

Product application checklist

Please complete in BLOCK CAPITALS

Boilers: Biomass boilers

Manufacturer/supplier name: _____

Applicant's name: _____

Telephone number: _____

Product information

Product name: _____

Model number: _____

Please complete each section of this form based on your product's characteristics. Incomplete or incorrect data could affect the processing of your product application.

Each product application should be made on a separate form unless a product's design characteristics are common to all the products. In this instance a single application can be made for multiple products.

1. Product testing and certification

No Yes

Where type testing has been applied to demonstrate product performance ensure that the information supplied is sufficient to demonstrate the performance of all the products for which applications are being made.

1.1 Is the product CE Marked?

1.2 How was the product(s) performance tested? (Please select one)

- a) Tested in a laboratory either in house or on-site, witnessed by an independent accredited laboratory (i.e. 'witnessed testing').
- b) Tested by an independent accredited laboratory (i.e. 'independent testing').
- c) Tested as part of on-site acceptance tests or field trials.
- d) Representative model/s used.

Please note that the performance of products in categories 2 and 3 (only) may be determined from measurements made during field trials or acceptance tests, provided that the measurements have been made by, or witnessed by, an accredited laboratory or contractor that is accredited to make those measurements. The product's net thermal efficiency must be calculated by an independent body that is competent to verify the measurement data.

Please refer to Section 2 of ECA Guidance Note 5 "ECA Testing Programme: Energy Technology List (ETL) Product Testing Framework" for details of the requirements that must be satisfied for each of these product testing options.

1.3 Where product testing has been witnessed by an independent accredited laboratory, what was the name of the witness? (Please include contact details).

1. Product testing and certification (continued)

No | Yes

1.4 Where products have been tested by an independent accredited laboratory:

a) What is the name of the independent accredited laboratory?

b) What is the laboratory's registration number?

1.5 Where product testing was done as part of on-site acceptance tests of field trials, please provide details of the accredited laboratory or contractor that made or witnessed the measurements, and the independent body that calculated the net thermal efficiency. (Please include contact details).

1.6 Is the application for: (please select one)

- a) A product with individual performance test data (go to 2)
- b) A product with the same constructional design as other products where “Representative models” have been tested and are listed on the ETPL
- c) A product with the same constructional design as other products that are not yet on the ETPL, and where performance test data is being submitted for “Representative models” with this application.

1.7 What are the “Representative model’s”:

ETL Product ID number

Product name and model number

For products <= 300kW, the type testing procedures set out in Annex F of BS EN 303-3:1999 or section 5.1.4 of EN 303-5:2012 or Annex C.2.1 of BS EN 304:1992 (as amended) may be used to select representative models for testing and to reduce the overall number of performance tests that must be completed.

For products > 300kW, test data may be submitted for a single representative model provided that the maximum rated output of the products being applied for is not more than twice, or less than half, the maximum rated output of the product tested. Where the range of rated outputs exceeds these limits, products should be grouped into size ranges that comply with these rules, and test data submitted for one representative model for each group.

2. Product type (Please tick one)		No	Yes
2.1	Is the product designed to burn wood, cereal straw, or solid fuels derived from them?		
2.2	What is the rated output of the biomass hot water boiler that you are applying for?		
	a) <= 300kW (Go to 3)		
	b) > 300kW (Go to 4)		
3. Product performance: Biomass hot water boilers with a rated output <= 300kW		No	Yes
3.1	Has the product's thermal efficiency been tested in accordance with the procedures set out in BS EN 303-5:2012?		
3.2	For boilers with a nominal rating of <=100kW: a) Does the product have a thermal efficiency of at least 90.0 + log (Nominal Heat Output) based on the net calorific value of the fuel? For boilers with a nominal rating of >100kW and <=300kW: b) Does the product have a thermal efficiency of at least 92.0% based on the net calorific value of the fuel?		
3.3	Have the tests been done with a biomass test fuel (designated A, B1, B2, C & D) in accordance with Table 7 of BS EN 303-5:2012 that is appropriate to the advertised usage of the product? <i>Please note that performance data obtained in accordance with the procedures and standard rating conditions laid down in EN 303-5:1999 and using a biomass test fuel (designated A1, A2, B1, B2, C & D) in accordance with Table 8 will be accepted as an alternative to testing in accordance with EN303-5:2012 until further notice.</i>		
4. Product performance: Biomass hot water boilers with a rated output > 300kW		No	Yes
4.1	Has the product's thermal efficiency been tested in accordance with the procedures set out in one of the following standards? (a) BS 845-1: 1987 (b) BS EN 12953-11: 2003 (c) BS EN 12952-15: 2003 (d) BS EN 303-5:2012 (e) Equivalent procedures within the national standards of EU member states Please state which equivalent procedures and national standards have been used:		
4.2	Have the tests be done using a biomass test fuel (designated A, B1, B2, C & D) in accordance with Table 7 of EN 303-5:2012 that is appropriate to the advertised usage of the product. <i>Please note that performance data obtained in accordance with the procedures and standard rating conditions laid down in EN 303-5:1999 and using a biomass test fuel (designated A1, A2, B1, B2, C & D) in accordance with Table 8 will be accepted as an alternative to testing in accordance with EN303-5:2012 until further notice.</i>		

4. Product performance: Biomass hot water boilers with a rated output > 300kW (continued)		No	Yes
4.3	Does the product have a thermal efficiency of at least 90.0% based on the net calorific value of the test fuel?		

Where BS 845-1: 1987 is used, the standard test conditions are:

- A maximum ambient air temperature of 25 degrees Centigrade.
- An excess combustion air level certified as being representative of normal commercial operation.
- The boiler must be operating at a rating of at least 60% of its maximum continuous rating (i.e. 60 - 100% MCR) during the tests.

