VERIFIED RESULTS · AMMONIA CHILLER · PHASE 2

Patented capital equipment cut refrigeration energy *8.97%* on an ammonia chiller.

With no impact to operations, food safety, or controls.

8.97%	9,942	12 days	6.03 mo
VALIDATED REDUCTION	KWH SAVED · 12 DAYS	TRIAL DURATION	PROJECTED PAYBACK

SOLUTION

Patented enPact FilterPro technology. Installed to optimise refrigeration system performance by reducing electrical losses and improving overall system efficiency. Operates without impacting refrigeration temperatures, food safety requirements, or operational processes.

- Reduce refrigeration energy consumption
- Improve compressor operating efficiency
- Lower electrical demand across refrigeration assets
- Deliver measurable operational cost savings
- Support sustainability and carbon-reduction objectives

CHALLENGE

Large-format retail sites operate extensive refrigeration systems that consume significant amounts of electricity throughout the day. Key challenges:

- Continuous refrigeration demand across extended operating hours
- High energy consumption from refrigeration assets
- Variable ambient conditions influencing system load
- Requirement for accurate weather-adjusted validation
- Need to demonstrate measurable financial returns
- Maintaining operational performance throughout the trial

Results. *Whole-site refrigeration savings.*

Phase 2 weather-adjusted measurement validated FilterPro's refrigeration energy reductions under live operating conditions on an ammonia-based chiller system.

- 8.97% validated reduction in refrigeration energy
- 9,942 kWh saved during the live operational trial
- Savings achieved consistently across 12 operational days
- Performance exceeded original business case projections
- Weather-adjusted validation methodology
- 6.03-month projected payback

VERIFIED METRICS

Technology	enPact FilterPro
Validated reduction	8.97%
Trial energy saved	9,942 kWh
Trial duration	12 operational days
Measurement	Weather-adjusted
Projected payback	6.03 months

Operational performance. The Phase 2 trial confirmed that energy reductions were maintained under normal operating conditions while refrigeration performance remained unaffected. Results demonstrate that FilterPro can consistently reduce refrigeration energy demand without requiring changes to site operations, maintenance procedures, or equipment controls.

CONCLUSION

Phase 2 delivered an 8.97% validated reduction, 9,942 kWh saved across 12 operational days, and a 6.03-month projected payback — reinforcing FilterPro's ability to deliver measurable, scalable refrigeration energy reductions.

SCALABILITY INSIGHT

Combining the validated reduction, per-site savings, and rapid payback demonstrates strong replication potential across multi-site retail estates — extending individual savings into meaningful estate-wide reductions in energy, cost, and carbon.

Interested in achieving similar savings across your estate?

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