

AIM INVESTIGATE Victoria Shopping Centre

Location: Victoria Shopping Centre, Harrogate, UK

Sector: Retail/Shopping Centre

Start Date: 19TH May 2026

Project Status: Complete | Draft Report Under Client Review

Key Results: Identified annual savings of **£61,000–£85,000**, equal to around **21–30%** of total annual energy spend.

Site Description

Victoria Shopping Centre is an enclosed town-centre retail asset and the only covered shopping centre within Harrogate. The multi-storey building includes ground, first and second floor retail areas, back-of-house corridors, service yards and roof-level and below-ground plant spaces. The centre accommodates national retailers including TK Maxx and Sports Direct, with retail demand varying significantly by day, season and trading period.

Overview

Following the AIM Audit, Victoria Shopping Centre was progressed into the AIM Investigate stage to move from data-led insight into a more detailed technical review of building services, HVAC operation, BMS limitations and practical energy conservation measures. The investigation confirmed that much of the HVAC plant and control infrastructure is original to the base build, with an older Cylon Building Management System operating in a limited and largely non-functional state.

The lack of effective monitoring, scheduling and demand-led control contributed to avoidable baseload consumption, excessive ventilation and unnecessary plant operation. The project therefore focused on identifying low-risk, financially attractive opportunities to reduce energy spend, improve operational resilience and support longer-term energy and carbon management

The Challenge

The investigation identified that Victoria Shopping Centre was experiencing high energy costs, with annual energy spend estimated at approximately £286,500. Electricity costs were estimated at over £106,000 per year and gas costs at approximately £175,000–£180,500 per year. The centre's redundant BMS, manual plant operation and limited system visibility made it difficult to align HVAC and ventilation operation with actual demand.

Key issues included significant overnight electrical baseload, chilled water and LTHW pumps operating in hand, limited weather compensation and outside air temperature hold-off control, excessive ventilation during low-occupancy periods, and opportunities to improve tenant energy transparency for AHU 3 serving TK Maxx.

Services Delivered

- Detailed review of electricity and gas consumption data
- Site-based assessment of HVAC plant, ventilation systems, lighting controls and BMS condition
- Identification and quantification of energy conservation measures
- Business case development, including indicative savings, capital costs and simple paybacks
- Recommendations for ongoing AIM – Manage energy management and BMS analytics

Client Relationship

The AIM Investigate phase built on the original audit by giving SA Evolve a clearer technical and commercial pathway for energy reduction at Victoria Shopping Centre. The findings provide a strong basis for immediate optimisation, phased capital investment and longer-term asset planning.



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The Conclusion

Results & Impact:

The AIM Investigate project converted the initial audit findings into a prioritised package of practical energy conservation measures. Collectively, the measures could deliver annual cost savings of approximately £61,000–£85,000, with many individual measures offering sub-two-year paybacks and several achieving paybacks in under one year.

Insights:

- The centre's electricity profile showed high and variable baseload consumption, indicating avoidable always-on loads and plant operating outside genuine demand.
- Weather correlation for electricity consumption was poor, suggesting that HVAC operation was not being effectively matched to external conditions.
- Gas consumption was strongly weather-related, but limited data restricted the ability to draw firm conclusions from utility data alone.
- The redundant BMS was a critical constraint, limiting visibility, control, scheduling, alarm handling and tenant-level energy allocation.
- Ventilation systems presented high-value optimisation opportunities due to full fresh-air operation and changing occupancy patterns across the centre.

If you manage a retail or commercial asset and want to reduce energy costs, improve HVAC performance, strengthen ESG reporting and build a clear roadmap for decarbonisation.

AIM Investigate can turn operational data and site insight into a practical, costed action plan.

Our Recommendations

- Restore and upgrade the BMS to provide reliable plant control, monitoring, scheduling, trending and alarm functionality.
- Implement BMS-led optimisation strategies including pump scheduling, weather compensation, OAT hold-off and chilled water flow temperature reset.
- Progress AHU 2 ventilation optimisation by removing unnecessary ground floor ventilation, installing VSD control and using CO₂-based demand control for the first floor.
- Prioritise AHU 3 Option 2 for the strongest energy and carbon benefit, while considering sub-metering to support transparent tenant recharge.
- Trial link bridge ventilation shutdown with temporary indoor air quality monitoring before permanent operational changes.
- Adopt AIM – Manage to ensure savings are delivered, sustained and protected against performance drift.

Delivery

The investigation was delivered through a structured review of utility data, site observations, HVAC operation, BMS condition and practical retrofit opportunities. The approach was tailored to a live retail environment, identifying measures that could be implemented with minimal disruption while providing strong financial returns and operational improvements.

**Get in touch to unlock your building's
full energy performance potential**