



PRESTIGE OFFICE BUILDING

COMPANY OVERVIEW

This international legal firm helps a diverse client base ranging from small and mid-sized businesses to the largest multi-national companies solve their biggest challenges and reach their business and operational goals.

THE SOLUTION

Our partner, AIS BMS implemented our software, Kaizen, supported by their own Energy and Building Performance Centre in Slough.

Our engineers helped the client understand the information and actions suggested by our analytics package and created a workflow from the core data right through to the site based facility management team.

The existing maintenance methodology, based on routine periodic inspection, was shifted to a fully directed resources model using actionable insights from Kaizen.

AIS BMS' on-site support technicians were given specific items to fix and potential causes to check, which meant that they were directed to tackle the issues that were having the greatest performance impact on the building.



THE PROJECT

This 17,193m² mixed-use office building in London, England is the prestigious headquarters for a global legal firm. Situated near St Paul's, this is an impressive modern building that has been maintained to UK's SFG20 since completion to help the building stay compliant.

THE CHALLENGE

From the initial energy audit conducted by our partner AIS BMS, it was clear that the building presented a significant opportunity to reduce energy consumption.

Comparing the existing utility use to CIBSE TM46 showed an over consumption of £201k or 1,834,345 kWh annually. AIS BMS was commissioned to investigate the use of the data within the building automation system to help better understand which areas of the HVAC and control systems needed urgent attention.

OPERATIONAL BENEFITS

By focusing on the key operational issues within the HVAC and controls systems, we were able to identify energy savings of £46k within the first few weeks. Further benefits realized included an impressive reduction in help-desk calls; “too hot/too cold” calls were down by 40%. There was also a substantial increase in the amount of available resource time which can be dedicated to proactive maintenance tasks within the building. We have calculated that the significant reduction in maintenance resources consumed by the previous high levels of reactive calls was 20% of the facility team’s total available time.

Kaizen can calculate and quantify terminal unit KPIs (the measured performance of each indoor zone), to surface the performance of each zone for critical objectives for temperature and ventilation rates. The calculated performance of these metrics for zones within the building show a dramatic improvement (a starting point of 43%) with the building is now running at 99% of zones within acceptable ranges. Occupants report higher satisfaction with their office environments and the building’s engineering team reported higher job satisfaction knowing they are now dedicating their time to solve meaningful problems within the building’s complex mechanical systems..

A different approach to schedule based maintenance. Routine and frequency task allocation were previously based on a calendar, typically through standards such as SFG20 and building requirements for an item of the plant. Regardless of the impact that an under-performing item was having elsewhere in the building or the amount of energy consumed, it was being serviced when it is scheduled to be. This could be months away, unless it fails first or creates an issue that the client can’t ignore. Such failures or operational issues usually manifest in an alarm on the building management system diverting resources from core tasks, creating potential operational and financial risks.

Ensure your teams are focused on the right tasks that will drive improvements. Through the intelligent use of the data from the building combined with our powerful analytics platform, Kaizen, the client can now plan their team’s workload to ensure they are tackling the important building performance issues, not just plant maintenance on a set routine.



THE FINAL RESULT



£185k annual savings



1,235,194 kWh savings



‘Too hot/too cold’ calls down **40%**