculated in line with the ECO Guidance effective at the time the measures were installed.

Changes in ECO software requirements

Four respondents expressed concerns that the removal of 'P' will cause further delay in the implementation of ECO software tools. Since the outcome of this consultation does not introduce any new calculation methodology outside standard SAP/RdSAP practices, we do not anticipate major changes will be needed to ECO tools. The ECO software tools are currently under development and none of the software provider respondents indicated that the removal of 'P' will cause them financial burden or onerous time constraints.

Amendments to our requirements for bespoke ECO scoring tools resulting from this consultation are detailed in Annex 3 below and in the revised document *Energy Companies Obligation (ECO) 2012: Guidance of requirements for bespoke scoring tools, Version 1.1*[3] published on the same date as this letter.

If you have any further questions about any of the content of this letter please contact Will Broad at ECO@ofgem.gov.uk.

Yours faithfully

Charles Hargraves
Associate Director, Environmental Programmes

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[3] http://www.ofgem.gov.uk/SUSTAINABILITY/ENVIRONMENT/ECO/INFO-FOR-SUPPLIERS/Documents1/Bespoke%20ECO%20scoring%20software%20-%20features%20FINAL%208%20apr%2013.pdf.

Annex 1: List of consultation respondents

1. British Gas New Energy
2. Building Research Establishment (BRE) Scotland
3. Carillion
4. Centre for Sustainable Energy (CSE)
5. ECO EST Limited
6. EDF Energy
7. Elmhurst Energy
8. EUM Consultants Limited
9. National Energy Services (NES)
10. Northgate Public Services
11. npower
12. Osborne Energy Limited
13. Quidos Limited
14. ScottishPower Energy Retail Limited
15. SSE
16. Stroma Certification

Annex 2: List of published guidance sections with significant changes

Paragraph(s)	Amendment(s)
8.13	Reference to 'P' has been removed from the two ECO scoring formulas. The amended formulas are: "**Formula for calculating a carbon saving using SAP or RdSAP** Under CERO and CSCO, suppliers should use the following formula to generate a carbon saving for an ECO measure: $S \times L \times (100 \% - IUF)$ = carbon saving (tCO_2) Where: **S** is the annual carbon saving calculated in accordance with SAP or RdSAP; **L** is the lifetime of the measure (in years); and **IUF** is the in-use factor of the measure (by percentage). **Formula for calculating a cost saving using SAP or RdSAP** (For calculating a cost saving for a qualifying boiler see paragraph 8.36 below). Under HHCRO, suppliers should use the following formula to generate a cost saving for an ECO measure: $S \times L$ = cost saving (£) Where: **S** is the annual cost saving calculated in accordance with SAP or RdSAP; and **L** is the lifetime of the measure."
8.14-8.16	The heading "Total assumed installation- 'P'" and subsequent paragraphs are removed.
8.11	Newly added sub-paragraph 8.11.4 to state:

	Extent of the measure installed - calculations for partial installations can be carried out using any method as long as it forms part of SAP/RdSAP standard practices.

Annex 3: List of changes in guidance on requirements for bespoke ECO scoring software

Category, data field	Factors relevant to calculating savings
A, 5	Field 5 'Percentage of total assumed installation ('P')' deleted.
B(i), 17	Field 17 'Percentage of total assumed installation' deleted.
C, 10	Amended field 10 to state: Total carbon saving (tCO2) = S x L x (100% - IUF) S = SAP/RdSAP annual carbon saving L = lifetime of measure (years) IUF = in-use factor of the measure
C, 11	Amended field 11 to state: Total cost saving (£) = S x L S = SAP/RdSAP annual cost saving L = lifetime of measure (years) (note that HHCRO scores do not use IUFs)