

In certain locations excess heat can be stored in a heat sink, usually a tank of water, where heat is stored when radiators are turned down and can be drawn upon if the radiators need to be turned up. Excess heat can also be used to heat swimming pools, and local schools and public pools now use biomass boilers symbiotically. E.g. Crymych Leisure Centre.

BENEFITS

Biomass Boilers are a sustainable low carbon form of heating, which uses, in this case, waste wood instead of fossil fuels. The CO₂ released when the wood fuel is burned is never more than the CO₂ being taken up by new growth. It is therefore termed 'carbon neutral'.

The temperature produced from a biomass boiler is hotter than the temperature from the equivalent sized fossil fuel boiler.

Potash is produced as a waste product and is a good source of nutrients for garden compost.

DISADVANTAGES

High Maintenance - If this system replaces a gas or oil boiler in a school or public building the maintenance needed from the caretaker will increase as more ash is produced. When the caretaker was employed at the National Park Offices it was stipulated that one of the duties was to maintain the biomass heating system.

The boiler system can go out due to blockages and needs regular cleaning to prevent ash build up. The system therefore requires considerable care and attention, often during anti-social hours, such as Bank Holidays.

The pellets can be shaken up during transportation, and therefore get broken down into sawdust. This effects the efficiency of the boiler and produces more ash. If the pellets are delivered well before the season gets cold enough to fire up the boiler, pellets can get damp in the hopper, effecting the boiler efficiency.

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HEATING SYSTEM COSTS:

Biomass Boiler	£30,000
Pellets per year (in 07-08 financial year)	£6,500
Grants from Clear Skies (now the Low Carbon Building Programme).....	£22,000

USEFUL CONTACTS:

Welsh Biofuels	01656 729714
Sundance Renewables	01269 842401
PCNPA Caretaker, Brian Pratt	BrianP@pembrokeshirecoast.org.uk

