Telesoft Technologies LED lighting

Low Carbon DORSET

Grant awarded: £9,046.21

Estimated Annual Savings: £8,300 / 32 tonnes of CO$_2$

Project cost
£22,615.52

Estimated Savings
£8,300 / 32 tonnes of CO$_2$ per year

Equipment / Installer
317 LED light fittings – Light Sense LED

The Project

Telesoft Technologies, a Blandford based cyber security firm, is a high energy user with annual energy bills of over £100k. As part of a strategic decision to reduce their energy consumption they replaced 364 lower efficiency lights with 317 highly efficient LED fittings, reducing their carbon footprint by 32 tonnes of CO$_2$ a year.

Getting started

Telesoft Technologies occupy three buildings in Blandford with no gas connection. This means all heating and cooling is supplied by electricity. With multiple server rooms which need cooling, and office space which needs heating, the firm has an extremely high energy demand.

As part of an organisational drive to become more environmentally friendly and reduce energy costs, Telesoft Technologies contacted Low Carbon Dorset to help identify what they needed to do to reduce their energy demand. In an energy report issued by Low Carbon Dorset, a comprehensive list of energy efficiency and renewable energy measures were recommended.

LED Lighting

The existing light fittings in the buildings were mostly compact fluorescents and halogen spot lights. It was identified that this could be an area for huge potential energy savings. After seeking advice from a specialist supplier, it was estimated that a switch to LEDs could reduce Telesoft's lighting costs and energy use by 74%.

With the help of a grant to cover 40% of the cost of the switch Telesoft replaced 364 old light fittings with 317 highly efficient LEDs. The installation and bulbs cost £23k, Telesoft received a grant of £9k to go towards this cost. It is estimated that it will take a year and a half for the lights to pay for themselves with the help of this grant.

Other recommended measures:

As a large proportion of Telesoft's energy demand comes from its need to cool its server rooms further recommendations focused on reducing this demand. They included upgrading the existing reversible air source heat pump system and controls to a newer more efficient system, introducing ambient cooling (which alone could save 80% on their server room cooling expenses) and insulating windows in server rooms to exclude solar gain. Telesoft's 24/7 energy demand also makes them an ideal candidate to maximise the benefits from Solar rooftop PV.

As an organisation we were looking to reduce our carbon footprint and increase energy savings. Low Carbon Dorset were extremely helpful in carrying out an onsite survey which identified some significant improvement opportunities. With the available grant funding we were able to finalise the project and make significant savings

John Dallison, Business Improvement and Compliance Manager, Telesoft Technologies