

CASE STUDY — Global Convenience Retailer (Dublin)

Achieving 7.9% Energy Reduction with enPact FilterPro

INTRODUCTION

A leading multi-site food retailer sought to reduce refrigeration energy consumption while maintaining temperature stability and operational performance across its estate. A trial of enPact FilterPro was undertaken on a high-footfall retail location to validate achievable energy savings and financial returns.

SOLUTION

enPact FilterPro was installed on the site's refrigeration infrastructure to optimise system efficiency, improve heat transfer performance, and reduce overall energy consumption.

Performance was measured using a like-for-like baseline methodology, comparing equivalent operating periods and accounting for seasonal variations to ensure a robust and accurate assessment.

CHALLENGE

Refrigeration systems operate continuously and represent one of the largest electrical loads within food retail environments. The client was looking for a solution capable of delivering measurable energy savings without disrupting operations or requiring changes to store processes.

RESULTS:

The site delivered a validated energy reduction of **7.89%**, equivalent to approximately **107 kWh of energy savings every day**.

Based on the measured performance, the installation is projected to save over **39 MWh annually**, generating more than **€6,200 in yearly cost reductions** while avoiding approximately **13 tonnes of CO₂ emissions**.

The achieved payback of **8.71 months** outperformed the original quoted payback period of **10.02 months**, demonstrating stronger-than-expected operational performance.

Metric	Result
Average Energy Reduction	7.89%
Daily Energy Saved	106.99 kWh/day
Annual Energy Savings (Projected)	39,051.86 kWh
Annual Financial Savings (Projected)	€6,248.30
CO ₂ Reduction (Projected)	13,000 kg CO ₂ /year
Achieved Payback	8.71 Months

CONCLUSION

The enPact FilterPro trial successfully demonstrated measurable refrigeration energy savings for this global food retailer, achieving a validated reduction of **7.89%**, projected annual savings of **€6,248.30**, and a payback period of just **8.71 months**. The results provide a strong foundation for evaluating broader estate deployment opportunities.

SCALABILITY INSIGHT

The trial demonstrates how relatively modest percentage reductions can generate significant savings when deployed across a larger retail estate.

With annual savings exceeding **39,000 kWh** from a single location, wider rollout across multiple stores presents the opportunity to deliver substantial reductions in energy consumption, operating costs, and carbon emissions across the portfolio.

INTERESTED IN ACHIEVING SIMILAR SAVINGS ACROSS YOUR ESTATE?

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

✉ enquiries@emissis.com | 🌐 emissis.com | ☎ 01642 049024



enPact Solutions