

Lovat Arms, Loch Ness is a landmark Victorian hotel, recently refurbished to a high standard with 29 modern bedrooms. As part of the upgrade, the hotel has switched to renewable energy, with an environmentally friendly woodfuel boiler providing the central heating and hot water. This modern and efficient system uses local woodfuel supplies and has substantially reduced heating costs. Grant support for the installation was received from HIE Inverness & East Highland, the EU ERDF and Forestry Commission Scotland.

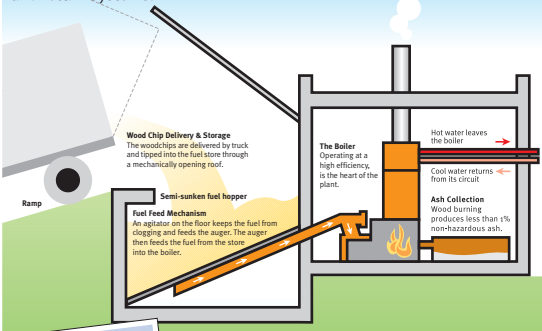


## Lovat Arms Hotel

### Sustainable woodfuel supply and heating

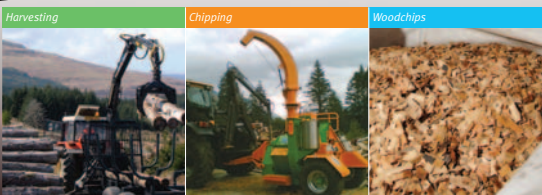
#### How does a woodfuel boiler work?

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 boiler uses wood chips produced nearby from sustainable local resources. The supplier tips the wood chips into a purpose built 10 tonne underground fuel store. Delivery is quick and efficient with minimal disturbance at the site. The woodfuel is fed directly from the pit to the boiler by a series of augers.

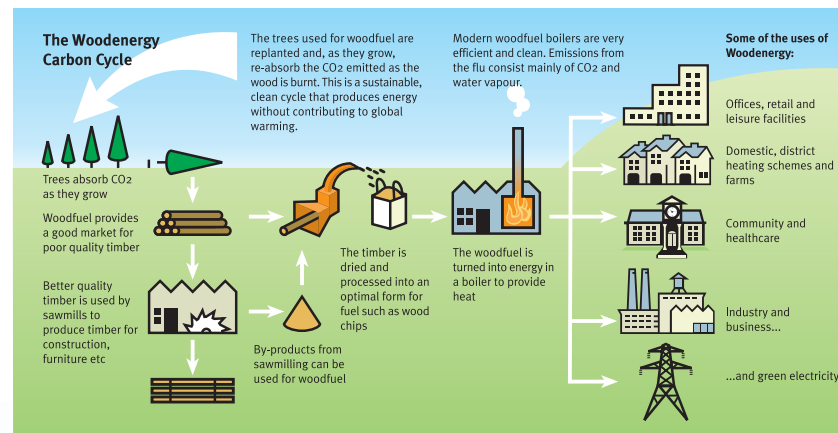


#### Facts and figures

Boiler: Froelling Turbomatic 100 kW  
Heat storage accumulator tank: 2 x 1800 ltr  
Fuel usage: 200 tonnes p/a @ 30% MC  
CO<sub>2</sub> savings: 271 tonnes p/a  
Fuel storage: 115m<sup>3</sup> capacity  
Fuel delivery: tipped in bulk



## 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

