

CASE STUDY - National Hotel Chain (U.K.)

11.2% TOTAL ENERGY REDUCTION

32,954 kWh annual savings | £7,579.47 saved annually | 6.4-month payback

INTRODUCTION

A major U.K. hotel site operating 24/7 was seeking to reduce its growing electricity costs. With high electrical demand from HVAC, kitchen equipment, refrigeration, lifts and lighting - and the added complexity of onsite solar generation affecting baseline comparisons - the hotel required a solution that could lower consumption without operational disruption or major equipment upgrades.

FilterPro, a power alignment technology, was installed to improve how electrical power is delivered and used across the site.

SOLUTION

Patented enPact FilterPro Technology

The hotel installed the patented enPact FilterPro power alignment technology to reduce electrical inefficiencies across major circuits without disrupting guest operations. FilterPro improves voltage and current alignment, stabilises power quality, and reduces wasted kWh across motors, compressors, HVAC equipment and general electrical loads.

The installation required no downtime and delivered immediate, measurable reductions.

CHALLENGE

- Electricity consumption increasing across multiple high-load systems
- 24-hour operation leaving no window for downtime or intrusive works
- Poor power quality and misalignment causing wasted kWh
- Onsite solar generation complicating baseline comparisons
- Need for transparent, independently validated savings
- Required payback window of 6–12 months to support wider rollout

The hotel needed a solution that worked across all electrical loads without changing how staff operate the site.

RESULTS:

32,954 kWh SAVED A YEAR

Equivalent to:

- ✓ Powering 4 hotel bedrooms for 12 months
- ✓ Eliminating over 7 tonnes of CO₂

£7,579.47 SAVED EVERY YEAR

More than £630 per month in direct reductions.

11.2% TOTAL CONSUMPTION REDUCTION

Achieved across ALL electrical loads on site.

6.4-MONTH PAYBACK

Fast enough to justify immediate multi-site rollout.



Metric	Quoted	Achieved
% Savings	7%	11.20%
Annual kWh Saved	20,957 kWh	32,954 kWh
Annual Financial Savings	£4,820	£7,579
Payback	10.1 months	6.4 months

Solar-Adjusted Results:

Despite the site generating part of its electricity through onsite solar PV, FilterPro still delivered **8.5% verified savings** during non-solar hours, proving that the reduction in consumption came from improved electrical efficiency - not from solar contribution.

CONCLUSION

FilterPro delivered substantial and verifiable energy savings for this national hotel chain, outperforming initial expectations and achieving a rapid 6.4-month payback.

By improving power quality across all connected loads, the site achieved measurable reductions in electricity use without any operational disruption or changes to staff behaviour.

The success at this location provides a strong, data-backed foundation for wider rollout across additional hotels within the group.

ESTATE-WIDE IMPACT PROJECTION

Rolling out patented enPact FilterPro across all 800 locations would deliver:

- **26.3 million kWh** saved annually
- **£6.0 million** yearly financial benefit
- **5,600 tonnes** CO₂ removed every year

A high-return, estate-wide opportunity with no operational disruption.

INTERESTED IN ACHIEVING SIMILAR SAVINGS ACROSS YOUR ESTATE?

Get in touch to discuss validated energy-reduction opportunities and multi-site rollout potential.

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