

This 55kW woodchip boiler provides heat and hot water for Crannich farmhouse, woodchip drying system and emerging tourism based diversification schemes. Energy costs are significantly lower than for oil or LPG and, as woodchip is produced on site from local timber, delivery distances are negligible! The heating system is user-friendly, with automatic ignition and de-ashing – in fact the ash only needs emptied once every few weeks – and a control panel regulates the heat supply to each of the buildings.

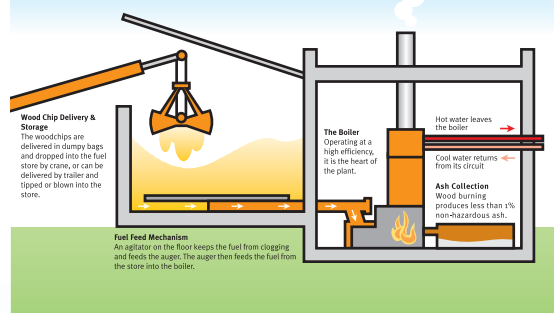


Crannich Woodfuel

Sustainable woodfuel supply and heating

How does the boiler work?

Modern installations are fully automated and require minimal attention. The key components are the boiler, fuel handling system, and the flow and return systems.



Facts and figures

Boiler: Fröbeling Turbomatic

Boiler output: 55 kW

Size of fuel hopper: 6 cubic metres

Fuel usage: 30 tonnes p/a

Accumulator: 1500 litres of water storage for extra heat capacity and system efficiency

CO₂ savings: 28 tCO₂

SUPPLY

Woodchip Store: 75'x 30'x 30' barn including 30'x 30' drying bay with six underfloor hot air ducts, fan and coil – up to 30kW drying capacity.

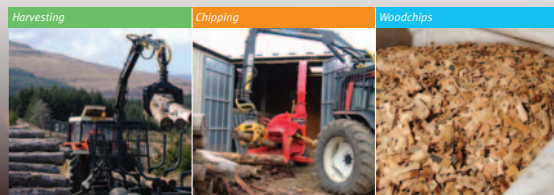
Handling systems: Mobile, tractor driven sucker blower unit for filling bags and hoppers, with a specially designed bucket for filling dumpy bags.

Timber collection and woodchip delivery: Forwarder & crane for timber collection from forests with delivery of woodchip in bags, or bulk delivery in trailers.

The fuel supply

Crannich Woodfuel produces woodchips for automated woodfuel systems. The raw material is sourced from local, well managed woodlands, extracted during normal harvesting and forest management activities. The wood is air dried in the forest and chipped into a drying shed. To ensure quality control, the building has air ducts to further dry the chip to meet the specifications of customers' boilers.

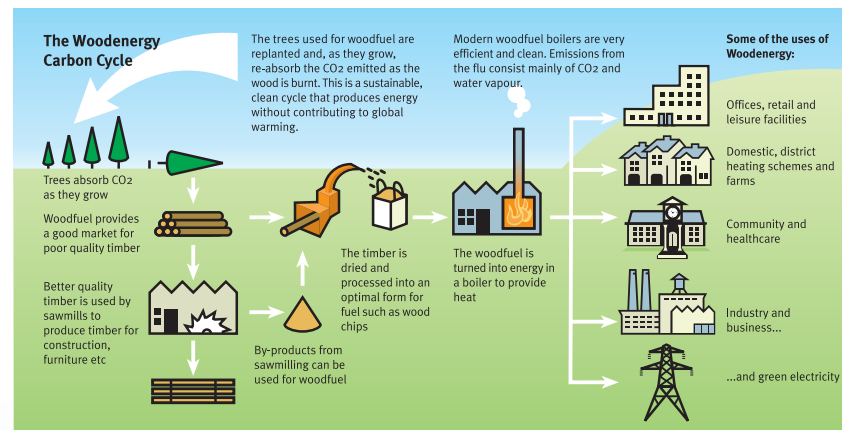
The chips are delivered in bulk by trailer, then tipped or blown directly into the hopper, or in dumpy bags and put into the fuel store by crane.



Sustainable Heating with

WOODENERGY

SCOTLAND



What is woodfuel?

Woodfuel is a modern, clean and environmentally friendly alternative to fossil fuels, and is an economic solution for the heating needs of public buildings, industry and business premises, agricultural buildings and households. It comes in many forms including logs, pellets (made from sawdust), and woodchips.

Woodfuel is widely used throughout mainland Europe for heating and power generation and is Europe's most important source of renewable energy providing 51% of all renewable energy.

Why biomass?

Supporting the local economy

- local income stream
- more local jobs than any other renewable energy alternative
- new market for forestry and farming industries
- cheaper fuel prices

Environmental Facts

- renewable energy
- clean and safe to store
- promotes sustainable forest management and so can benefit wildlife

Social Benefits

- local employment
- communities can contribute to their own future energy needs
- helps reduce fuel poverty

