

Green BELLE Case Study: Sapcote Engineering Limited



The new LED lighting, gas blower heater and destratification fans installed at Sapcote Engineering Limited

Sapcote Engineering Limited is an engineering company based in Broughton Astley. They specialise in Food Industry Applications, Conveyoring and Bespoke Designed Machinery.

Sapcote Engineering Ltd contacted Green BELLE as they were keen to further increase the energy efficiency of their building in addition to the work that had already been done.

Sapcote Engineering applied to Green BELLE to increase the efficiency of the lighting. During the site visit, it was highlighted that the factory heating could also be upgraded through Green BELLE.

The lighting project consisted of replacing 400 W metal halide and sodium high bay lighting with 200 W high bay LED lighting. It is predicted that a 53% reduction of energy will be achieved by replacing these lights, due to the reduced wattages and the increased efficiency. Employees conduct very detailed work in the factory, and as the LEDs have a daylight quality that has greatly improved the working environment.

The Green BELLE grant was also used to upgrade a 30-year-old and a 20-year-old gas blower heater, increasing the efficiency from 75% and 80%, to 92%. Destratification fans were also installed to prevent heat loss to the ceiling. These fans will increase the efficiency by a further 20%.

A Green BELLE grant of £6,521.78 was awarded to install the energy efficient lighting, heating and destratification fans. This grant was 50% of the total project cost.

A previous project was undertaken at Sapcote Engineering with the Manufacturing Advisory Service to install LED lighting in the offices and the low bay lighting in the factory, which is predicted to save 80% on lighting energy usage and cost. Solar PV has also been installed on the roof of Sapcote Engineering, providing renewable energy and reducing the energy required from the national grid.

With a Green BELLE grant, Sapcote Engineering improved their working environment, increased their efficiency and reduced energy usage and costs. The measures saved the equivalent of around 4.3 tonnes of CO₂ emissions in the first 12-months, with similar ongoing annual savings. That's the same as the average annual emission from two cars.

Green BELLE was part-funded by the European Regional Development Fund and was administered by Leicester City Council with support from Leicestershire County Council. The scheme provided grant funding to eligible SMEs to install energy efficiency measures from 2017 to May 2023.

For more information, visit www.greenbelle.org.uk and www.leicester.gov.uk/your-council/policies-plans-and-strategies/energy-efficiency/