

CASE STUDY

Ricoh UK Products Ltd Chooses SolarEdge for Energy Optimisation Project



Background

Back in March 2024, Ricoh UK Products Ltd (RPL) approached SolarEdge with a need for increased visibility of energy data to create meaningful changes that would support their net-zero drive.

Since 2002, RPL has invested significantly in over 250 CO₂ emission-reduction activities at its 52-acre site, as well as installing a 1.6-megawatt solar-photovoltaic system, providing 18% of site electricity. **This has enabled periods of 100% self-sufficiency,** and offsets over 292 tonnes of CO₂ per annum.

Ricoh Company Ltd. has sustainability deeply embedded in its culture; Ricoh was recently awarded a Platinum rating from EcoVadis – the world's most-trusted provider of business sustainability ratings.

And most recently, Ricoh was named in the 2026 Global 100 **Most Sustainable Corporations** by Corporate Knights.

Employees at Ricoh are actively engaged in sustainability improvement activities, with many environmental-related 'Bright Ideas' raised through RPL's ideasUK Platinum-accredited suggestion scheme each year.

From 2002 to date, RPL has seen an **80% reduction in CO₂**, decreasing energy costs by **£500k+ per annum** by implementing high-impact energy projects (such as a high-efficiency assets overhaul, introduction of solar arrays, various energy recovery initiatives), **but to affect the remaining 20%, more granular energy data would be critical...**

Highlights



80% reduction in CO₂ since 2002



3 buildings monitored and optimised independently



£500k+ saved annually through optimisation



1.6MW of on-site solar generation capacity

Challenges

As part of RPL's net-zero 2030 ambition, certain initiatives would require the critical insight offered from **energy monitoring and management software**. With a 2.5% year-on-year energy reduction target, it would be important to identify any inefficiencies across the site, implement changes and measure the results in order to understand project success.

As an example, Ricoh wanted to explore weekend energy expenditure and understand where consumption was still occurring outside of production times. At the time, **weekend consumption accounted for £45k per year**.

Not only was identification of inefficiencies and tracking projects important for Ricoh but also being able to provide *transparency* of energy projects too. Often, businesses report only the *amount* of carbon being offset, but Ricoh wanted to go one step further and explain *how* that carbon is being offset.

A final challenge for Ricoh was understanding the breakdown of consumption across multiple buildings on site. The site in Telford operates across three buildings and is home to multiple Ricoh businesses.

The three buildings are supplied by PV and have differing loads throughout the day. **It's important, not only operationally, but for bill verification to understand what each building/company is consuming** and allow RPL to appropriately bill the other companies on site.

"Integrating Hark by SolarEdge into our software suite has quickly made the platform an essential part of how we manage the site. It provides clear, reliable data that allows us to respond faster and more effectively to any equipment issues."

Beyond day-to-day problem solving, SolarEdge provides a level of visibility into our energy consumption that were previously difficult to track. That insight is now helping us to target CO₂ reduction activities with far greater precision."

"Perhaps most exciting is the future potential the platform unlocks..."

We are now incorporating energy and process data to create detailed reports for key process areas — even down to understanding the energy used and carbon footprint of each product manufactured."

"I'm genuinely looking forward to continuing the integration of Hark data across Ricoh and turning this new level of energy data into real, measurable action."

Andy Smith, Engineering Specialist (RPL)



*[Pictured above: The RPL Energy Team.
Andy Smith, Ryan Humphreys, Robert Farr]*

Solutions & Results

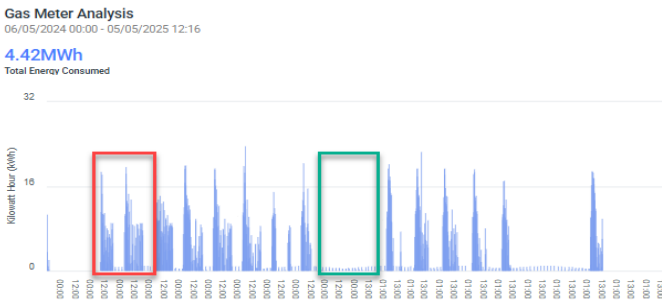
To support Ricoh’s sustainability and operational efficiency goals, SolarEdge deployed **energy management software solutions** at the Telford facility. The site features two distinct solar PV arrays: a ground-mounted system located in the adjacent field and a carport-mounted array within the main site. SolarEdge’s platform integrates data from both PV systems, alongside gas, water, and electricity meters and the site’s EV charging infrastructure. This unified dataset provides Ricoh with a single, real-time view of their core energy and resource streams.

Beyond centralised monitoring, Ricoh uses the software to actively improve performance and decision-making. **The built-in alarm and alerting functions** support ongoing operations and maintenance (O&M), helping their team quickly identify issues and maintain system health.

SolarEdge’s dedicated “PV Systems” feature enables analysis of solar performance ratio and generation trends, including comparisons such as clean vs. soiled panel output to inform maintenance scheduling. The software is also used in production planning, where energy profile visibility contributes to more efficient scheduling. Additionally, Ricoh’s engineering team leverages the platform for equipment performance studies, such as comparing air handling unit profiles before and after configuration changes to quantify efficiency gains and validate optimisation strategies.

Since deployment, the platform has become a core operational tool for Ricoh’s engineering and facilities teams. Andy Smith, Engineering Specialist (Manufacturing & Facilities Engineering), uses the software on a weekly basis to detect anomalies and investigate irregular energy behaviour across the site. Meanwhile, Ryan Humphreys, Area Specialist Maintenance Engineer, makes use of it daily to monitor equipment performance and alarm notifications—catching issues such as air compressor failures early, supported by clear data trails and evidence. This reliable data visibility also helps the team correlate production output with energy use, enabling them to evaluate how efficiently the site is operating at any given time.

The software has directly influenced decision-making and driven measurable reactive improvements. For example, RPL quickly identified that some labs were being heated unnecessarily over weekends, **allowing them to adjust scheduling and cut out avoidable energy waste** to save on weekend costs. See the example below:



**This simple change resulted in a £4000 saving.*

Solutions & Results

The software also enables the **visualisation and targeting for known efficiency improvements**, making it easy to report the CO₂ and financial savings. For example, the team identified and planned the integration of on-demand chiller equipment for a RICOH Pro VC80000 Print Engine in the Customer Experience Centre. Prior to this planned change, the chillers only have an on-off function irrelevant of the printer cooling demand. As a result of the chiller equipment changes, the software enabled RPL to see the energy demand reduction when the printer is not in-cycle.

The Software enabled RPL to realise an approximate **£10,000 savings equating to 6.6 tonnes CO₂** per year in making this planned change, and it did not require any extensive engineering measurements to be made to get this information.

Robert Farr commented that RPL is already looking at utilising Alarms to manage reactive maintenance of energy assets such as the Solar PV Systems. Ricoh hopes to expand the system further within Telford with live PowerBI Dashboards pulling consumption data from the platform via API, helping to understand energy distribution for multiple businesses under one-roof and **gain insights into granular energy costs per product**.



About Ricoh UK Products Ltd

Ricoh UK Products Ltd is a subsidiary of ETRIA, a joint venture company created by Ricoh in partnership with Toshiba Tec and OKI.

Through technical and operational excellence, Ricoh UK Products Ltd delivers products and services that power digital print devices, enabling Fulfilment through Work and contributing to a sustainable future.

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