Onsite Review & BMS Appraisal

CUSTOMER
A surgical centre, UK

SECTOR
Healthcare

FOCUS
Onsite review, BMS appraisal and detailed consumption analysis

THE CHALLENGE
Concept Energy Solutions was asked by a surgical centre to identify and recommend solutions for improving efficiency.

ACTIONS
Concept Energy undertook an onsite review, BMS appraisal and detailed consumption analysis to identify where savings could be made. A full review of the plant operation and status of all installed assets and equipment was conducted to identify areas for improvement.

OUTCOMES
Following analysis it was confirmed that the hospital’s energy consumption was 41% above expected levels (having accounted for catering and degree days). The primary causes of the excess consumption was a lack of availability of energy data for monitoring and targeting purposes, limited HVAC controls and BMS settings that did not match internal requirements or occupancy levels. It was evident that the control of building services had reduced over time and systems were not being reviewed by appropriately experienced staff.

BENEFITS
Following the onsite review, BMS appraisal and detailed consumption analysis, estimated savings of 33% were identified and recommended to the client.

The recommendations amounted to £200,000 in annual energy savings and this included a series of no/low cost adjustments, such as:

- Changes to plant start/stop times
- Air conditioning control amendments
- Matching space temperatures to avoid overheating
- Behavioural change

In addition, a series of costed capex projects were put forward including:

- Lighting upgrades
- Monitoring and targeting
- Voltage optimisation

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