

Wood gasification boiler providing the main heating for a detached, rural property with backup provided by an oil-fired boiler

This detached house is set in 7 acres of woodland which provides an ample supply of logs, so that throughout the year virtually all its heating and hot water requirements can be met from a renewable resource.

A 25kW EcoAngus Super wood gasification boiler is linked to a 2000 litre Akvaterm accumulator tank via a pressurised circuit. This tank is oval to allow it to be squeezed through the door of the small plant room. A Laddomat 21-60 maintains the efficiency of combustion within the boiler and regulates the rate at which the store is charged. The circuit includes a 250 litre expansion vessel.

Protection against overheating is provided by a thermal safety valve which if the temperature in the store charging circuit reaches 95°C will open to admit cold water through a 'quench' coil in the boiler jacket.

The existing oil-fired boiler was retained and connected to the Akvaterm to provide backup and convenience when the wood boiler is not in use.

Benenden, Kent





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