As an alternative to measurement of losses other than flue gas losses, a standard deduction of 2.0% x 100%/% load may be used.

5. Air Quality Emissions Limits		No	Yes
5.1	Does the product meet the following air quality emission limits?		

(a) Particulate matter (PM) emissions must not exceed 30 grams per gigajoule (g/GJ) net heat output.

(b) Oxides of nitrogen (NOx) emissions must not exceed 150 g/GJ net heat input.

The requirements for testing of PM and NOx are:

- *That testing is carried out in accordance with the provisions relevant to emissions of PM and NOx specified in whichever of the following standards applies: EN 303-5:1999 or EN 303-5:2013.*
- *That testing is carried out in accordance with EN 14792:2005 for NOx and EN 13284-1:2002 or BS ISO 9096:2003 for PM.*

6. Summary of documents to be included

No Yes

Please send ONE copy of each of the following documents:

If the relevant information in support of the questions above is contained within a larger document, please indicate the location of the relevant information. Note that all documentation submitted must directly refer to the model numbers for which you are making this application. Documentation should be added to your online application at <https://etl.decc.gov.uk>

- a. A technical sales brochure or leaflet for the product clearly summarising:
 - i) The key features of the product (ideally including photographs of the product's exterior).
 - ii) The product's operation (i.e. in-built functionality) and intended applications (i.e. usage).
 - iii) Any product selection options (including optional extras, alternative configurations etc.).

This documentation should contain sufficient detail to enable the assessor to confirm that the proposed entry on the Energy Technology Product List (ETPL) is correct, and uniquely represents a single product of fixed design (as defined by the rules of the ECA Scheme). If the model names contain any 'wildcards' in respect of cosmetic variations please check with ECA Questions that this is permitted before submitting your application.

- b. A technical specification for the product, including:
 - i) Details of the model numbers covered (including individual features of each model).
 - ii) The product's design ratings (electrical, mechanical, thermal, flow rates, energy use etc.).
 - iii) A description of how to install the product including connection/wiring diagrams. Where the product must be assembled, configured and/or commissioned on site before use, please include instructions.

This documentation should contain sufficient detail to enable the assessor to confirm that each product entry on the Energy Technology Product List (ETPL) has the design features specified in the eligibility criteria for that category of product. Please indicate on the checklist where information on specific design features is located in the documentation.

- c. Evidence that the products performance criteria, including:
 - i) Test reports showing product performance at the standard rating/test conditions.
 - ii) Details of the test procedures/standards used to determine product performance.
 - iii) Evidence that product testing was undertaken by or witnessed by an independent accredited laboratory (e.g. certificate of testing or schedule of accreditation).
 - iv) A declaration certifying the accuracy of the test reports and confirming that:
 - The test facilities complied with the minimum specifications outlined in the test standard, and the required test conditions where applied during testing.
 - All measurement equipment used in testing was calibrated by an accredited laboratory, or its calibration is otherwise traceable back to national standards.
 - Appropriate quality assurance procedures have been used to verify or cross-check the accuracy and repeatability of the test procedures and test results.
 - v) Where representative testing has been used, evidence that the products covered by the representative model(s) are of the same constructional design.
 - vi) Valid Renewable Heat Incentive (RHI) emissions certificates for the specific biomass boiler listed, or a certificate confirming that the boiler is part of a range (as per the RHI emissions limits type test rules) that meet these emissions limits.

Detailed test reports must always be submitted for acceptance tests or field trials.

Please refer to ECA Guidance Note 5 "ECA Testing Programme: Energy Technology List (ETL) Product Testing Framework" for further guidance on the submission of test results, and minimum information requirements.

- d. A Declaration of Conformity with EU Directives on product safety, including:
 - i) CE Marking Directives.
- e. Evidence that a quality assurance system/procedures is/are in place to:
 - i) Control the specification, design, manufacturing and testing of the products.
- f. Signed application checklist.

Please note that all product documentation provided must be written in, or translated into, English.

9. Declaration

I confirm that the information given above is correct to the best of my knowledge and that I have read and agree to the terms and conditions governing the management of the Enhanced Capital Allowance Energy Technology List (ETL).
A copy of the terms and conditions can be found at <https://www.gov.uk/guidance/energy-technology-list>.

Signature: Date:

For more information:

Web:
<https://www.gov.uk/guidance/energy-technology-list>

Phone:
0300 3300657

Email:
ECAQuestions@carbontrust.co.uk

Post:
Energy TL Coordinator,
ICF,
6th floor,
Watling House,
33 Cannon Street,
London, EC4M 5SB

Withdrawn

Whilst reasonable steps have been taken to ensure that the information contained within this publication is correct, the Carbon Trust, its agents, contractors and sub-contractors, and the Government give no warranty and make no representation as to its accuracy and accept no liability for any errors or omissions.

Any trademarks, service marks or logos used in this publication are the property of the Carbon Trust or Government. Nothing in this publication shall be construed as granting any licence or right to use or reproduce any of the trademarks, service marks, logos, copyright or any proprietary information in any way without the Carbon Trust's prior written permission. The Carbon Trust enforces infringements of its intellectual property rights to the full extent permitted by law.

The Carbon Trust is a company limited by guarantee and registered in England and Wales under Company Number 04190230 with its Registered Office at: 4th Floor, Dorset House, 27-45 Stamford Street, London SE1 9NT. The Enhanced Capital Allowance Scheme for energy saving equipment is run by the Carbon Trust on behalf of Government.

Published in the UK: May 2017.

ECA718 v14