

## RENEWABLE HEAT INCENTIVE (RHI) SCHEME

### Introduction

Increasing renewable heat is key to the UK meeting its renewable energy targets, reducing carbon emissions, ensuring energy security and helping to build a low carbon economy.

The introduction of the Renewable Heat Incentive (RHI) scheme by the UK Government is intended to increase significantly the proportion of heat that is generated from renewable sources. By encouraging a switch from fossil fuels, this will contribute towards the UK's wider carbon reduction goals. The RHI is intended to compensate for the higher cost of renewable heating technologies, which will help make renewable heating an option for all.

### Eligible biomass installations

In order to be eligible to claim the RHI, equipment must be:

- a new installation;
- first commissioned on or after the **15 July 2009**;
- generating heat for an eligible use (see below); and
- metered output.

### Eligible uses of heat

The RHI will only support 'useful' heat. This is defined as follows:

- Heat supplied to meet a justifiable heating requirement;
- Load should be an existing or new heating requirement i.e. not created artificially, purely to claim the RHI; and
- Acceptable uses are space, water and process heating

### Payments

RHI payments will:

- only be made to the 'owner' of the biomass installation through an application made directly to Ofgem;
- be calculated by multiplying the appropriate tariff by the amount of eligible heat; and
- be made over a period of 20 years on a quarterly basis following the submission of the required periodic information.

### Tariff

Tariff name	Eligible size	Tier 1 rate (pence/kWh)	Tier 2 rate (pence/kWh)
Small biomass	Less than 200kWth	7.6	1.9
Medium biomass	200 kWth and above; less than 1,000 kWth	4.7	1.9
Large biomass	1,000 kWth +	2.6	
Tier 1 is on output <u>below</u> the Tier Break; Tier 2 is on output <u>above</u> the Tier Break Tier Break (annually) = installed capacity x 1,314 peak load hours			

### Highlights

The UK government has introduced the RHI scheme to encourage the switch to heat generated by renewable sources. This subsidy applies to qualifying biomass installations:

- Up to 7.6p paid per kWh of useful heat
- Heat output to be metered and the support calculated from the amount of eligible heat, multiplied by the tariff level
- Tariff is dependent on the size of boiler
- Installations over 45kW do not require certification under the Microgeneration Certification Scheme (MCS) to qualify
- Payable to owner of the equipment
- Payable on a quarterly basis, guaranteed for 20 years.
- Immediate eligibility (equipment commissioned on or after 15 July 2009)

### Example – Small biomass

A qualifying 180kW biomass installation in a school. Assumed operation - 10 hrs per day; five days per week; 35 weeks per year. Assumed generation of 315MWh of useful heat per annum from 70 tonnes of wood pellet. Approximate installed capital cost £75k:

#### RHI calculation:

**Tier break** = 180 x 1,314 = 236,520 kWth

**Tier 1:** 236,520 @ 7.6p = £17,975.52

**Tier 2:** 78,480 @ 1.9p = £ 1,491.12

315,000 £19,466.64

**If generated evenly throughout the year, payments will be received of £4,866.66 per quarter**

#### Fuel costs:

70 tonnes of pellet x £190 per tonne\* = **£13,300**

#### Benefit:

**Energy costs covered AND £6,166.64 cash benefit\* AND, assuming no change in fuel price, every year for 20 years.**

\*based on typical fuel price at April 2011

### Ashwell Biomass - your RHI partner

Ashwell Biomass is one of the UK's leading biomass boiler manufacturers and installers of biomass heating and hot water solutions, with **over 200** installations in the UK.

Ashwell Biomass work with you to design, manufacture, install and service your RHI qualifying installation.

With our full engineering facility and in-house fabrication expertise, we will deliver a solution bespoke to your specific needs

### Boiler Ranges qualifying for the RHI



Established 1879

The GreenTec wood pellet boiler range is manufactured in-house in Leicester. The boilers are Clean Air certified (models 150kW and above) and, being of modular design, offer an extremely versatile configuration of fuel feeds along with a much reduced footprint compared to the majority of biomass boilers. These pellet boilers are available over a range of outputs from 50 kW to 300 kW

Fuel Type		Example Uses		
Wood Chip		X	Domestic	✓
Wood Pellets		✓	Small Commercial/ Industrial including containerised plant room	✓
Logs		X	Medium Commercial/ Industrial e.g. Office Block, district heating schemes	✓
Firewood		X	Large Commercial/ Industrial e.g. Factory, Hospital	X



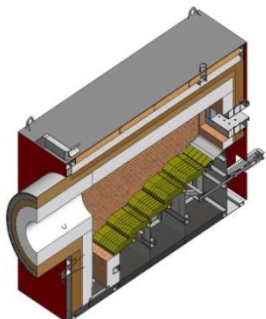
Ashwell Biomass is the exclusive UK distributor of this comprehensive range of biomass boilers. The D'Alessandro boiler range is manufactured in Italy to ISO9001 quality standards and boilers are EN303/5 compliant where applicable. With boiler outputs ranging from 60kW to 2MW and versatility over a large range of fuel types, D'Alessandro boilers are suitable for most applications.



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Wood Chip		✓	Domestic	✓
Wood Pellets		✓	Small Commercial/ Industrial e.g. Farm/ School	✓
Logs		✓	Medium Commercial/ Industrial e.g. Office Block, district heating schemes	✓
Firewood		✓	Large Commercial/ Industrial e.g. Factory, Hospital	✓
Other		✓	Containerised plant room	✓



Ashwell Biomass is the exclusive UK distributor and installer of the Komforts boiler range. Komforts provides a range of bespoke boilers and complete boiler house solutions to provide hot water, steam and CHP. The advanced systems are individually manufactured to ISO9001 quality standards and are more suited to medium and large scale industrial/commercial solutions. Available output range from 500kW to 8MW.



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Firewood		X	Large Commercial/ Industrial e.g. Factory, Hospital	✓
Other		✓	Containerised plant room	X

### Accreditations



### Containerised Bio Heat Cabins

A cost effective boiler house and fuel store solution with shorter lead times and lower costs for planning. They are complete boiler houses incorporating boiler, pumps, pipe work, fuel stores and electrical connections.

Tel: 0116 2604050

www.ashwellbiomass.com

Ashwell Biomass Ltd, Unit 12, 35 Pinfold Road, Thurmaston, Leicester, LE4 8AT

