

CASE STUDY:

Humber Court Farm (Our Offices)



**WE SEE A HUGE REDUCTION IN
FUEL COSTS FROM SELF SUPPLYING
FUEL GROWN ON SITE**

SUMMARY OF PROJECT:

- 50Kw Linder & Sommerauer Biomass Boiler.
- Distribution pipework including all internal connections to existing heating systems.
- Runs on wood sourced and chopped on site.

KEY OUTCOMES:

- **Biomass Fuel Cost Reduction;** 50-80% vs oil.
- **CO₂ Reduction;** 96% vs oil (Source; Biomass Energy Centre)
- **RHI Accreditation;** the project is RHI accredited and is generating an additional revenue for the farm diversification business.

Financial Benefits:

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

ABOUT US

MJS Mechanical and Electrical Solutions are a Midlands-based mechanical, plumbing and electrical, design and installation company.

MJS regularly carry out installations for other renewable energy companies throughout the UK, offering them access to an experienced team of installers, builders and groundworkers to assist with their project delivery if additional capacity is required.

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)

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 approx £5,500 in RHI payments every year for 20 years.

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 products of this size. Current information on RHI payments for guidance only, not to be considered a guarantee.

Background

MJS's offices and main HQ are at Humber Court farm, a 200-acre mixed livestock and arable farm in Leominster, Herefordshire.

The Requirement

The farm's original biomass boiler was decommissioned, to make way for an RHI accredited wood chip district heating scheme. The boiler 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.

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

The Renewable Heat Incentive

As well as fuel cost savings of 50-80%, the installation is accredited into the Renewable Heat Incentive.

The installation is now receiving quarterly RHI payments. The fuel cost savings and the RHI payments combined give a payback of 5-6 years.

Biomass heating Summary

Alongside Wye Valley Energy, we installed the boiler system and organised the trenching. We also installed the heat main and carried out all the internal connections into the farm house and offices.



- 1 x 50kw Linder and Sommerauer wood chip boiler.
- 4m agitator and 3m Auger to enable a large fuel store build and minimise fills.
- 2,000 litre buffer tank.
- High efficiency system pump.
- 2 x class 2 RHI eligible ultrasound 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**

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