



Biomass Heating Case Study

Inch Mills, District Heating, County Kilkenny



Key Facts HDG 150 kW Boiler & 3000L buffer tank

Application

Heating and hot water for 2 detached houses, workshop, offices and timber kiln on a site outside Kilkenny City by the River Nore.

Previous Heating

Hand fed boiler and stoves

Year 2005

Background

Inch Mills has been the home of the Brett family for 140 years. For 5 generations innovation, self sufficiency and sustainability have been key drivers in the development of the family business; the production of high quality native timber products. These drivers are reflected in energy choices for the site and from the outset the river has provided a renewable energy source from the earliest mill wheel belt-driven saws to the hydro turbine electrical machines of today. Similarly, the demand for heat for the kiln drying process, showroom, offices and homes is met by a state of the art automated high efficiency biomass system.

Process

In 2005, Glas Energy surveyed the heat load which included 2 detached homes, workshop with wood drying kiln and showroom with offices. A 150 kW HDG boiler was specified with sweeping arm auger system and 3000 liter buffer tank. A full distribution network of district heating pipes with pumps and controls were incorporated into the system. The boiler is fueled from a combination of saw dust, shavings and wood, chipped on site as a waste product of the timber business. The HDG boiler manages the varied fuel source by automatically adjusting the combustion process based on the fuel specified. The system, now running for over 10 years, offers a zero carbon solution for commercial and domestic purposes including being home to Glas Energy's office.



Comfortable heating. With wood!

From top left: John and Eoin Brett. An overview of the boiler house and fuel store. A chipping machine visits to chip timber unsuitable for other use.