

Maxim Logistics Group Ltd

Giving green lighting the green light

Following an on-site carbon survey on its premises by the Carbon Trust, Maxim Logistics Group Ltd used an Energy Efficiency Loan to install new energy saving lighting for its main warehouse. The changes have improved working conditions by making the warehouse brighter, while cutting the company's annual energy bill by almost 41%.

The business case

Maxim Logistics Group Ltd is a haulage, freight and warehousing company with two sites in Corby, Northamptonshire.

Eager to cut costs and reduce its carbon footprint, the company called in the Carbon Trust to carry out an on-site carbon survey and identify potential savings. The survey highlighted that warehouse lighting accounted for 93% of the company's annual energy spend, which at the time was £54,000.

No-cost options

As the warehouse's 93 staff work 24-hour shifts during the week, one problem was the amount of energy being used overnight. So the first recommendation was that the company start monitoring this and set targets for reducing it.

To support this, and encourage staff to be more energy conscious, the Carbon Trust also gave Maxim Logistics Group Ltd free employee engagement materials to highlight the importance of saving energy.

Spending to save

Even with careful monitoring, the traditional, energy-intensive fluorescent lighting system was still far from ideal. So a further recommendation from the survey was that the company replace it with more modern, energy efficient equivalents that were fit for purpose.

After careful investigation, the company decided on the most suitable option and applied for an Energy Efficiency Loan from the Carbon Trust. It received £44,400 towards the new lighting, which cost just over £60,000. As the new system is on the Energy Technology List (ETL), the company could also apply for a 100% tax break as part of the Enhanced Capital Allowance (ECA) scheme.

The company's energy costs for November 2008, the first full month with the new lighting, were £1,850 lower than those of November 2007. Thanks to its expected monthly savings and reduced maintenance costs, Maxim Logistics Group Ltd will have paid off the loan in under two years.

Savings, at a glance

- Energy Efficiency Loan: £44,400
- Projected annual cost savings: £22,200 (plus lower maintenance costs)
- Payback period: Under two years
- Annual carbon savings (CO₂): 114 tonnes

Looking for a loan?

Energy Efficiency Loans from the Carbon Trust are a cost-effective way to replace or upgrade your existing equipment with a more energy efficient version.

Being more energy efficient makes sound economic sense because using less energy lowers operating costs. From an environmental perspective, it's an effective way for business to cut carbon emissions and, in turn, combat climate change.

For more information visit www.carbontrust.co.uk/loans

'With the Carbon Trust's support our new lighting system in the warehouse has improved the working environment, and is now more energy efficient and more economic to run.'

Anna Zaka, Environmental Manager, Maxim Logistics Group Ltd.



The technology

Because the new lighting is more efficient, Maxim Logistics Group Ltd has been able to halve the number of fluorescent strips in its main warehouse, without comprising the working environment. Where there had previously been eight in each of the aisles, there are now just four. Two are on permanently, while the other two are lit at 10% with motion sensors to boost the light to 75% when the space is occupied.

Reducing the number of lights has brought down the company's monthly energy consumption from 44,500kWh to just 28,000kWh – significantly reducing both its energy spend and carbon footprint.

Over 80% of this saving is due to having the dimmable lights in all the aisles, which lets the team reduce the output when aisles are not being used. As some of the more narrow aisles are only occupied for just over an hour each day, this has made a huge impact.

A brighter future

Although there are fewer lights, the warehouse is now actually brighter. With the old system, illumination levels (known as lux) had generally been around 70, but had dropped over time. The new system gives levels of 130-150, even with the two lamps on dimmer – making the warehouse feel brighter and improving working conditions for staff.

The project is a great example of how saving energy can actually improve a working environment rather than compromise it. Maxim is now looking at how it can make energy savings at its other site.

Top tip

If you're installing fluorescent lighting, use lamps with a tri-phosphor coating. They will last longer and won't dim as much with age.

For more lighting tips download our [Lighting technology overview \(CTV021\)](#)

Did you know?

Commercial and industrial lighting consumes an estimated 20% of all electrical energy generated in the UK.

Get the experts in

If your annual energy bill is £50,000 or more, we can provide an on-site carbon survey to help you identify no-cost and low-cost changes, offer practical advice and recommend how you can make significant energy savings on your premises.