LCF Case Study

Project - Biomass Boiler at the Sustainability Centre

LCF funding - £55,000 to Earthworks Trust



Summary

Photographs courtesy of the Sustainabilty Centre and 4th image supplied by AK Purkiss

Energy efficiency was one of the main aims for improvement at the Sustainability Centre.

The 120kw fully automatic woodfuelled boiler was comissioned to provide heat to the visitor centre, offices and the Wetherdown hostel for the Sustainability Centre near East Meon in Hampshire.

Some 50 tonnes of seasoned woodfuel per year are sourced from the site and from local sustainable woodland management.

The project qualified for LCF support under Object D: to provide, maintain or improve a general public amenity.

Objectives

- To improve energy efficiency at the centre.
- To use sustainable fuel.
 - That emissions are well within the requirements of the Clean Air Act.





Outcomes

Combustion is controlled by a Technomatic modulating boiler controller, optimising combustion enabaling maximum efficiency and minimum emissions.

Boiler efficency is greater than 86% and emissions are well within the requirements of the Clean Air Act.

The boiler is installed in the hostel boiler house with hot water piped via a pre-insulated underground heat main to the visitor centre heating system.

The system delivers an estimated 125,000 kWh/year of renewable heat, avoiding some 38 tonnes of carbon dioxide emissions per year.

Some 50 tonnes of seasoned woodfuel per year is sourced from local woodland management.

Additional information

The Sustainability Centre in Hampshire was set up by the charity Earthworks Trust to:

'Demonstrate, develop and promote knowledge, skills, technologies and lifestyles that improve peoples qualify of life without damaging the local and global environment'

www.sustainability-centre.org



