

Biomass wood chip boiler ETA HACK 200 kW District heating for 9 homes, Duns



Installation project

Our client contacted Border Eco Systems to design, supply, install then maintain a wood chip boiler to supply district heating to their farmhouse plus 7 cottages with capacity to add on a future development of one more property.

In view of the scale of the project, crossing public and private land, on behalf of our client Border Eco Systems liaised with organisations such as Scottish Power, Scottish Borders Council and so forth.

The choice of an eco cabin ensured meeting the client's preferences: a site by the cottages, a larch clad finish. The cabin was actually constructed on-site then fitted out with the boiler equipment for straightforward connection to all the existing properties.

- ▶ **Boiler type** ETA HACK 200 kW and automatic fuel transfer system
- ▶ **Hopper** 85m³ custom built
- ▶ **Flue system** twin wall stainless steel chimney system
- ▶ **Estimated fuel use** 115 tonnes per annum
- ▶ **Service requirements** empty ash once a month and annual boiler service

District Heating

Heat is transferred from the boiler room to all properties via Rehau pre insulated pipework buried 1000mm into the ground, covered by 100mm sand to further insulate and protect. An accumulator tank allows the boiler to burn at maximum efficiency and to store energy for times of peak demand.

Each cottage has a heat exchanger, heat meter and hot water tank, enabling individual monitoring of heat use.