

CASE STUDY 02

renewable energy

Charterhouse Centre, Blagdon, Somerset

State of the art wood heating has hit the Mendips with the installation of a 55 kW Froeling turbomatic boiler in the Charterhouse Centre, Blagdon. Installed by Eenergy Ltd with funding from Somerset County Council and Clearskies, the computerised boiler burns 25 tonnes of renewable fuel and produces 45,000 kw of energy. CO2 output has been reduced by an estimated 15 tonnes per year. The boiler is 92% efficient and needs de-ashing only once a month.

The centre is home to the Mendips AONB and provides educational and outdoor activities to approximately 44 children and adults per week. The centre is very fortunate in being a mile from a large wood recycling centre called Mendip Wood Shavings. A very clean and uniform specification of wood shred from discarded pallets and demolition wood has been produced. And at 10-15% moisture content and prices of £35-45 tonnes delivered, the centre is running on a cheap and local fuel source.

The boiler cost just over £14,000 to supply, install and commission. One lesson learned was the need to allow for mechanical handling and storage of the fuel by constructing a bunker and vehicle access.

The centre is a contender for the SW RICS Award for regeneration and sustainability. It has a green roof, wind turbine and in addition to the woodfuel, uses Western Red Cedar from Stourhead in Wiltshire as cladding.



Above: Woodfuel boiler
Below: Charterhouse Centre, Somerset
PHOTOS: SW WOODFUELS

