Energy Technology List

Department for Energy Security & Net Zero

Product application checklist

Please complete in BLOCK CAPITALS

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 **Does the product have an appropriate Conformity Assessment mark?** ☐ ☐

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 the ETL 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 ETL ☐

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 models'?**

ETL Product ID number	Product name and model number
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

For products ≤ 500kW, 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 shall be completed.

For products > 500kW, 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 and solid fuels derived from them?**	☐	☐
2.2	**What is the rated output of the biomass hot water boiler that you are applying for?**		
	a) ≤ 500kW (Go to 3)		☐
	b) > 500kW (Go to 4)		☐

3.	Product performance: Biomass hot water boilers with a rated output ≤ 500kW	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 ≤ 500kW:**	☐	☐
	a) Does the product meet or exceed the Seasonal Space Heating Energy Efficiency (ηs) value, as defined by Ecodesign Commission Regulation (EU) 2015/1189, of 80%.		
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?**	☐	☐

4.	Product performance: Biomass hot water boilers with a rated output > 500kW	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 been 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.**	☐	☐

4.	Product performance: Biomass hot water boilers with a rated output > 500kW (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 does not exceed 50mg/m^3.		☐
	b) Oxides of nitrogen (NOx) emissions does not exceed 200mg/m^3.		☐
	c) Carbon monoxide (CO) emission does not exceed 500mg/m^3.		☐
	d) Organic Gaseous Compound (OGC) emissions does not exceed 20mg/m^3.		☐
	Testing for emissions of PM, NOx, CO and OGCs shall be carried out in accordance with the relevant provisions specified in EN 303-5: 2012. *Testing shall be carried out in accordance with:* • *PM: EN 13284-1: 2017 or BS ISO 9096: 2017* • *NOx: BS EN 14792: 2017* • *CO: BS EN 15058: 2017 or PD CEN/TS 17337: 2019* • *OGCs: BS EN 12619: 2013 or BS EN ISO 13199: 2012.*		

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.

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 ETL). If the model names contain any 'wildcards' in respect of cosmetic variations please check with ETL 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 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 the 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 Renwable Heat Incentive (RHI) emissions certificates for the specific biomass boiler listed, or a certificate confriming 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 the ETL Testing Framework for further guidance on the submission of test results, and minimum information requirements.

d) A Declaration of Conformity with UK/EU Directives on product safety, including:

i) An appropriate Conformity Assessment mark. ☐

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.

7. 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 Energy Technology List.
A copy of the terms and conditions can be found **here**.

Signature: ..... Date: .....

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