

CASE STUDY

The best of low-carbon technology

Barnsley College, Think Low Carbon Centre

Installation: Remeha 100kW Wood Pellet Biomass Boiler

A Remeha 100kW biomass boiler has been chosen to demonstrate the best of low-carbon technology by one of Europe's most innovative energy training centres, Barnsley College in Yorkshire. The inspirational £4.2 million Think Low Carbon Centre is part of the College's think low carbon strategy. This state-of-the-art building, which achieved BREEAM Excellent and an Energy Performance certificate of A, is a centrepiece for all the latest technology and techniques used to make low carbon, energy-efficient buildings. It serves to support the courses run by the College for the building services industry, as well as hosting practical demonstrations and seminars for construction professionals, academics and anyone who wants to know more about low-carbon buildings.



The Remeha biomass boiler, located in the College's hi-tech plant room, is fuelled by wood pellets. This boiler is one of the most efficient ways of getting heating equipment to run on low to zero carbon fuel. It is also one of the most technologically advanced biomass systems available, incorporating firewall software to enable the students to monitor on their PCs the energy generation of the boiler through the College's building management system.



“The Think Low Carbon Centre is intended as a national knowledge hub for low-carbon buildings as well as a training support,” said Consultant Daniel Madden of S.I. Sealy & Associates. “Our role is to specify the very best biomass boiler for the project, which is why we came to Remeha.”

The Remeha biomass boiler is just one of the energy efficient, green technologies featured at the Centre. Others include solar panels, a green roof covered in wild flowers, triple glazing, rainwater harvesting, and reflective sun pipes which allow natural daylight into dark rooms. Windows open automatically to regulate temperature, an air source heat pump provides underfloor heating, sheep’s wool, panels of locally sourced straw bale and hemp, and recycled denim are used to insulate the walls. A display panel shows visitors how much energy is generated and consumed.

Mike Hefford, Head of Renewable Technologies at Remeha said: “Remeha is delighted to have played a part in the creation of this centre of excellence which will provide construction professionals with the skills and knowledge to meet the growing demand for energy-efficient buildings.”

Sales enquiries: 0118 978 3434