

Energy Companies Obligation (ECO): Boiler Assessment Checklist

This Boiler Assessment Checklist (the Checklist) is designed to assist operatives¹ in assessing boilers under the Energy Companies Obligation (ECO) to determine whether a boiler should be repaired or replaced under that scheme.

This document is intended to be a tool to assist you and does not provide any detailed information on the requirements of ECO. Further information on ECO can be found in our guidance document, *Energy Companies Obligation (ECO): Guidance for Suppliers*² or by contacting us at eco@ofgem.gov.uk.

Completing the Checklist

The information provided in the checklists will form the basis of our determination of whether the boiler is 'broken down' or 'not functioning efficiently' for the purposes of ECO.

In completing the checklist you should ensure that you (i.e. the relevant operative):

- Complete all relevant sections;
- Sign and date the Checklist;
- Record all the steps you have taken in determining boiler condition;
- Record your recommendation as to whether the boiler should be repaired or replaced.

The Checklist should be retained by the relevant supplier for subsequent audits by Ofgem.

Format of the Checklist

Suppliers may adapt the format of the checklist to match their own systems, as long as the content is not changed. Suppliers may submit adapted checklists to us before use for confirmation that the content is acceptable.

Page four is only needed for (i) boiler repair measures; and/or (ii) where there are two operatives.

Accuracy of the Checklist

It is important to note that your decision to replace a boiler on the basis that you consider the boiler is broken down/not functioning efficiently and cannot be economically repaired does not necessarily mean that we will reach the same conclusion, particularly if we consider that an assessment has been incorrectly carried out. For this reason, suppliers should ensure that the Checklist is completed accurately.

Monitoring and Audit

Monitoring and auditing will be undertaken to ensure that boiler assessments are carried out in accordance with our requirements. To effectively protect against fraudulent activity, monitoring initiatives will include inspection of boilers before they are repaired or replaced.

¹ The assessment and the repair or replacement of a qualifying boiler must be carried out by a person of appropriate skill and experience (the 'operative(s)'). See the ECO Guidance for Suppliers for details of operative competency requirements.

² Available at : <https://www.ofgem.gov.uk/ofgem-publications/75775/energycompaniesobligationecoguidanceforsuppliers-version11.pdf>

Energy Companies Obligation (ECO): Boiler Assessment Checklist

A. Information Required		To be filled in by Operative on site (all boiler measures)		
1	Date of boiler assessment (dd/mm/yyyy)	_ _ / _ _ / _ _ _ _		
2	Date of repair/ replacement (dd/mm/yyyy)	_ _ / _ _ / _ _ _ _		
3	Address: (Building number/name, Street name, Town, City, County)			
4	Postcode			
B. Existing boiler details: Complete for all boiler repairs and replacements				
From boiler label/nameplate and fuel supply, determine the SAP Identifier information (fields 1-5 below)				
1	Manufacturer			
2	Brand			
3	Model			
4	Model Qualifier (if applicable)			
5	Fuel Type			
6	Year of original commissioning (if available)			
7	Age of boiler in years (approx, if commissioning year unavailable)			
8	State how you have established year of original commissioning / age (e.g. servicing sticker, records held by householder, landlord records, original installation documentation, SEDBUK, SAP etc.)			
9	Is it a combination boiler?	Yes <input type="checkbox"/>		No <input type="checkbox"/>
10	Seasonal Efficiency Rating: Provide efficiency rating when assessed against SAP/SEDBUK 2009 ³			
C. Boiler Assessment Part 1: Complete for all boiler repairs and replacements				
1	Is the boiler connected to a functioning domestic central heating (and, if applicable, hot water) system?	Yes <input type="checkbox"/>		No <input type="checkbox"/>
2	Boiler Fault List (Note: this list is not exhaustive)	Boiler repair possible	Boiler replacement necessary ⁴	Supporting notes
	<i>Example:</i> <i>Boiler heat exchanger corrosion or fouling</i>	✓		<i>Boiler heat exchanger replaced</i>
2a	Boiler heat exchanger corrosion or fouling			
2b	No boiler ignition or unstable firing			
2c	Flue Gas Analyser combustion results outside boiler manufacturer tolerance			
2d	Gas supply rate outside boiler manufacturer tolerance			

³ See www.boilers.org.uk and search using above SAP Identifier information fields 1 – 5. If an efficiency rating is unavailable refer to SAP2009 Table 4a or 4b at: www.bre.co.uk/sap2009

⁴ Only tick this field if the fault cannot be repaired.

