



Green Fox Community Energy

JOHN CLEVELAND COLLEGE

Green Fox Community Energy is a volunteer-run energy cooperative set up by a team of local volunteers in 2012 to enable community-led action for sustainable energy in Leicestershire. Green Fox is one of the few cooperatives investing in community energy schemes in the country.

This biomass project is the second ever cooperatively funded biomass project in the country, the *first* of this type in the education sector. Rural Energy is proud to be a partner in this project facilitating community biomass.

The Community Energy scheme allows people to buy shares in the projects. This helps fund renewable energy schemes.

Green Fox also has a number of partners, which is how Rural Energy became involved with the scheme. They also work with Transition Leicester, Sharenergy and the National Forest (to name a few).

John Cleveland College, a secondary school in Hinckley, Leicestershire, was previously heated by numerous unreliable and old oil boilers.

With support from the partners, the 800kW Herz BioFire project came to life at the start of 2014 after months of careful planning. Rural Energy acted as Main Contractor and project managed the entire programme to ensure a quick turnaround during the summer holidays.

Rural Energy designed and installed a system comprising a Herz BioFire retrofit into the existing plant room and an octagonal fuel store. Rural Energy's team managed the construction of the plant room (or rather deconstruction of some of the walls). This included coordinating the removal of several defunct oil boilers. As the boiler is a retrofit installation, it was important to provide a suitable fuel store solution. A prefabricated octagonal silo and a vertical elevator/trough system for wood chip deliveries was specified to meet this requirement.

This has ensured the long-term prospects of the school. The scheme brings reliable, renewable heating to a school that was constantly struggling with boiler break-downs and cold classrooms.

CASE STUDY FOCUS

Supplying an
800kW
Herz® BioFire

In the first four months
129T
of CO₂ were saved

WORKING WITH

Main Contractor: Rural Energy

Sub Contractors: East Goscote Plumbers

SYSTEM SUMMARY

Boiler Type: Herz® BioFire

Fuel Type: Wood chip

Fuel Store: Octagonal pre-fabricated



DEVELOPING A PROJECT IN PARTNERSHIP

With the success of their first biomass boiler project, the Green Fox Community Energy team are looking to expand and provide a second boiler for John Cleveland College in 2015.

WORKING WITH A COMMUNITY PROJECT

Rural Energy had not worked with a community energy cooperative before and are looking forward to the opportunity to install a second boiler and really make biomass heating work for school life at John Cleveland College.

THE FIRST COMMUNITY-FUNDED BIOMASS BOILER IN EDUCATION HISTORY

This innovative renewable energy project started in 2013 when Green Fox Community Energy Co-operative, in partnership with John Cleveland College, launched the first community energy share offer in the UK. This aimed to heat the College with renewable heat rather than with their old 'oil guzzling' boilers. The project planned to reduce the £200,000 annual oil bill and reduce the carbon emissions from the College.

Investors in the project became 'Members of the John Cleveland College Community Woodheat Co-operative' and raised just under £600,000 for the purchase and installation of an 800kW biomass boiler. Investors came from all over the UK, but 50% of investors were from Leicestershire.

The new biomass boiler was installed by Rural Energy in 2014 and has been supplying heat to the College for just over four months. In that time the Co-operative has saved the College £30,000 in fuel bills and maintenance costs. In addition, by switching from oil to wood chip, the project has saved 129 tonnes of carbon emissions in the first four months.

The project will save over 250 tonnes of carbon dioxide annually - 5,000 tonnes throughout the lifetime of the project plus an estimated £45,000 per year in heating bills.

“The project will create a Local Community Fund, which is to be used to support local community benefit initiatives at the school and local community. This is estimated to generate £227,876 over the project's 20 years.”

Ben Dodd
Development Executive
Green Fox Community Energy Co-operative



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Rural Energy
INSTALLING BIOMASS SINCE 2002