

Link To Energy

Central Stores, Lydbrook



connecting with local tradespeople

Key Points

- Day time electricity use reduced by 13%
- A saving of £1,800 per annum
- Night time electricity use reduced by 34%
- A saving of £1,000 per annum
- Annual carbon savings achieved equivalent to 14 tonnes per annum

Most savings achieved by no cost control methods

The Business

Central Stores is a convenience store and sub-post office in Lydbrook. The business was initially surveyed in 2008 and had a follow-up survey completed in 2012. The total annual energy spend in 2008 was approximately £15,000—emitting 82 tonnes of CO₂, the equivalent to that emitted from 12 homes.

Energy Performance

Since the original survey, the business has taken significant steps in reducing its energy consumption.

Multiple chillers, freezers and air-conditioning units are used both on the shop floor and in the stock rooms. It was discovered that the air-conditioning on the shop floor was left on 24/7. The air-conditioning settings were reduced to business hours. Chillers that hold non-perishable goods (such as drinks fridges) are now switched off out of business hours.

Originally all hot water was provided by a hot water immersion tank with no timer controls. A feed from a new condensing gas boiler was installed to provide the hot water needs.

Next Steps...

Since 2008 the business has increased the shop floor area, as well as now incorporating a sub-post office. **This makes the achieved energy savings all the more impressive.** However there are additional measures that can still be installed to further reduce operating costs.

Severn Wye recommended the use of energy efficient lighting across the business as this could produce savings of over £2,000 per annum, with a return on



Before

After

Central Stores—Savings achieved through reduced unnecessary cooling

investment of less than 15 months. This would reduce the business's electricity consumption by 11%.

The temperature settings on the chillers and freezers could be adjusted to produce further savings and remain within the recommended guidelines.

The older chest freezer units used for storage in the stock room should be fitted with energy monitors to check annual consumption and replacements be specified if deemed financially viable.

The temperature settings on the air conditioning should be increased from 16°C to 22°C.

Natural cooling could be utilised, on days when the weather allows an 'open door' policy to be implemented. This will help reduce the demand on the air-conditioning system.

Quote from Business Owner

"We're keen to save as much energy as we can. Since the first survey, we've seen a significant improvement in our energy bills, which have been reduced by nearly a quarter annually. This latest survey identified a further £2,000 of savings a year we could make just by investing in energy efficient lighting. We're likely to see a return on that investment in about 15 months."

Phillip Edwards-Owner Central Stores