



## Biomass Boilers

Biomass heating systems usually burn wood pellets, chips or logs to provide warmth in a single room or to power central heating, hot water and under floor heating systems. They can be equally efficient in a domestic or commercial situation.

A wood-fuelled stove burns logs or pellets to heat a single room and may be fitted with a back boiler to provide water heating as well. A wood-fuelled boiler burns logs, pellets or chips, and is connected to a central heating and/or hot water system.

### How does it work? ▶

Biomass boiler systems operate in the same way as a conventional boiler system, with the exception of fuel delivery. Pellets or wood chips are fed through an auger which is automatically controlled by the boiler. As the fuel enters the boiler, the material is ignited by an element.

The heat is then transferred to the hot water cylinder and central heating system.



### Maintenance ▶

Wood fuelled boilers, stoves and room heaters should be kept clean and swept regularly to remove ash. Ash quantities are generally very low (1-3% of fuel volume), but you will still need to empty the ash bin of a wood burning stove or boiler. This is likely to be weekly.

Some appliances, particularly boilers, have self-cleaning systems built in. A self-cleaning system will collect ash from the combustion grate and the heat exchanger tubes.

### The benefits of wood-fuelled heating ▶

- **Affordable heating fuel:** although the price of wood fuel varies considerably, it is often much cheaper than other heating options.
- **A renewable heating source** – reduce your carbon footprint.
- **Financial support:** wood-fuelled boiler systems benefit from the Renewable Heat Incentive.

**A low-carbon option:** the carbon dioxide emitted when wood is burned is the same amount that was absorbed over the months and years that the plant was growing. The process is sustainable as new plants continue to grow in place of those used for fuel.

## Biomass Boilers Installed by ESP Energy



### ETA ▶

Ideal where heating needs to be economical, environmentally friendly and fully automated. Sized range from 7kW upwards, to suit your home or business.



### Froling ▶

Manufactured in Austria and Germany, Froling offer a firewood, wood chip and wood pellet boiler. Sizes range from 10kW upwards.



### ECO Angus ▶

Angus Super and Angus Origno. Wood Gasification Boilers using wood or briquettes. Manual Log Boiler.



### Twin Heat ▶

Using woodchip, pellets or logs and an automatic auger. Varying sizes to suit your business or home.



### Heizomat ▶

Ranging from between 15-990kW, the most popular model is the RHK-AK Using woodchips, sawdust, wood shavings and pellets. Highly effective and robust.

Solar PV  
Solar Thermal  
Biomass Boilers  
Ground Source Heat Pumps  
Air Source Heat Pumps

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