



An historic estate near Witham in Essex was prompted to investigate woodfuel as a heat source after receiving a £5,000 oil bill for one month's heating. The new system will save thousands of pounds as well as more than 500 tonnes of carbon over the next five years.

Bringing 125 hectares of woodland back into active management will provide a sustainable supply of woodfuel, based on a 30 year harvesting cycle, and will improve biodiversity.

www.woodfueleast.org.uk www.braxtedpark.co.uk



Braxted Park, an historic estate near Witham in Essex, has installed a state of-the art woodchip heating system and has reinstated positive management across 125 hectares of mainly hornbeam woodland, including 47 hectares of ancient and semi-natural woodland.

Owner Duncan Clark was prompted to investigate woodfuel as a heat source when he received a £5,000 monthly oil bill to run an old 450kw heating system in December 2008. He consulted the Carbon Trust which recommended reducing his boiler size, opting for a woodfuel system and installing a state of-the-art heating control system with Econergy.

The innovative new heating system has sophisticated controls which allow different rooms to be heated independently, managed remotely by a computer-based interface.

A woodland management plan was prepared by the Essex Woodland Partnership and approved by the Forestry Commission. As part of the plan, wood will be harvested from the estate through thinning and coppicing on a 30-year rotation. This will be seasoned, chipped and stored on site. A local fuel supplier will fill the gap until the estate's own seasoned wood is ready to chip. Hornbeam woodland coppiced last year is already re-growing and will provide a future woodfuel crop.

Woodfuel East provided advice on a wide range of issues, from selecting timber extraction equipment to creating an effective and sustainable woodfuel plan.

They also provided funding towards the conversion of a barn into a woodchip store, a forestry forwarding trailer, log grab and moisture meter. The estate has also developed some innovative solutions of its own including converting a potato elevator into a woodchip lift to fill the boiler store.

Braxted will become self-sufficient in heating and hot water as well as improving the biodiversity of the estate and creating work for local people. The Herz Firematic 150kw Woodchip Boiler installed by Rural Energy is fed from a woodchip store in a former toilet block.

The **Timbermaster Protimeter moisture meter** is used to ensure that
the moisture content is low enough
before chipping into the store for further
drying.

The Farma nine-tonne forwarding trailer has a C6 crane unit mounted which has a six-metre range and can lift up to 300kg, well suited for the woodland on the Estate

The Botex heavy duty log grab is fitted to a JCB front end loader, and is used to move and stack round wood prior to chipping.

Woodfuel East grant aid will secure carbon savings of 507 tonnes over the next five years, based on an average annual requirement of 120 green tonnes of roundwood replacing oil.

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