

Bespoke ECO scoring software: features for software development

When a supplier notifies us of a measure under the Energy Companies Obligation (ECO), it must provide the carbon or cost saving associated with that measure. We understand that suppliers, and other stakeholder working on behalf of suppliers, may wish to develop or adapt software tools to assist with calculating those scores. The table below lists factors to be considered when developing bespoke ECO scoring software and contains the summary referred to at paragraph 8.50 of the [Energy Companies Obligation \(ECO\): Guidance for Suppliers, Version 1.1](#)¹ (Guidance for Suppliers).

This note and the table below must be read in conjunction with our Guidance for Suppliers, in particular Chapter 8 (on calculating savings) and Chapter 9 (on notification of completed measures).

We have grouped features into the following categories:

- **A – Inputs**
Data to be entered into the scoring tool.
- **B(i) – Outputs for notification to Ofgem**
Data relating to the carbon or cost saving of a measure which suppliers must notify Ofgem of following completion of that measure. Developers of software tools should have regard to our [ECO Notification Data Dictionary](#)², also on our website, in which we describe the format and requirements for all data to be notified to us by suppliers.
- **B(ii) – Outputs to be made available on request**
Data relating to the carbon or cost saving of a measure that must be kept on file by a supplier for each measure. This data should be made available to Ofgem, our technical monitoring agents and auditors on request.
- **C – Processes**
Processes and calculations that are carried out within the software tool to calculate the carbon and cost saving of a measure.
- **D – Updates**
Periodic updates that must be made to the scoring tool.
- **E – Checks**
Checks that can be carried out during data input to provide assurance that the data is accurate.

With respect to each factor we indicate whether a software feature addressing the factor is required or optional. Software that does not contain all of the required features cannot be approved, for ECO purposes, by an appropriate UKAS-accredited body.

Our Guidance for Suppliers explains the factors that suppliers must take into account when calculating and notifying carbon savings and cost savings for measures installed under ECO. Any person developing bespoke ECO software must refer to our Guidance for details and should not rely on this note alone. Our Guidance for Suppliers may be amended in the future, and we may publish guidance that supplements the main Guidance. Potentially, such amendments and supplements may change the factors that suppliers must take into account when calculating and notifying savings. Bespoke ECO scoring software should be designed to be able to take account of such changes.

¹ Available at: [http://www.ofgem.gov.uk/Sustainability/Environment/ECO/guidance/Documents1/Energy%20Companies%20Obligation%20\(ECO\)%20Guidance%20for%20Suppliers%20-%20version%201.1.pdf](http://www.ofgem.gov.uk/Sustainability/Environment/ECO/guidance/Documents1/Energy%20Companies%20Obligation%20(ECO)%20Guidance%20for%20Suppliers%20-%20version%201.1.pdf).

² Available at: <http://www.ofgem.gov.uk/SUSTAINABILITY/ENVIRONMENT/ECO/INFO-FOR-SUPPLIERS/Pages/index.aspx>.

	Factors relevant to calculating savings	Required feature	Optional feature	Notes
A	Inputs			
1	Full RdSAP Inputs	✓		
2	Full SAP Inputs		✓	
3	Obligation Category (CERO, CSCO, HHCRO, Rural)		✓	
4	Date of Completed Installation	✓		See Chapter 9 of Supplier Guidance
5	This data field has been deleted.			
6	Lifetime ('L')	✓		
7	In-Use Factor ('IUF')	✓		
8	Ability to enter multiple wall types (EWI, IWI, CWI, HTT CWI) for a single property, and its according percentages of the total exterior walls	✓		
9	Information (name, company, relevant qualifications) relating to original assessor, and any other persons who have subsequently been involved in calculating the score	✓		
B(i)	Outputs - for notification to Ofgem			
1	Supplier Reference Number	✓		
2	EPC reference number (where relevant)	✓		
3	GDAR reference number (where relevant)	✓		
4	Building Number	✓		
5	Building Name	✓		
6	Flat Name/Number	✓		
7	Street Name	✓		
8	Town	✓		
9	Post Code	✓		
10	Gross Floor Area (m ²)	✓		
11	Primary Heating System	✓		
12	Percentage of measure installed	✓		This is the amount of the measure actually installed compared to the full installation of that measure. For example, if a house has 100m ² of exterior-facing walls, and 75m ² is insulated with CWI, then <i>percentage of measure installed</i> = 75%.
13	Is the measure part of the construction of an extension (Y/N)?	✓		
14	Annual carbon savings (tCO ₂)	✓		Recommended that cost and carbon savings are calculated for each measure, regardless of obligation category
15	Annual cost savings (£)	✓		Recommended that cost and carbon savings are calculated for each measure, regardless of obligation category
16	Name and version of scoring tool used	✓		
17	This data field has been deleted.			
18	Lifetime	✓		
19	In Use Factor	✓		Only applied to CERO and CSCO measures
20	Total carbon savings (tCO ₂)	✓		
21	Total cost savings (£)	✓		
22	Decimal points - 3DP for tCO ₂ , and to nearest £	✓		Rounding to occur post calculations. See Chapter 8 of Supplier Guidance
23	Scores on a measure-by-measure basis	✓		

