



Energy Optimisation in an Aging Commercial Office Tower

CASE STUDY

Introduction

This aging commercial office tower is located within a major metropolitan business district. Conservia has been engaged to lead targeted building systems upgrades to transform the building's operational reliability whilst significantly reducing energy consumption.

Retrofitting a modern Building Management System (BMS) and implementation of high-performance HVAC control strategies will deliver energy efficiency, operational reliability and underpin a better occupant experience.

Challenge

The building presented an opportunity to improve its NABERS Energy rating, enhance its end-of-life BMS, and optimise occupant comfort. Addressing these areas would reduce energy consumption, improve operational efficiency, and lower operating costs through a structured upgrade approach.



ENERGY PERFORMANCE UPGRADE IN COMMERCIAL OFFICE ENVIRONMENTS

Client Outcome

A structured upgrade pathway delivering improved energy performance, system reliability, and tenant comfort, positioning the asset for long-term operational success.

- ✓ Estimated payback period: 5.3 years
- ✓ \$170,207 predicted annual energy savings



Targeted upgrades restore performance while reducing energy use and operating costs.

Core Services Provided

Conservia supported the project with a comprehensive suite of services focused on building performance improvements:

- Building performance upgrade and optimisation programs
- BMS design, implementation, and optimisation
- Energy monitoring and analytics platforms
- HVAC and controls system optimisation
- Advisory-led upgrade strategy and delivery

These improvements established a strong foundation for long-term energy performance and operational stability.

Key Solutions

Conservia delivered a structured, performance-driven upgrade program:

- Detailed feasibility study and upgrade strategy (DFS)
- Targeted upgrades across HVAC, controls, and metering
- Implementation of a new BMS for improved control
- Staged delivery within a live, occupied building
- Focus on energy efficiency, reliability, and tenant comfort

Conclusion

Through a structured upgrade program and targeted infrastructure improvements, Conservia transformed the building's operational performance into a reliable and competitive asset by taking it from a 0 to 4 NABERS rating. The project demonstrates how modern control systems and strategic upgrades can restore performance, reduce costs, and improve tenant outcomes in commercial office environments.

40% Electricity reduction

0→4 Stars NABERS rating

963 Tonnes CO₂ emissions reduction