



Southill Estate, Bedfordshire

Southill Estate near Biggleswade in Bedfordshire is becoming self-sufficient for heating and hot water thanks to funding from Woodfuel East.

The estate took the leap of replacing its old oil fired heating system with a 365 kw Gilles woodchip boiler to heat Southill House, the home of the Whitbreads, the estate offices and meeting rooms.

A 40% grant from Woodfuel East, enabled the equipment and infrastructure to be put in place to harvest and process timber from the 4,450 hectare estate which comprises over 400 hectares of woodland, parkland and amenity planting.

“Now that the woodlands are being managed for fuel they are being regenerated, while we also save carbon and secure more jobs on the estate.”

Mark Egar
Southill Estate



Mark Egar, manager of Southill Estate, is convinced that the conversion from oil fired heating to woodfuel is a good investment in terms of finance, the environment and jobs.

Mark said: *“There’s no waste. Low quality wood, which is unsuitable for firewood logs or quality timber, can now be used. Best of all is that we can be self-sufficient and plan ahead. We know what our costs are likely to be, unlike future oil prices.”*

Funding from Woodfuel East has been used towards a chip store, hardcore timber stand, timber cracker, a forestry forwarder, crane and a moisture meter. These all help ensure that woodchip processing is carried out as efficiently as possible.

The Binderberger forwarder and crane are used to harvest the wood and move it to the hard cored drying area where the wood can dry in the open air, away from overhanging trees

Once seasoned the timber can be efficiently and cost effectively chipped directly into the neighbouring new chip

store. This is large enough to hold enough to supply both the current combustion system and a significant number of future systems, should the estate decide to expand its heating operations and become an Energy Supply Company (ESCO); selling heat direct to its tenants.

Mark added: *“Woodchip needs to be managed. It needs to be stored well, and turned to avoid chips clumping and not drying out properly. There’s not much to do but it needs to be done regularly.”*

The one piece of equipment not owned by the estate is a chipper which is hired from Anglia Woodfuels.

The estate is looking ahead with 3,000 new trees being planted annually, including the new 15 ha Diamond Jubilee Wood which will provide a sustainable source of woodfuel for the future.

Technical information

The Binderberger RW11 is an 11 tonne capacity hydraulic 4 wheel braked trailer with hydraulic swivelled drawbar, hydraulic self supply with cast iron pump, tank and high pressure filter, plus a new Binderberger FK 8300 log crane which comes as one unit and is a forwarder trailer of particularly rugged construction suitable for mounting the Westtech grabsplitter.

Larger dimension timber, particularly poplar, is cracked or split using the Westtech grabsplitter prior to seasoning. Poplar has a very low market value (\leq £ 2.50 per tonne) as timber but as seasoned fuel it can create the energy needed to draw down RHI subsidy.

The Humimeter BM1 is a bucket type moisture meter specifically designed for wood chips to monitor the moisture content of the chips in the store to guarantee suitable moisture content.