B(ii) Outputs - to be made available on request				
1	File showing all inputs used for calculation, all outputs and any information required to match the calculation to the measure. This file should be easy to read, and available both electronically and in hard copy.	✓		
2	'History file' showing source of inputs, all people who have been involved in calculating the score, their relevant qualifications etc	✓		
C Processes				
1	Use ECO-specific methodology for scoring packages of measures - inc. scoring by date of installation and not SAP default order	✓		See Chapter 8 of Supplier Guidance
2	Must <u>not</u> include bespoke occupancy assessment	✓		See Chapter 8 of Supplier Guidance
3	Calculations based on actual weather region (and not default)	✓		See Chapter 8 of Supplier Guidance
4	Same fuel prices/carbon coefficients used for both 'before' and 'after' calculations	✓		See Chapter 8 of Supplier Guidance
5	Use ECO-specific methodology for scoring qualifying and non-qualifying boilers	✓		See Chapter 8 of Supplier Guidance
6	Boilers and Heating Controls scored as separate measures	✓		See Chapter 8 of Supplier Guidance
7	Use ECO-specific methodology for scoring glazing measures	✓		See Chapter 8 of Supplier Guidance
8	When scoring other measures at the same property as a glazing measure or qualifying boiler, apply normal SAP/RdSAP conventions for the other measures	✓		See Chapter 8 of Supplier Guidance
9	Extensions: only that part of the measure which exceeds building regulations receives a score	✓		See Chapter 8 of Supplier Guidance
10	Total carbon saving (tCO ₂) = S x L x (100% - IUF) S = SAP/RdSAP annual carbon saving L = lifetime of measure (years) IUF = in-use factor of the measure	✓		See Chapter 8 of Supplier Guidance
11	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)	✓		See Chapter 8 of Supplier Guidance
D Updates				
1	SAP/RdSAP version	✓		Legislation currently states SAP/RdSAP version numbers. ECO software should have the ability to be updated to a new version should this be required.
2	Monthly PCDF	✓		Including boiler efficiencies, fuel prices
3	Any changes to ECO In-Use Factors and Lifetimes	✓		Ofgem will publish updates for In-Use Factors and Lifetimes on our website.
4	Additions to list of eligible measures		✓	Please check the Measures Table on our website for updates.
5	Ability to re-calculate scores on historic installations using old fuel prices and carbon coefficients set out in RdSAP, SAP or the monthly PCDF. This is in case of future re-election between ECO Obligations, or any other need to revisit score		✓	
E Checks to be carried out during operation of software (we will build on this list once we have had further discussions with suppliers, software companies and UKAS bodies. No individual check is mandatory however we expect software to include a range of checks to ensure accuracy)				
1	The aggregated area of all wall types (CWI, EWI, IWI etc) should not exceed the total wall area of the property		✓	
2	CERO secondary measures installed within 6 months of primary measures		✓	
3	CERO secondary measures installed only if 'proportion of measure installed' of primary measure is equal to or greater than 50%		✓	Note that in some cases, multiple primary measures at one property can be aggregated in order to meet this requirement. See Chapter 5 of Supplier Guidance

ACRONYMS
ECO - Energy Companies Obligation
CERO - Carbon Emissions Reduction Obligation
CSCO - Carbon Saving Community Obligation
HHCRO - Home Heating Cost Reduction Obligation
IUF - In-Use Factor
tCO₂ - Tonnes of Carbon Dioxide
SAP - Standard Assessment Procedure
RdSAP - Reduced Data Standard Assessment Procedure
PCDF - Product Characteristic Data File

Changes incorporated in bespoke ECO scoring software: features for software development (Version 1.1)

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 remove 'P' from the formula.
C, 11	Amended field 11 to remove 'P' from the formula.