

APPLICATION

Smart Lighting LED Retrofit

SECTOR

Manufacturing

LOCATION

UK

CUSTOMER

MediaCo

PARTNER

Carbon Reduction Technology

“We needed better quality lighting to enable the high quality print work we produce, while significantly reducing our energy bill.”

Stephen Arthur, Group Operations Director

Background

MediaCo is a UK based large graphics, display and events specialist who supply detailed print for companies globally. Energy consultancy Greener Climate were invited to audit their site in Manchester and identify energy saving opportunities.

Customer Challenge

The challenge was to reduce costs and CO₂ emissions at the printing facility to improve the business and environmental performance.

Greener Climate produced a report that highlighted the existing sodium lighting as a significant opportunity for energy saving and improving the efficiency of the building.

The report prompted MediaCo to request an intelligent lighting solution. It was important that the illumination levels were extremely high and consistently maintained throughout shifts during the high-quality colour printing processes.

The MediaCo facility operates multiple shifts during a six-day week so it was also important that a retrofit solution had minimal disruption to ongoing operations.

Greener Climate turned to enModus and Carbon Reduction Technologies to deliver a solution that could help MediaCo realise the efficiency improvements and smart lighting control they required.

We make any building smart

enmodus.com

Solution

MediaCo selected the enModus energy efficient and intelligent lighting control solution that uses the existing powerlines for connectivity and control.

The existing 400W sodium luminaires were replaced with HBX LED High Bay luminaires from Carbon Reduction Technologies with integrated smart lighting technology from enModus.

The Smart Connected Lighting Solution included DANLERS High Bay occupancy and ambient light sensors. The sensor inputs are used by the enModus LN101L Node to control the DALI driver to provide the

correct amount of light where and when it is needed. The Nodes communicate across the existing power cables to an enModus LH101 Hub. A Hub connects to the enModus Cloud Platform for easy to use web access.

MediaCo operational staff can use lighting schemes to ensure the high lighting levels are consistently maintained in the dynamic operating environment.

The Smart Connected Lighting solution from enModus delivers highly accurate real-time energy measurement and occupancy detection.

This information is used to fine tune energy consumption and provide insight into how the building is used.



LED LUMINAIRE



LIGHTING CONTROL



INTEGRATED SENSORS



CLOUD PLATFORM



ENERGY MEASUREMENT



TELEMETRY DATA

Results

The Smart Connected Lighting solution from enModus improved the energy efficiency of the building and enhanced the quality of lighting.

The initial commissioning set-up delivered 81% total energy saving through the new smart lighting solution.

The enModus system will pay for itself within 26 months and carbon emissions are being reduced by 27,944 kg per year.

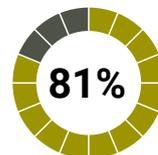
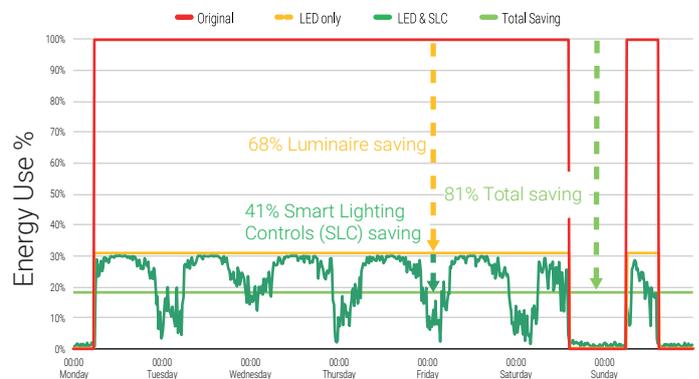
Information gathered and reported via the enModus Cloud Platform has identified the potential for further energy saving opportunities by tuning the day-light harvesting.

As a result, we will continue to work with MediaCo to refine their lighting control schemes and schedules, with a target to achieve energy saving closer to 90%.

The success of this project has prompted MediaCo to consider upgrading their office lighting.

Next steps

Request a meeting or [email](#) us today to find out how we can make your building smart.



Total energy saving



Payback period



CO₂ saving