

Renewable Heat Incentive Emissions Certificate

for Particulate Matter and Oxides of Nitrogen

Issued by Kiwa Ltd t/a Kiwa GASTEC at CRE

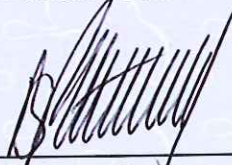
Certificate number	RHI 30344
Issue date	15 November 2013
Test report numbers	30344
Boiler models	The Topling SASP 990kW biomass boiler and associated fuel feed system, installed at Daff Works, near Inverkip, Scotland

Manufacturer name and address

TOPLING d.o.o.
Magistralni put BB
78430 Prnjavor
The Republic of Srpska
Bosnia and Herzegovina

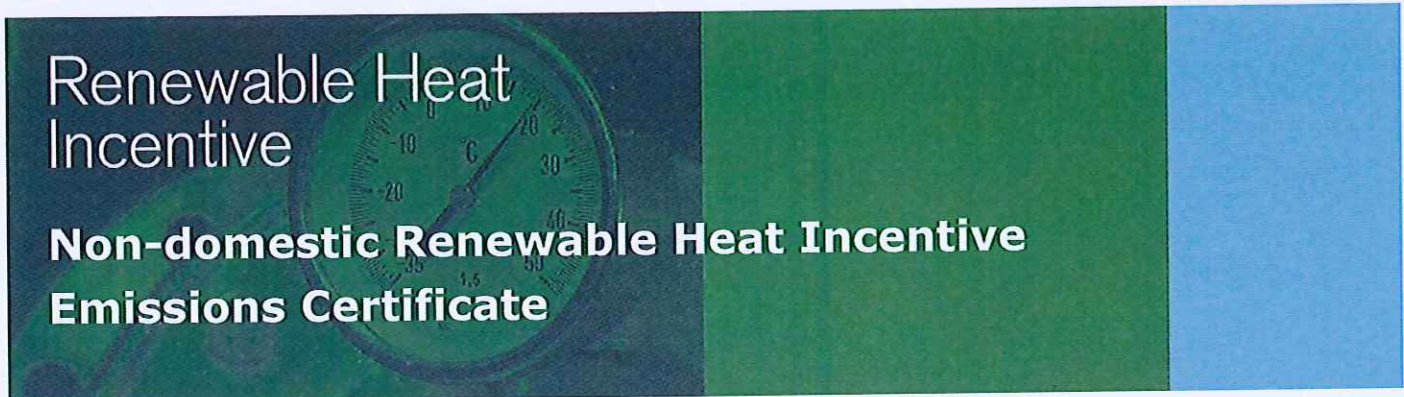
Kiwa Ltd declares that the solid fuel boiler(s) detailed above meet(s) the emission limits of 30g/GJ for particulate matter and 150g/GJ for NO_x as stated by Defra, and as such the emissions are within the acceptable limit for the appliance to be used in installations wishing to claim the Renewable Heat Incentive.

Signed on behalf of Kiwa Ltd



Mr A J Pittaway – Authorised Signatory
15 November 2013

Certificate



This certificate provides evidence that the tested boiler meets the air quality requirements of the non-domestic Renewable Heat Incentive (RHI). It must be issued by a testing laboratory. Applicants applying for the RHI with biomass boilers must submit a certificate with their application, or alternatively, an environmental permit.

1. TEST HOUSE	
a) name and address of testing laboratory	Kiwa Ltd t/a Kiwa GASTEC at CRE Orchard Business Centre Stoke Orchard Cheltenham Gloucestershire GL52 7RZ
b) name and signature of the person authorised by the testing laboratory to issue the certificate	Mr A J Pittaway
c) date of issue of the certificate together with certificate reference number	Date of issue: 15 November 2013 Certificate no: RHI 30344
d) if testing laboratory is accredited to ISO 17025, date of accreditation and accreditation number <i>(note: if testing conducted after 24 September 2013, the testing laboratory must be ISO 17025 accredited)</i>	Accreditation date: 17 January 1991 Accreditation number: 0692
2. PLANT	
a) name of the plant tested	SASP
b) model of the plant tested	The Topling SASP 990kW biomass boiler and associated fuel feed system, installed at Daff Works, near Inverkip, Scotland
c) manufacturer of the plant tested	Topling
d) installation capacity of the plant in kilowatts (kW)	990kW
e) is the plant a <u>manually stoked, natural draught</u> plant? (that is, without a fan providing forced or induced draught)	No
f) the date the plant was tested	01 October 2013
g) list of all the plants in the type-testing range of plants to which the certificate applies, if any	N/A

**Appendix to
Renewable Heat Incentive Emissions Certificate**

Certificate Number: RHI 30344

3. FUELS	
a) types of fuels used when testing	Wood chip
b) based on the testing, list the range of fuels that can be used in compliance with the emission limits of 30 grams per gigajoule (g/GJ) net heat input for particulate matter (PM), and 150 g/GJ net heat input for oxides of nitrogen (NOx) <i>(based if relevant on classifications from EN14961 or EN303-5)</i>	Wood chip <i>Based on wood chips (category A1) classification from EN 14961</i>
c) moisture content of the fuel used during testing	20.5%
d) maximum moisture content of the fuel which can be used so as to ensure that the emission limits are not exceeded	25% <i>Based on wood chips (category A1) classification from EN 14961</i>

4. TESTS	
a) if the plant is 500kW or lower, and BS EN 303-5:1999 or EN 303-5:2012 applies to it, please confirm: - tests were conducted to whichever standard was current at the time of testing.	Not applicable
b) if the plant is 500kW or lower, and BS EN 303-5:1999 or BS EN 303-5:2012 do not apply to it, please confirm: - emissions of PM represent the average of at least three measurements, each of at least 30 minutes duration and; - the value for NOx emissions is derived from the mean of measurements made throughout the PM tests.	Not applicable Not applicable
c) if the plant is 500kW or higher, please confirm: - emissions of PM represent the average of at least three measurements, each of at least 30 minutes duration and; - the value for NOx emissions is derived from the mean of PM measurements made throughout the PM tests.	Yes Yes
d) please confirm the tests were conducted to: - EN 14792:2005 in respect of NOx, and; - EN 13284-1:2002 or ISO 9096:2003 in respect of PM	Yes Yes
e) please confirm the plant tested at ≥85% of its rated output	Yes
f) please confirm the tests show that emissions were no greater than 30 g/GJ PM and 150 g/GJ NOx	Yes
g) measured emissions of PM in g/GJ net heat input	23
h) measured emissions of NOx in g/GJ net heat input	63