	Boiler Fault List (Note: this list is not exhaustive)	Boiler repair possible	Boiler replacement necessary	Supporting notes
2e	Gas supply pressure outside boiler manufacturer tolerance			
2f	Burner pressure outside boiler manufacturer tolerance			
2g	Boiler and system sludge			
2h	Poor flue condition			
2i	Primary flow rate outside boiler manufacturer tolerance or unsatisfactory			
2j	Primary flow temperature outside boiler manufacturer tolerance or unsatisfactory			
2k	For combination boilers only: Unsatisfactory hot water flow rate or temperature			
2l	Boiler external corrosion			
2m	Boiler installation is Immediately Dangerous (ID) or At Risk (AR) situations (Gas Safe definition)			
2n	Boiler not installed in accordance with manufacturer's instructions and applicable regulations			
2o	Other			
3	If 'other' please provide detailed description			
4	Diagnosis/conclusion: is the boiler broken down?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
5	If 'no', have the faults identified above <u>significantly</u> affected the performance of the boiler so that it is not functioning efficiently?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
6	What steps did you take to reach this diagnosis/conclusion?			

D. Boiler Assessment Part 2:		
Complete for boiler replacements where question B10 is 86% or above		
1	Are all parts required for the repair available?	Yes <input type="checkbox"/> No <input type="checkbox"/> No parts required <input type="checkbox"/> <i>(If 'no' proceed to Recommendation section)</i>
2	What is the actual cost of repair? ⁵	£
3	What is the actual cost of a replacement boiler? ⁶	£
4	Is the actual cost of repair more than the actual cost of a replacement boiler?	Yes <input type="checkbox"/> No <input type="checkbox"/> <i>(If 'yes' proceed to Recommendation section)</i>
5	What is the condition of the existing boiler (when assessed against the expected condition of a boiler of that age)? ⁷	Poor <input type="checkbox"/> Standard <input type="checkbox"/> Good <input type="checkbox"/>
6	Is the actual cost of repair less than the maximum cost of repair as identified in the 'Economic Repair Cost Comparison Tables'?	Yes <input type="checkbox"/> No <input type="checkbox"/> Boiler type not in tables <input type="checkbox"/> <i>(If 'boiler type not in tables' proceed to Recommendation section)</i>
7	What is the maximum cost of repair as identified in the 'Economic Repair Cost Comparison Tables' ⁸	£
E. Recommendation: Complete for all boiler repairs and replacements		
1	Repair or Replace?	Repair <input type="checkbox"/> Replace <input type="checkbox"/>
F. Details of new boiler: Complete for all boiler replacements		
1	Manufacturer	
2	Brand	
3	Model	
4	Model Qualifier (if applicable)	
5	Fuel Type	
6	Seasonal Efficiency Rating: Provide efficiency rating when assessed against SAP/SEDBUK 2009 ⁹	
G. Operative details: Complete for all boiler measures		
Operatives must meet industry competency standards and all legal requirements to work with the relevant fuel type.		
OPERATIVE 1		
1	Operative company name	
2	Operative name (title, first name, surname)	
3	Operative competency: Accreditation/Accrediting Body	
4	Accreditation Number	
5	Checklist sections completed	All <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> J <input type="checkbox"/>
6	Operative signature	

⁵ See page 5 for costs to be included in actual boiler repair cost calculations.

⁶ See page 5 for costs to be included in actual boiler replacement cost calculations.

⁷ See page 6 for guidance on assessing boiler condition.

⁸ See page 5 for Economic Repair Cost Comparison Tables.

⁹ See footnote 1.

This page only needs to be completed when more than one operative is involved or a boiler is being repaired		
OPERATIVE 2 (where applicable)		
7	Operative company name	
8	Operative name (title, first name, surname)	
9	Operative competency: Accreditation/Accrediting Body	
10	Accreditation Number	
11	Checklist sections completed	All <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> J <input type="checkbox"/>
12	Operative signature	
H. Details of repair: Complete for all boiler repairs		
1	Provide details for repair undertaken (parts, etc.)	
2	How much of the actual cost of repair is attributable to the cost of the warranty that has been/will be provided?	£
J Details of warranty¹⁰ offered to customer: Complete for all boiler repairs		
1	Start date of warranty (dd/mm/yyyy)	_ _ / _ _ / _ _ _ _
2	End date of warranty (dd/mm/yyyy)	_ _ / _ _ / _ _ _ _
3	Is there a cap ¹¹ on the value of repairs under the warranty?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4	If yes, what is the cap?	£
5	Has the customer been informed by you, the operative, that the boiler is under a warranty for: a) 1 year or b) 2 years from the date of repair (including an explanation of the nature of the warranty)?	Yes, 1 year <input type="checkbox"/> Yes, 2 years <input type="checkbox"/> No <input type="checkbox"/>
K For completion by the customer (for boiler repairs only)		
<i>I, the customer, have been informed by you, the operative, that the boiler is under a warranty for: a) 1 year or b) 2 years from the date of repair. I have been provided with a copy of the warranty. I confirm that the nature of the warranty has been explained to me.</i>		
Customer signature		

¹⁰ Full details of the warranty requirements are available in Appendix 2 of the ECO Guidance for Suppliers (section 3.8).

