

CASE STUDY:

Humber Court Farm Leominster



**Wye
Valley
Energy**

In partnership with Treco Ltd

"We practice what we preach and have a number of renewable energy measures heating and powering our offices and farm house. I am very pleased with the Lindner & Sommerauer biomass boiler and the solar PV arrays. We are so excited to be able to use fuel grown on the farm."

*Richard Collins, Managing Director
Wye Valley Energy*



WYE VALLEY ENERGY SEES A HUGE REDUCTION IN FUEL COSTS FROM SELF SUPPLYING FUEL GROWN ON SITE

SUMMARY OF PROJECT:

- 50kW Lindner & Sommerauer biomass boiler.
- Distribution pipework including all internal connections to existing heating systems.
- Runs on wood sourced and chipped on site.

KEY OUTCOMES:

- **Biomass Fuel Cost Reduction;** Up to 80% over oil.
- **CO₂ Reduction;** 96% (Source Biomass Energy Centre).
- **RHI Accreditation;** The project is RHI accredited and is generating an additional revenue stream for the farm business.

FINANCIAL BENEFIT:

- RHI payments and fuel cost savings make the project both sustainable and financially viable.

ABOUT US

Wye Valley Energy is a regionally based business covering Wales and the Midlands and is a Treco partner.

We design, supply, install and maintain a wide range of complete biomass boiler heating systems that will burn logs, wood chips, wood pellets, grain or miscanthus.

BIOMASS BOILERS HELP

- Reduce fuel costs by up to 80%.
- Reduce CO₂ emissions by 96%.
- Gain Renewable Heat Incentive (RHI) compliance.



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CONTACT US ON

01568 616 888

or Hello@WyeValleyEnergy.co.uk
To Discuss Your Biomass Project

KEY FACTS*

PROJECT INCLUDED

Lindner & Sommerauer 50kW wood chip boiler with 4m agitator. Distribution pipework including internal connections to heat exchangers.

FUEL CONSUMPTION

25 tonnes of wood chips, per annum. (Based on system of similar capacity, in a similar application).

FUEL COST SAVING

Wood chips: 50-80% vs heating oil. (Source; Biomass Energy Centre).

CO₂ SAVING

Up to 98% or 88 tonnes vs heating oil (Source; Biomass Energy Centre).

RHI PAYMENTS

A project of this size would gain approximately £5,500 in RHI payments every year for 20 years, index linked to inflation.

TOTAL PROJECT PRICE

£45,000.

PAYBACK PERIOD

5-6 years (combining RHI income & fuel cost saving).

*Financial information not specific to this project – figures are based on an average of several typical projects of this size. Current information on RHI payments for guidance only, not to be considered a guarantee.

BACKGROUND

Wye Valley Energy's offices and main HQ are at Humber Court Farm, a 200 acre mixed livestock and arable farm in Leominster, North Herefordshire.

THE REQUIREMENT

The farm's original biomass boiler was decommissioned, to make way for an RHI accredited wood chip district heating scheme. A 50kW Lindner & Sommerauer SL system now heats the farm house and buildings. Heat is sent to the farm house by underground heat main.

COMPLETE BIOMASS DISTRICT HEATING PACKAGE

It was a turnkey project, including all ground works and the construction of a new building to house the biomass boiler and fuel store.

We supplied and installed the boiler system, organised the trenching, laid the heat main and carried out all of the internal connections into the farm house and offices.

We also oversaw the construction of a bespoke boiler house and fuel store.

A large wood chip fuel store was built in the plant room. This minimises the amount of fills per year and enables us to bulk chip our fuel from our own woodlands and hedges to keep the cost down.

THE RENEWABLE HEAT INCENTIVE

As well as fuel cost savings of up to 50%, the installation is accredited into the Renewable Heat Incentive.

Wye Valley Energy is now receiving quarterly RHI payments.

BIOMASS HEATING SUMMARY

Wye Valley Energy supplied and installed the boiler system, organised the trenching.

We also laid the heat main and carried out all of the internal connections into the farm house and offices.



- Lindner & Sommerauer 50kW biomass boiler.
- Runs on wood chips.
- 4m agitator and 3m Auger to enable a large fuel store to minimise fills.
- 2,000 litre buffer tank.
- High efficiency system pumps.
- 2 x class 2 RHI eligible ultrasonic heat meters complete with certification.
- Biomass boiler linked to existing heating and hot water system.
- High efficiency, low energy main system pump.
- Full assistance with RHI application including schematic drawings.
- Commissioning, programming and end user training.



**CONTACT US TO DISCUSS
YOUR BIOMASS PROJECT
01568 616 888**

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