

Russwood is a successful sawmilling business, supplying a range of products to the specialised building and construction industries. Russwood identified a need for on-site heating of their workshops and decided to install a woodfuel heating system using their own resources for heat production. Support was provided by EU ERDF funding, HIE Inverness and East Highland and Forestry Commission Scotland to establish the woodfuel supply and install the heating equipment. A Veto boiler, fuelled by the sawmill's slabwood, now provides a cheap source of heat energy for the business.



### Facts and figures

Boiler: Ala-Talkari Veto

Boiler output: 120 kW

Fuel hopper: 6m<sup>3</sup> capacity, woodchips delivered to the boiler by Veto Maxi fuel feed mechanism

Fuel usage: 100 tonnes p/a

CO<sub>2</sub> savings: 63 tCO<sub>2</sub> p/a

#### SUPPLY

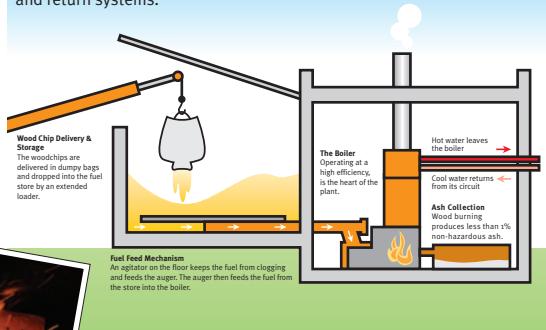
Woodchip production: onsite using Heizohack HM10-14-400 woodchipper

## Russwood Woodfuel

### Sustainable woodfuel supply and heating

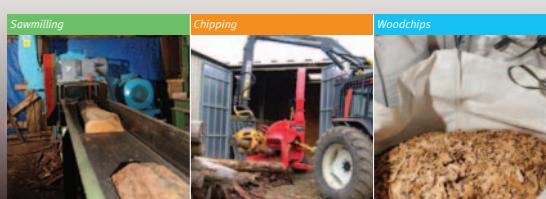
#### How does a woodfuel boiler work?

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

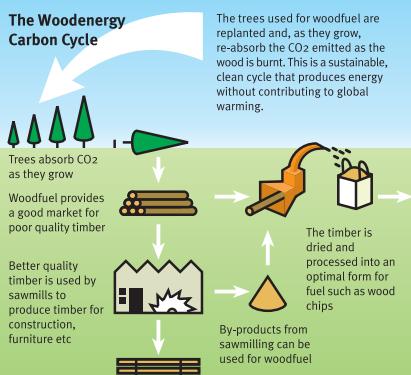
Slabwood is produced as part of the sawmilling operation, providing a constant source of timber. The wood is then air conditioned to reduce the moisture content and chipped using a Heizohack HM10-14-400 woodchipper which will chip logs up to 230mm diameter. The chips can then be loaded into the hopper, providing a cheap, reliable source of energy using the sawmill's own resources.



## Sustainable Heating with **WOODENERGY** SCOTLAND



#### The Woodenergy Carbon Cycle



The trees used for woodfuel are replanted and, as they grow, re-absorb the CO<sub>2</sub> emitted as the wood is burnt. This is a sustainable, clean cycle that produces energy without contributing to global warming.

Modern woodfuel boilers are very efficient and clean. Emissions from the flue consist mainly of CO<sub>2</sub> and water vapour.

The woodfuel is turned into energy in a boiler to provide heat

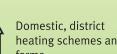
The timber is dried and processed into an optimal form for fuel such as wood chips

By-products from sawmilling can be used for woodfuel

#### Some of the uses of Woodenergy:



Offices, retail and leisure facilities



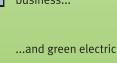
Domestic, district heating schemes and farms



Community and healthcare



Industry and business...



...and green electricity

#### 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

the future for Scotland's wood energy is at [www.usewoodfuel.co.uk](http://www.usewoodfuel.co.uk)