

# Upton House, 15kW



Upton House, a National Trust site in Warwickshire, employed Econergy distributors, Greenearth Energy, to carry out recent work on the renovating of the holiday let cottage in the grounds. Part of this renovation included a complete new heating system as previously there had been no heating apart from open fires.

Greenearth Energy who operate in Herefordshire and surrounding areas, offer Econergy log and pellet boilers along with other renewable technologies. Greenearth Energy designed the fuel store, installed and commissioned the Froling P2 Pellet boiler.

## Biomass Boiler

The boiler selected for this project was the Froling 15kW P2 boiler using a large adjacent fuel store to hold the pellets. As the cottage is a holiday let for National trust customers, ease of use for the system was the main decision in choosing the automatic pellet boiler.

Right - P2 pellet boiler





Left - Purpose built pellet store, showing storz 'A' pellet connections.



Right - Inside pellet fuel store, built on site, with V shaped sides running into feed extraction

### Technical Summary

- High efficient ratings of over 90%.
- Automatic ignition.
- Modular control with the 3100 controller. Ensures perfect combustion and allows the system to control up to four heating circuits.
- Clean and efficient - the upright tubular heat exchanger has rapid, fully automatic cleaning, including automatic ash removal to the ash can.
- Back-fire safety - the patented pellet lock ensures complete, effective protection against back-fire.

### Pellet Specification

All Econergy domestic pellet boilers require a 3201 6mm pure-wood pellet to ONORM M 7135 standard.

### Pellet fuel store

The adjacent large pellet store was designed by Greenearth Energy. The fuel store is 2m x 2m x 1.5m and V shaped so the pellets naturally fall into the screw extraction arm, which runs along the bottom into the boiler. The store will hold approximately 4m<sup>3</sup> (2.5 tonnes), annual usage is expected to be 5 tonnes a year. The pellet store needs to be completely damp proof to prevent fuel degradation. Fuel is delivered via a pellet tanker using a blow hose which connects to the pipes in the fuel store.

Econergy have installed over 15 projects for the National Trust. These range from small cottages to large visitor centres and Estates.

The P2 boiler has been replaced with the P4 which is now available. This system offers further benefits including highly flexible fuel solutions.