

Novar Estate is a traditional working estate with sporting interests, which it is seeking to diversify and expand. The 18th century stable square has recently been converted to a luxury lodge with reception rooms and nine double suites for sporting and other corporate events. The conversion included the installation of a wood chip fired system to heat the buildings and supply hot water. The woodfuel boiler has been partially grant aided by HIE Inverness & East Highland, the EU ERDF and Forestry Commission Scotland.

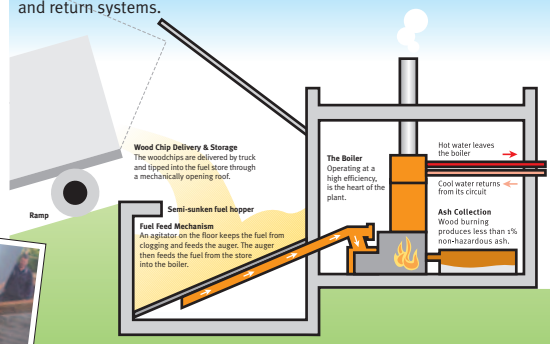


Novar Estate

Sustainable woodfuel supply and heating

How does a woodfuel 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.



The fuel supply

The woodfuel used at Novar Estate is supplied locally by Raddery Sawmill. The estate has its own sustainably managed timber resources which it uses in a small sawmill and could also supply the boiler. By adding value to low-grade timber, woodfuel can help the estate to manage its woodlands sustainably.

Facts and figures

Boiler: Froeling Turbomatic
Boiler output: 110 kW
Heat storage accumulator tank: 1500 litres
Fuel usage: 100 tonnes p/a
CO₂ savings: 75 tonnes p/a
Fuel storage: 25m³ capacity
Fuel delivery: direct tipping

Harvesting



Chipping



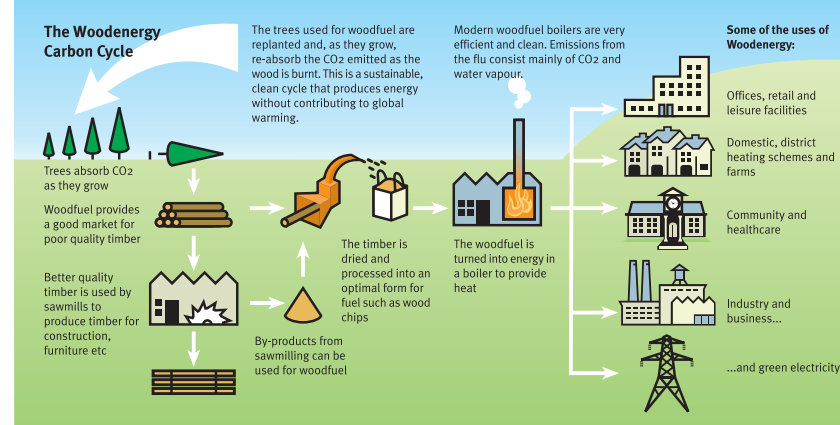
Woodchips



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