

Make sure you have the right boiler to match your needs

ENERGY NOW LOOKS AT THE DIFFERENCES BETWEEN THE BIOMASS BOILER SYSTEMS AVAILABLE TODAY WITH **RICHARD COLLINS**, GROUP BIOMASS MANAGER AT THE LEADING RURAL RETAILER, COUNTRYWIDE

There are 3 key types of Biomass boiler available; log, wood pellet and wood chip, each with their own individual characteristics and benefits, explains Mr Collins. They are:

LOG BOILERS

The log batch boiler system can be extremely effective, but requires a significant commitment, as it can require the loading and burning of logs up to twice a day. It is:

- Ideal for domestic use and for smaller commercial operations.
- A cost effective way of heating.
- Can be fuelled by a customer's own wood supply.
- Certain log boilers can be fitted with a pellet burner, if the user needs a break from loading logs.

WOOD PELLET BOILERS

Wood pellet burners are easy to use and maintain. There are a large number of wood pellet systems on the market, so choosing the right option for individual requirements is key.

- Pellet boilers are ideal for domestic or smaller commercial operations, particularly in homes or businesses where space is limited; pellets take up less room than other sources of biomass fuel.
- The majority of boilers are auto igniting so can turn on and off when required.
- Some boilers require a hot water buffer tank to help them operate at high efficiencies; others can be connected directly into the heating system.
- Certain wood pellet burners have self-cleaning burner units and heat exchangers. However, solid fuel burning boilers will always require a certain amount of cleaning.
- Efficient pellet storage – Some boilers have built-in pellet stores; others



Countrywide's group biomass manager Richard Collins – Three key types of biomass boilers

allow for a remote connecting storage facility.

- Pellet boilers are generally cheaper than wood chip boilers and require less interaction.
- Wood pellet fuel will need to be purchased as small-scale pellet production is difficult to justify financially.

WOOD CHIP BOILERS

The wood chip boiler is also a customer friendly option, with a diverse range of systems available and, depending on how technically advanced the boiler is, requires an extremely low user input.

- Most of them are auto igniting, so can be switched on and off when required.
- The majority of wood chip boilers need to be connected to a hot water buffer to help level out heat demand and to operate at high efficiencies.
- Some boilers have self-cleaning burner and heat exchanger units, therefore only limited cleaning input is required.

Where wood chip boilers differ is in

the fuel delivery system, which is more robust than a wood pellet delivery system and can push up the capital costs.

"Choosing the most suitable and cost-effective bio-renewable energy source very much depends on individual circumstances," said Mr Collins. "With an abundance of free wood chip available, for smaller heat demands (below 70kw – 80kw), it may be more cost effective to install a pellet boiler and buy in any additional fuel requirements rather than pay extra for a wood chip boiler.

"The other financial aspect to consider is the cost of wood, as a domestic property can use more than 10 tonnes of wood a year. This can rise further with log boilers," he said.

Countrywide could help customers spread the cost of the boiler and installation through its Asset Management leasing business. It also offered "the entire solution for biomass - from initial enquiry and identifying the right solution, through to installation and wood fuel supply," he added. ■



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