¹¹ See page 5 for details of the minimum cover which can be provided by the warranty.

Economic Repair Cost Comparison Tables¹²

These tables provide guidance in determining when a gas boiler with a SAP/ SEDBUK (2009) efficiency of 86 percent or above cannot be economically repaired. They also show the minimum cap that may be applied to boiler warranties. There is a guide to using these tables overleaf, for reference.

a. Maximum repair cost for **combination** boiler

Age of boiler	Condition of boiler		
	Poor	Standard	Good
1	£1,940	£2,910	£2,910
2	£1,698	£2,668	£2,910
3	£1,455	£2,425	£2,910
4	£1,213	£2,183	£2,668
5	£970	£1,940	£2,425
6	£728	£1,698	£2,183
7	£485	£1,455	£1,940
8	£243	£1,213	£1,698
9	£-	£970	£1,455
10	£-	£728	£1,213
11	£-	£485	£970
12	£-	£243	£728
13	£-	£-	£485
14	£-	£-	£243
15	£-	£-	£-

b. Maximum repair cost for **regular** boiler

Age of boiler	Condition of boiler		
	Poor	Standard	Good
1	£1,107	£1,660	£1,660
2	£968	£1,522	£1,660
3	£830	£1,383	£1,660
4	£692	£1,245	£1,522
5	£553	£1,107	£1,383
6	£415	£968	£1,245
7	£277	£830	£1,107
8	£138	£692	£968
9	£-	£553	£830
10	£-	£415	£692
11	£-	£277	£553
12	£-	£138	£415
13	£-	£-	£277
14	£-	£-	£138
15	£-	£-	£-

The actual cost of repair for each boiler should account for, where applicable:

- parts and fittings
- water treatment inhibitor
- central heating controls
- sub-contract electrician
- quotation
- re-connecting and commissioning
- labour
- warranty
- any works deemed necessary at time of repair to protect the boiler for the life of the warranty.

The actual cost of a replacement boiler should account for all applicable items listed above plus the cost of the boiler and accessories, as appropriate.

The warranty should at minimum provide cover for total repair works, during the life of the warranty, valued up to:

- the financial level indicated in the 'Economic Repair Cost Comparison Tables' for a boiler of that type, age and condition; or
- £500 (exc. VAT),

whichever is higher.

¹² Note that all costs shown are exclusive of VAT

Using these tables

Step 1: Determine the boiler condition, using the boiler fault details in the section of the completed Boiler Assessment Checklist entitled 'Boiler Assessment Part 1'.

Poor: the apparent age of the boiler is a minimum of five years more than the actual age

Standard: the apparent age of the boiler corresponds with the actual age

Good: the apparent age of the boiler is a minimum of three years less than the actual age

(It should be noted that unless the boiler condition is demonstrably better or worse than expected for its age, the standard condition should be used.)

Step 2: Use the boiler condition and the boiler age to identify the maximum cost of repair above which boilers with a SAP/SEDBUK (2009) efficiency of 86 per cent or above may be replaced.

Example:

Boiler type: Regular

Condition: Standard

Age: 4 years

Age of boiler	Condition of boiler		
	Poor	Standard	Good
1	£1,107	£1,660	£1,660
2	£968	£1,522	£1,660
3	£830	£1,383	£1,660
4	£692	£1,245	£1,522
5	£553	£1,107	£1,383
6	£415	£968	£1,245
7	£277	£830	£1,107
8	£138	£692	£968
9	£-	£553	£830
10	£-	£415	£692
11	£-	£277	£553
12	£-	£138	£415
13	£-	£-	£277
14	£-	£-	£138
15	£-	£-	£-

Result: If boiler repair work costs over £1,245, this boiler can be replaced.

If the boiler repair work costs less than £1,245, boiler repair can be carried out. In this case, the boiler warranty should cover the boiler for work up to at least the financial level of £1,245.