



BCW Consultancy x Optimal Monitoring

Independent analysis highlights prolonged 24/7 plant operation



45,615

sq ft office building

£250k

annual electricity under review

UP TO 4 YRS

suspected waste period

24/7/365

continuous plant operation



OVERVIEW

BCW Consultancy are Chartered Surveyors providing property consultancy, asset management and service charge advice across commercial properties.

This case concerns a 45,615 sq ft purpose-built office building in Cambridge, where a tenant questioned an unusually high £250,000 electricity allowance in the 2025 service charge budget.



THE CHALLENGE

BCW was asked to establish whether the cost reflected a billing problem or inefficient operation.

Invoice checks confirmed the rates, tariffs and billing were correct. The remaining challenge was to understand how the building was actually operating when tenants had no visibility of, or control over, the landlord-controlled plant.



THE APPROACH

- 1 Review billing data**
Confirm invoices, tariffs and rates, ruling out a supplier or billing error.
- 2 Analyse half-hourly data**
Use EMMA AI to test for normal shutdown patterns and identify abnormal baseload.
- 3 Turn evidence into action**
Use clear visual evidence to prompt a BMS investigation and test whether corrective action worked.

WHY EMMA AI?

- ✓ Independent validation
Objective analysis using billing data alone.
- ✓ No BMS required
Insight without system integration.
- ✓ Clear visual evidence
Patterns that could not be dismissed.
- ✓ Actionable findings
Evidence for challenge and corrective action.

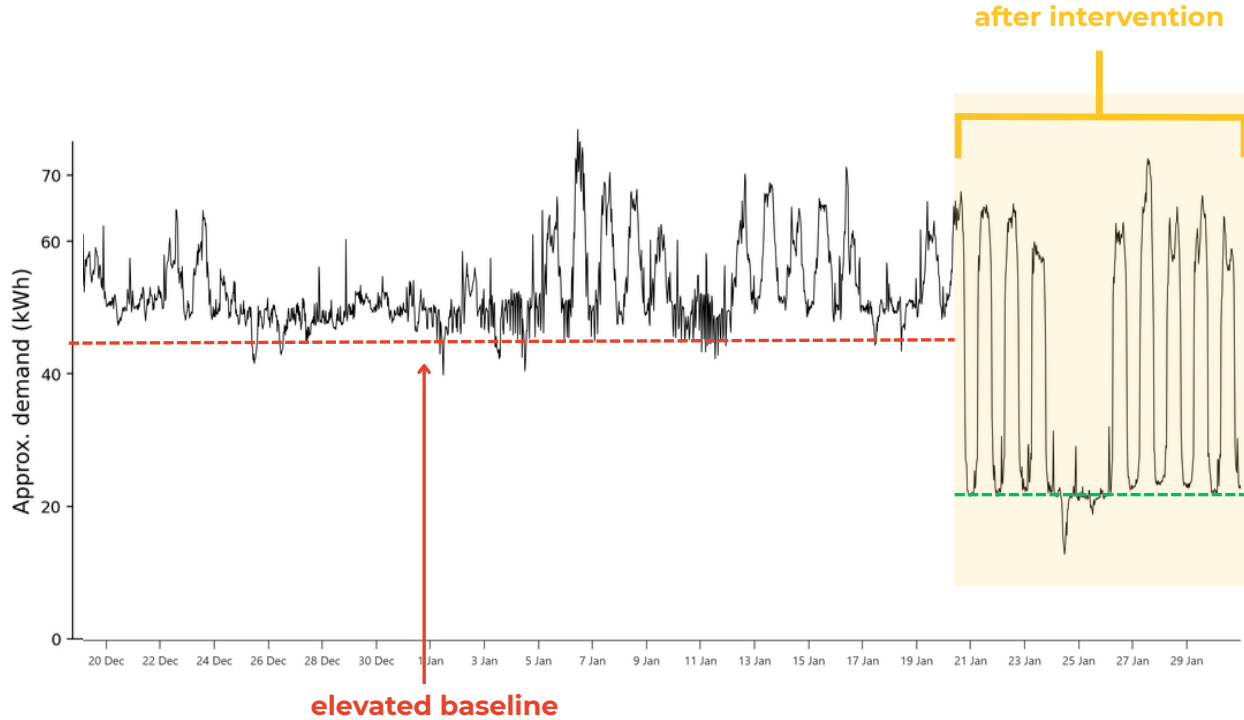
WHAT THE DATA FOUND

- No normal shutdown profile**
Consumption showed plant running continuously.
- Initial fix had no effect**
The first BMS intervention did not change the pattern.
- Long-running issue indicated**
The data suggested waste may have continued for up to four years.

"The EMMA AI analysis made the issue impossible to dispute."

-PROPERTY CONSULTANT, BCW CONSULTANCY

RESULTS & NEXT STEPS



What the analysis proved

- Billing was not the cause
Invoices, rates and tariffs were checked and found to be correct.
- The building lacked a shutdown profile
Half-hourly data showed continuous plant operation rather than normal occupied-hours control.
- The first intervention was insufficient
A BMS investigation was prompted, but the initial fix produced no measurable change.
- Tenants lacked operational control
The plant sat within the landlord's demise, leaving tenants unable to see or control its operation.

Recommended next steps

Collect post-intervention data

Confirm that overnight and weekend consumption has reduced.

Quantify the verified reduction

Translate the corrected profile into service-charge and carbon impacts.

Review historic charges

Use the evidence to support negotiation or further professional advice.

Maintain independent monitoring

Keep testing plant operation so the issue does not recur.



Why this mattered?



Commercial challenge

Evidence supported a robust review of the service charge.



Corrective action

The operating pattern could be tested after each intervention.



Carbon and historic exposure

Continuous operation implied avoidable consumption, emissions and possible historic overpayments.

CURRENT STATUS

Ongoing investigation. Post-intervention data will confirm whether a shutdown profile has been restored and the 2026 budget reduced.