

Thorlux Lighting

 **Lighting Manufacturer**

 **700 Staff**

 **Redditch**

 **1.4 MWp Solar PV**

Thorlux Lighting produces and distributes professional lighting and control systems throughout the UK. In 2019, they were awarded the prestigious Queen's Award for Enterprise in the Innovation Category. The company operates from a 16,882m² manufacturing facility in Redditch, Worcestershire.



BACKGROUND

In 2019 Ineco Energy won a tender to design, install, and operate a 250 kWp solar PV system for Thorlux Lighting, part of the FW Thorpe Plc group of companies. The environmental and financial savings were quickly visible and in 2021 Ineco were asked to deliver a further 500 kWp across three other FW Thorpe companies: TRT Lighting, Portland Lighting and Solite Europe. FW Thorpe's ambition to achieve net zero across their manufacturing and value chain, coupled with rising energy prices, meant Ineco were asked to extend the Thorlux system to 1,428 kWp.

SOLUTION

Analysing the manufacturing facility's electricity consumption and understanding future requirements, Ineco worked with Thorlux and the Grid (DNO) to design a system that would maximise self-sufficiency from on-site generation.

In a sensitive and constrained electricity network area, Reverse Power Relays were used as secondary protection devices for Export Limitation to fully satisfy the grid requirements.

A SolarEdge solution, using module level optimisation, was installed to increase performance, safety and provide real time visibility of the system. Constructed throughout the winter months, Ineco commissioned the system in December 2022.

BENEFITS

Thorlux will generate solar power at the equivalent rate of 4p/kWh for the next 25 years.

Annually the system will generate 1.03 GWh and save 228 tonnes of carbon, resulting in excess of £350k annual savings, £14m in lifetime savings and a 3-year payback. FW Thorpe achieved carbon neutrality in 2012 (scopes 1 and 2 of the Greenhouse Gas Protocol). Carbon savings from solar will contribute significantly to the Group's net zero ambitions.



3,138
Solar panels



35.5%
Annual energy savings



£14m
Lifetime savings

"The completion of the Thorlux headquarters installation is truly outstanding, with over 3,000 high-power panels. I am very proud of the result, and when I study my mobile app – which on a sunny day shows we are generating more electricity than we are using – I find it motivational and inspiring."

Michael Allcock,
FW Thorpe Plc Group Chairman