

Lund Gallery, Easingwold

An artful approach to biomass heating



Lund Gallery was opened in September 2005 by the landscape artist Debbie Loane. The gallery is dedicated to showing contemporary art, craft and sculpture from a wide range of makers in a relaxed rural setting.

The gallery occupies converted dairy buildings on a smallholding 20 minutes drive north from York, just outside the market town of Easingwold. The open aspect makes it an ideal space for exhibiting art in an uncluttered and relaxing environment, and The Lund has quickly gained a reputation as one of the leading galleries in the North of England.

Further expansion of the gallery has recently taken place to create additional exhibition space, an office and studio, as well as a small cottage for the owners. The gallery and adjoining cottage are heated by a woodchip boiler system, with woodchip sourced from Chopsticks – a project in nearby Northallerton employing adults with learning disabilities to make firewood kindling.

objectives

- The key motivations for installing a biomass boiler were the dislike of being tied down to oil price fluctuations, and the ability to buy a variety of fuels from a wide range of sources.
- Having the space on the smallholding to store fuel was an important factor in choosing biomass, as was choosing a boiler capable of accommodating a variety of fuels including logs, which gives the option of burning deadwood from the smallholding
- The owners also hope to reduce their carbon footprint.

actions

- A Danish Maskinfabrik CN40, 40kW boiler was installed in December 2008 to run on seasoned woodchip/pellets/logs. It provides heating for the gallery business and an adjacent two-bedroom home, as well as providing hot water to the later via a conventional domestic cylinder.
- In-line electric water heaters were installed in the gallery: because sinks were so spread out, it was considered heat loss due to long pipe runs would have outweighed the advantages of biofuel-heated water.
- It's early days yet, but estimates suggest the system is using between 1.5–1.8 tonnes of wood chip in a winter month, or about one dumpy bag of chips per day in winter.
- Back-up hot water is via immersion heaters, with oil-filled rads for heating in the extremely well-insulated gallery space. Gallery spotlighting also helps!

achievements

- The owners did set out to reduce their carbon footprint: because they are not in a position to state – with proof – that they have indeed reduced their total full lifecycle footprint, they are cautious about making claims. But if the boiler holds out for a good lifespan, and if we can source fuel locally, they are hopeful this will be the case.

fuel

- Initially, the owners are burning construction timber that was ripped out of the old barns during the conversion process, therefore avoiding sending it to landfill.
- The gallery is located on a smallholding, with some barns provide space to store fuel.
- The owners expect to buy most of their fuel, which currently is delivered in dumpy bags by van from Chopsticks in Northallerton.
- The decision to opt for a boiler that can accommodate a variety of fuels, including logs, gives the option of burning deadwood from the smallholding.
- A friend of the owners who is a tree surgeon may also be able to supply log wood for use as fuel.

quotes

- *“Biomass heating seems, somehow, to connect the gallery to the landscape-based art being shown and fits in with the whole ‘feel’ of what Debbie Loane has created at the Lund.”* – Gallery visitor.
- *“We can’t claim to have carried out a full cost or environmental analysis on the biomass project. Sometimes things just feel ‘right’, so you do them.”* – Gallery owners.

partners & funding

- Manco Energy (boiler supplier)
- Total cost: £14k for boiler, installed.
- The owners looked into applying for grants for the boiler, but in the end were not able to secure any, because they could not find grant aid to cover an installation that was half residential and half commercial.
- The initial gallery project was supported under the England and Rural Development Programme by the Department for Environment, Food and Rural Affairs and the European Agricultural Guidance and Guarantee Fund. The recent expansion was funded by business loans with no grant aid.

lessons learnt

- Initial teething troubles centring on boiler’s supply system have been ably addressed by the supplier.
- There appears to be a gap in funding streams for grants aimed at the work/live favoured by rural economic development agencies.

