



European Union European Regional Development Fund

# The Abbey Sutton Courtenay reduces energy bills & cuts carbon emissions





#### SME BUSINESS SECTOR:

The Abbey Sutton Courtenay is a social enterprise retreat and conference centre.

PROJECT COST:

£8,310

SAVINGS:

£3,385 per year 8.08 tonnes of CO2 per year

OXFUTURES GRANT:

£2,061

#### EQUIPMENT/INSTALLER:

Thermostatically controlled wallmounted electric heaters installed by United Electrical. All other installations done by volunteers from Shed Oxford.



66 The audit really helped us think clearly and make the case for change & we were delighted to win the funding to make it all happen!??

#### LINDA, DEVELOPMENT COORDINATOR, THE ABBEY

#### **The Project**

The Abbey is a conference and retreat centre built between the early to mid-1200s and late 1400s. The guest house was converted in the 1980s to accommodate residents visiting The Abbey.

Staff at The Abbey wanted to improve their guest experience, whilst also cutting their energy bills and their carbon emissions. Following their energy audit, they decided to prioritise their guesthouse and used grant funding from OxFutures and ToE2 to kick-start this initiative. The Abbey drew on an existing collaboration with Shed Oxford, a volunteer group of upcyclers and recyclers who are based on their site, to install most of the measures for free, reducing the installation costs.



## Where to start?

The energy audit recommended a host of measures that The Abbey could install to reduce their energy bills, make their rooms more comfortable and reduce their carbon emissions. Some were zero or very low cost. OxFutures helped The Abbey make decisions on what to prioritise and here are some of the measures The Abbey decided to go ahead with first.

## **Electric heaters**

Through installing modern wall-mounted heaters, The Abbey has much more control over the heating of the guest house. The heaters are thermostatically controlled and can be programmed so that the rooms are heated before guests arrive. Installing the new heaters was estimated to save 5492 kWh of energy and £276 per year.

## Loft insulation

The energy audit discovered that the guest house only had 50mm of insulation installed in the loft instead of the recommended 300mm. It was also poorly laid and patchy in some places. Up to 25% of a building's heat is lost through the roof, and so it was recommended that they install loft insulation to reduce heat loss and improve comfort levels for guests.

The mineral wool insulation was installed by a team of volunteers from Shed Oxford, reducing the potential labour cost of installation.

Improving the insulation of the loft was estimated to save 10,174 kWh of energy and £1,170 per year.

## A bright idea: LED Lighting

The guest house was using traditional 60W light bulbs throughout the building. The audit recommended that the switch to LED lights could save them £217 a year for only a £115 installation cost. The new LED lights will last for up to 35,000 hours, and will need replacing far less frequently than the old-style bulbs, whilst still providing a warm yellow light.

### Other recommendations

There were a range of other recommendations made for The Abbey, a lot at low or zero cost such as: making sure appliances were switched off when not in use, improving the accuracy of the billing with their electricity provider, and matching heating times with building use (this was estimated to save The Abbey a substantial £662 a year).

Measures that are being considered at a later date include: installing solar PV panels to generate electricity (which could save £748 a year) and installing solar thermal panels to heat water (a potential saving of £550 a year).

The Abbey are also going to replace baths with showers, which will benefit both guests and cut the Abbey's hot water consumption. The Low Carbon Hub will reduce energy consumption in the main listed building, with heating, insulation and draught-proofing measures, as well as reducing standing charges by removing several unneeded electricity meters.



Give the OxFutures team a call today on **01865 246009**, or visit **www.oxfutures.org** to see how you can save money and energy with a free energy audit and grant funding.