

Hotel Intercontinental Dhaka achieves 25.8% reduction in HVAC energy use and costs alone

CASE STUDY



BUILDING OVERVIEW

LOCATION

DHAKA, BANGLADESH

BUILT IN

1966

TOTAL SQUARE FOOTAGE

932,659

TOTAL SQUARE FOOTAGE CONTROLLED

387,125

CONTROLLER TYPE

JOHNSON CONTROLS

HVAC EQUIPMENT CONTROLLED

• AIR HANDLING UNITS (AHUS) •
VARIABLE AIR VALVES (VAVS) •
OUTDOOR AIR & EXHAUST AIR FANS •
HOT WATER SYSTEM • CHILLED WATER
SYSTEM

CONTEXT

A Luxury Hotel Building in Southeast Asia

Situated in Bangladesh's Capital center, Hotel Intercontinental's 11-storey hotel property showcases how an older building can adapt to modern challenges. Faced with rising energy costs and regulations, the hotel's facility operation team sought an innovative solution to comply with regulations, optimize energy asset management costs particularly in its chilled water loop and peripheral systems. Client identified Enerzyz as the ideal solution.

PROCESS

A tailored approach to success

Enerzyz worked closely with the building's controls contractor and internal team to integrate Enerzyz OS with the existing Building Management System (BMS). This allowed the facility team to use their existing tool set and systems to observe the AI in use throughout their building.

Enerzyz OS was ingesting data through our universal control module, while communicating via BACnet IP. The roll-out was executed floor by floor, in close cooperation with the building's Chief Engineer, ensuring that tenants remained comfortable and disruption-free throughout. This collaborative effort was key to the customer's positive experience and the project's long-term success.

Event Space and lobbies at the building require condenser water at all times. Enerzyz used the design criteria in the centrifugal pump schedule to develop a system curve and determined the minimum flow rate. This data was used as another input for our AI to consider, continuously optimizing set temperature and valve positions while satisfying the required thermal demand of the micro climates zonewise depending on occupancy.

RESULTS

Results for all stakeholders

Over a 3-month period in 2025, Hotel Intercontinental realized substantial electricity, emissions, and cost savings. Our Optimization solution drove a 25.8% reduction in HVAC-related electricity consumption, saving \$26,301, and mitigating 61.45 tCO₂eq. These remarkable results were achieved seamlessly, with the facility engineers noting no disruptions to daily operations — another key objective of the project.

With a firm focus on occupant comfort and smooth hotel operations (two key priorities of the client), our team and autonomous AI solution delivered outstanding results. Through collaboration and effective communication with the customer and their controls contractor, Enerzyz consistently provided value throughout the ongoing partnership. As a result, Hotel Intercontinental not only realized significant savings, but also met regulatory demands and enhanced operational efficiency, driving value for both the hotel and its occupants.

Discover more of our solution, Book a demo [here](#).



-\$26,301

Total cost savings



-25.8%

Reduction in HVAC related electricity consumption



-219,441 kWh

Reduction in HVAC related electricity consumption



-61.45 tCO₂eq

Reduction in HVAC related emissions



-18.4%

Reduction in HVAC related emissions