



SCOTTISH EXECUTIVE

This project was supported by the Scottish Community and Householder Renewables Initiative (SCHRI), funded by the Scottish Executive and managed by the Energy Saving Trust

Dunlossit Estate is a traditional estate, providing housing for its employees, pensioners and local tenants. The Estate aims to be self-sufficient and recognises the potential for establishing a woodfuel supply using its own resources to meet the heat demand of the properties. The first buildings to be converted to woodfuel were the office and bunkhouse accommodation, linked in a local heating network. The Estate was able to purchase the necessary woodchipper and woodchip-fired boiler with grant aid from the EU ERDF, HIE Argyll and the Islands, Forestry Commission Scotland and SCHRI.



Facts and figures

Boiler: Ala-Talkkari Veto

Boiler output: 60 kW

Size of fuel hopper: 6 cubic metres

Fuel usage: 75 tonnes p/a @ 30% MC

CO₂ savings: 40 tCO₂ p/a

SUPPLY

Woodchip: Estate grown timber chipped onsite with Timberwolf TW75/230H chipper.

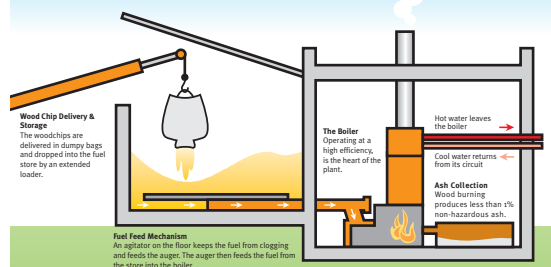
Timber collection and woodchip delivery: The forestry team's existing tractor with loader collects timber from the forest, and delivers woodchip to the hopper in bulk tote bags.

Dunlossit 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

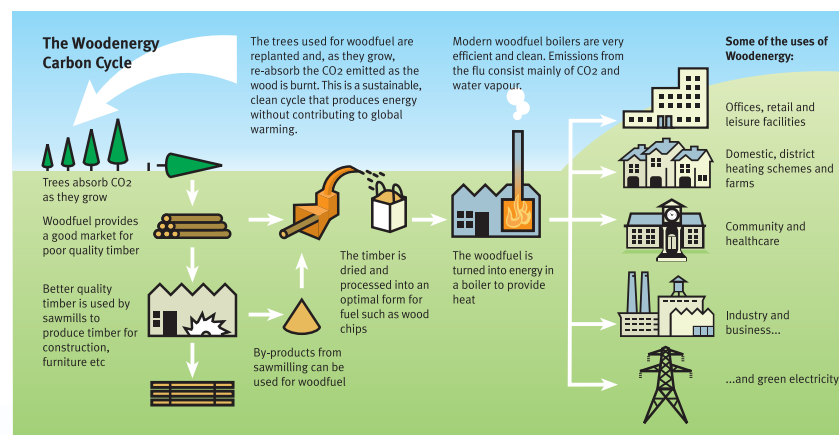
The Isle of Islay is ideally suited to woodfuel heating systems with a supply of timber for which there is no alternative economic market, due to timber transport costs. The wood comes from sustainably managed forests on the Estate. It is air conditioned and chipped on site, then delivered into the

woodfuel hopper using existing machinery on the Estate. Woodfuel therefore provides a cheap, low carbon source of fuel, which will also help safeguard jobs on the Estate.



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

the future for Scotland's wood energy is at www.usewoodfuel.co.uk