

# Powrmatic

## Overview

At Powrmatic, we're committed to leading by example in energy efficiency and sustainability as part of our race to net zero. Recently, we implemented a comprehensive energy optimisation project at our own manufacturing and warehousing facility to make significant strides toward this goal.

This initiative was designed to drastically reduce energy consumption, optimise heating solutions, and minimise our carbon footprint.

Through a simple, effective and targeted improvements to our gas and electric systems, we achieved substantial results: reducing CO<sub>2</sub> emissions by 477.5 tons, cutting electricity usage by 30%, and lowering gas consumption by 40%. This case study highlights our journey toward creating a greener, more efficient facility right at home.



“Our energy optimisation project has transformed how we operate, cutting costs and significantly reducing our environmental impact. The results speak for themselves, and we're excited to help others achieve the same.”

James Metcalf - Powrmatic Facilities Manager



## Project Goals

- Enhance Facility-Wide Energy Efficiency
- Optimise Gas and Electric Usage
- Reduce Overall Carbon Footprint
- Lower Operational Costs

## Results

By implementing these measures, Powrmatic achieved impressive reductions in both gas and electric consumption, as well as a notable decrease in CO<sub>2</sub> emissions:

**477.5**  
Tons of CO<sub>2</sub>E  
Saved

**30%**  
Electrical Usage  
Reduction

**40%**  
Gas Usage  
Reduction

## Gas Reduction

### Optimised Paint Line Operations:

Improved planning on the paint line, ensuring optimal part placement and hanging to maximise utilisation through the plant.

### Warm Air Redistribution:

Warm air from the paint line was pushed to other areas of the factory using high-level fans, allowing the facility to switch off heaters in these zones, minimising unnecessary energy use.

### Reduced Heater Operation:

All factory heaters were set to minimal usage, reducing both the temperature settings and operational time.

### Continuous Heat Utilization:

By running the paint line during tea and lunch breaks, Powrmatic leveraged the residual heat in the oven, ensuring maximum utility from energy already consumed.

**Ducted Heat Transfer to Canteen:** Latent warm air from the powder-coat paint line was ducted into the canteen, creating a warmer space without additional energy expenditure.

## Electrical Reduction

### Electric Reduction

Powrmatic implemented several key electrical upgrades to optimise energy use:

### LED Lighting & Proximity Sensors:

Replaced fluorescent lights with LEDs and added proximity sensors throughout, ensuring lights only operate when needed.

**Timed Heating & Exterior Lighting:** Added timers to tea/coffee water heaters and exterior floodlighting, so they operate only when necessary.

### Compressor & Equipment Control:

Set compressors to auto shut-off during downtime, fixed air leaks, and configured CNC machines for auto shutdown, reducing both compressor load and energy waste.

### Office & Forklift Efficiency:

Consolidated single-use offices to reduce heating and lighting loads, and installed timers on forklift chargers to charge only during off-peak hours.



Discover your  
energy saving  
potential today

Want to see how much your facility could save on energy costs? Powrmatic offers a free site survey to assess your specific needs and identify cost-saving opportunities tailored to your space. Let our experts help you unlock new efficiencies and reduce your carbon footprint. Contact us today to schedule your free survey.

[www.powrmatic.co.uk/energysaving](http://www.powrmatic.co.uk/energysaving)