

Pellet Stove at The National Energy Foundation

The National Energy Foundation is an independent educational charity based in Knowlhill, Milton Keynes. The objective of the Foundation is to work for the more efficient, innovative and safe use of energy and to increase the public awareness of energy in all aspects. NEF Renewables is a department within the National Energy Foundation that promotes and raises awareness of renewable forms of energy through education and information programmes and projects.

Renewable Energy Features at the National Energy Foundation

The home of the Foundation is the National Energy Centre, an energy efficient building featuring renewable energy technologies. A photovoltaic array, a small wind turbine and energy crops can all be seen at the Centre. A pellet stove has now been installed in the foyer of the building to demonstrate the value and efficiency of using wood as a fuel. Pellets can be made of many types of wood materials including sawdust, waste wood and energy crops such as willow.



Routine inspection of the willow demonstration crop at the National Energy Foundation.

The EF5 Enviro Evolution Pellet Stove

The stove installed at the National Energy Foundation is an EF5 Enviro Evolution pellet stove donated by BioEnergy Devices Ltd of Bridgend and installed by Culworth Forge of Culworth

near Banbury. The stove is in a prime position in the foyer where it can act as a demonstration of pellet heating as well as supplementing the installed energy efficient space heating. This location provides the opportunity for the many visitors to view this renewable energy technology. The conference room at The National Energy Centre is used by many organisations for a variety of events. This means many people will be seeing the pellet stove in the near future. The Enviro Evolution has an output of up to 30 000 Btu (8.80 kW) which produces enough heat for 149m² and operates at 82% efficiency. The pellet stove was made in Canada and currently retails at £1,359 plus VAT.



The Enviro Evolution EF5 installation in the foyer of the National Energy Foundation.

Features of the EF5 include a large 39kg capacity hopper designed to be easy to fill with pellets. Another design element is the 'run quiet system', consisting of a cushioned auger and the option of installing the convection fan outside the building. The stove can also operate efficiently with the convection fan turned off. In addition, the flue for the stove was painted grey so that it blends in with other pipes on the exterior of the building.

Locally Available Pellets

Pellets for the stove are available locally from M P Oakey Contracting of Brackley at a cost of up to £4 for a 15kg sack.

Grants for Pellet Heating

Grants will be available shortly under the Clear Skies scheme for the purchase of stoves like the EF5. Householders will be able to obtain a grant of £600 against the cost. Community groups will be able to claim a grant of 50% off the cost of pellet stoves and installation. Grants will also be available to householders and community groups for wood fuelled boilers to run central heating systems. Further information on Clear Skies is available on 0870 2430930 and at www.clearskies.org.

Staff at The National Energy Foundation are delighted with their EF5 Enviro Evolution:

"We are pleased with the pellet stove, it is so easy to use and smells delicious".

"I would like one installed at home, I think they are great".

"The system is surprisingly compact for the amount of heat it produces. Visitors are amazed when they feel the how much heat is generated by the stove"

The EF5 Enviro Evolution Pellet Stove was donated by BioEnergy Devices Ltd of Unit 28 Brynmenyn Business Centre, St Theodore's Way, Brynmenyn Industrial Estate, Bridgend, CF32 9TZ. Tel 01656 724300. Fax 01656 724626. Contact Marc Howells. E-mail marchowell@bioenergy-devices.co.uk; www.bioenergy-devices.co.uk

Pellets manufactured by Premier Waste Management Ltd available locally from M P Oakey Contracting, 53 Church Street, Helmdon, Brackley, Northants, NN13 5QJ. Tel/Fax 01295 760435. Mobile 07831 879705.



This case study has been produced as part of the Log Pile project. For more information, please visit www.logpile.co.uk



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The large capacity hopper of the EF5 Enviro Evolution

Features and Specifications

- Heavy duty heat exchanger
- Heat output can be turned down 80%
- 406cm² glass window
- Automatic ignition system
- Air wash system keeps glass cleaner
- Designed for easy maintenance and cleaning
- 39kg hopper capacity
- Output 8.8KW
- Area heated 149m²
- Efficiency 82.0%
- Dimensions: W56cm D46cm H85cm



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