

R-Tech Materials

R-Tech Materials is a leading provider of world-class materials expertise. The laboratories at their Testing House, provide one of Europe's most extensive ranges of commercially available mechanical testing equipment.

Industry
Material Manufacturer

Technology
LED Lighting & Solar Photovoltaic

Location
Port Talbot, Wales

Overview



SOLAR PANELS INSTALLED

108



ANNUAL CO2 SAVINGS
(TONNES)

11



SYSTEM SIZE (KWP)

28



PAYBACK (YEARS)

5



ANNUAL GENERATION (KWH)

30,511



EQUIVALENT RATE (P/KWH)

4p



The Motivation

R-Tech was considering refurbishing its offices due to outdated, inefficient lighting that was beginning to fail. During this time, they became aware of the Carbon Trust's Green Business Fund, which offered grant funding for energy efficiency projects. R-Tech approached Ineco Energy with the goal of achieving significant energy and carbon savings through the installation of LED lighting and solar PV panels at Testing House.

The Ineco Solution

Comprehensive Energy Upgrade

Ineco Energy upgraded R-Tech's lighting to LED and installed solar panels, reducing energy use, lowering costs, and enhancing sustainability.

LED Lighting Upgrade

A survey revealed broken halogen lights and poor illumination. Our team assessed room dimensions and tagged fittings to design a tailored lighting solution, compliant with CIBSE guidelines. High-quality UK-manufactured LEDs reduced fittings by a third while improving light quality and efficiency.

Solar PV Installation

With South Wales' high solar irradiance, solar panels provided a cost-effective energy solution. Trina Solar panels were installed on the south-facing roof, connected to a Fronius inverter, optimising on-site power use. This system balanced seasonal energy needs, complementing the LED upgrade for year-round efficiency.

The Benefits

Financial Impact

R-Tech Materials significantly reduced their overall energy consumption, delivering financial savings which directly impacted the bottom line. The investment future-proofed their electricity costs against price volatility whilst simultaneously reducing maintenance costs and improving the working environment for staff.

Sustainable Impact

By adopting these sustainable technologies, R-Tech not only enhanced their environmental credentials but also delivered a significant reduction in carbon footprint.



It was a pleasure to work with Ineco Energy who delivered on our values when installing both LED lighting and solar PV projects at Testing House."

Director, R-Tech Materials