



# CASE STUDY

LARGE COUNTRY ESTATE, HEREFORDSHIRE

# Biomass Installation

CASE STUDY DELIVERED BY





# Overview



This distinguished 19th-century estate is set within the tranquil countryside of Herefordshire, offering a secluded and picturesque retreat. Located a short distance from a historic market town, this Grade II listed manor house is an outstanding example of Tudor-Gothic architecture. Built in the mid-1800s, the estate showcases elegant pink sandstone exteriors, battlemented parapets, and distinctive octagonal chimney stacks, embodying the architectural grandeur of its time. Surrounded by rolling parkland, ancient woodlands, and serene lakes, the estate spans 50 acres of unspoiled countryside, providing complete privacy and a true sense of escape. The setting is perfect for those seeking both relaxation and outdoor pursuits, with walking trails and scenic pathways weaving through the grounds.

The property has undergone extensive restoration, seamlessly blending its historic character with modern luxury. A collection of beautifully refurbished cottages offers high-end accommodation, each designed with comfort and elegance in mind. Guests can enjoy exclusive amenities, including private indoor swimming pools, leisure facilities, and beautifully landscaped gardens. The nearby village is a charming and peaceful enclave, home to a handful of traditional dwellings and a historic church that dates back to the 12th century. With its quiet lanes and well-maintained footpaths, the area is ideal for walking enthusiasts, allowing visitors to immerse themselves in the beauty of the surrounding landscape.

This estate represents a perfect fusion of history and contemporary refinement, making it a sought-after destination for those looking for a luxurious countryside retreat. Its architectural heritage, combined with modern comforts and a breathtaking setting, ensures an experience of timeless elegance and tranquility.



# Transitioning from Fossil Fuels to a Sustainable Biomass Heating System



MJS Energy was approached by the new owners of a historic country estate in Herefordshire, recently acquired and transformed into an upmarket wedding venue and holiday retreat. The estate comprised multiple buildings, previously heated using a mixture of oil and gas systems. With plans to expand the property and attract high-end clientele, the owners wanted to reduce their reliance on fossil fuels and implement a more sustainable and cost-effective heating solution.

Following a thorough assessment of available renewable heating options, MJS Energy proposed the installation of a 199kW Lindner & Sommerauer wood pellet biomass boiler. This eco-friendly system would enable the estate to lower its carbon footprint, significantly reduce fuel costs, and benefit from Renewable Heat Incentive (RHI) payments.

## Biomass Boiler Installation & Heating System Overhaul

The Lindner & Sommerauer 199kW wood pellet biomass boiler was chosen due to its high efficiency, low emissions, and automatic fuel optimization features. In addition to installing the boiler, MJS Energy also:

- Removed outdated oil and gas heating systems across multiple properties
- Designed and installed a modern plumbing and heating system to ensure seamless integration with the new biomass system
- Optimized the system for maximum efficiency, ensuring consistent warmth across the entire estate while minimizing energy waste

This comprehensive upgrade provided a fully renewable heating solution, reducing reliance on external fuel supplies and enhancing the estate's long-term sustainability goals.

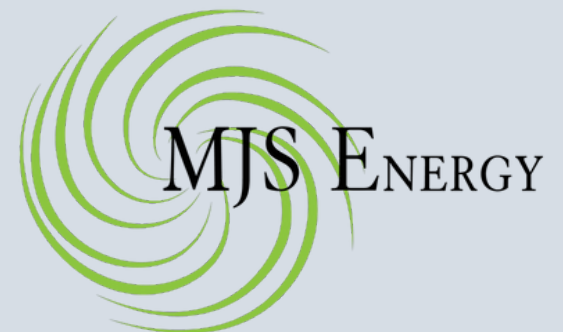
## Lindner & Sommerauer 199kW Wood Pellet Boiler – Key Features & Benefits

The Lindner & Sommerauer biomass boiler is renowned for its efficiency and innovative technology, making it an ideal choice for large estates.

- High Efficiency (Up to 95.3%) – Maximises energy use, reducing waste and running costs
- Automatic Fuel Detection – Adjusts combustion settings based on fuel quality for consistent performance
- Fully Automated Cleaning System – Reduces maintenance and ensures long-term reliability
- Low Carbon Footprint – Utilises sustainable wood pellets, cutting CO<sub>2</sub> emissions and supporting carbon neutrality
- Modular Design – Allows for future system expansion if required

By integrating this advanced biomass heating system, the estate now benefits from a reliable, cost-effective, and environmentally responsible energy source.

# RHI Accreditation & Financial Incentives



One of the key advantages of installing this biomass system was that it qualified for the Renewable Heat Incentive (RHI), a UK government scheme designed to encourage the adoption of renewable heating technologies. Under this scheme, the estate received substantial financial payments based on the heat generated, offsetting installation costs and creating an additional revenue stream.

## Significant Cost Savings & Sustainability

- Fuel cost reductions of 20–40% compared to traditional oil and gas heating
- Lower carbon emissions, helping the estate align with UK sustainability goals
- Future-proofed against rising fossil fuel prices, ensuring long-term operational savings

With its commitment to sustainability, the estate can now market itself as an eco-conscious wedding and holiday destination, appealing to environmentally aware guests and event planners.

## Project Outcome

The successful installation of the 199kW Lindner & Sommerauer biomass boiler has transformed the estate into a luxurious yet sustainable venue. By making the switch from fossil fuels to biomass, the estate has achieved:

- Lower heating costs and increased energy efficiency
- Long-term financial gains through RHI payments
- A reduced carbon footprint, supporting eco-friendly business practices
- Reliable, renewable heating for guests and events all year round

By partnering with MJS Energy, the estate owners have future-proofed their property with a highly efficient, environmentally responsible heating solution, ensuring comfort, sustainability, and financial viability for years to come.