





A Case Study on a Shopping Centre

Heating, Ventilation and Air-Conditioning (HVAC) Equipment Optimization with Abound Predictive Insights

The Site

A regional shopping center in Brisbane with 170+ retailers, requiring consistent indoor comfort and reliable HVAC performance to support tenants and visitors.

The Challenge

-  Limited real-time visibility across HVAC assets.
-  Operations were largely reactive, with issues identified after alarms or tenant complaints and static control strategies.
-  Need to reduce energy consumption while maintaining comfort.
-  Lack of a data-driven approach to support optimal performance and smarter decision-making.

The Solution

Abound Predictive Insights was deployed on top of the existing WebCTRL version 8.0 building automation system. This enabled continuous monitoring and proactive optimization of connected HVAC equipment, including a Carrier 19XRV centrifugal chiller and a Carrier 30XW fixed-speed water-cooled screw chiller.

Operational improvements included:

- Trim & Respond control strategies
- Outdoor air reset integration with optimum start scheduling
- Targeted Building Management System tuning
- Data-driven maintenance and lifecycle planning

The optimization of equipment operations was aligned with the best practices in ASHRAE Guideline 36-2021.

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About Carrier Abound

Carrier Abound delivers AI powered predictive intelligence and expert services to help businesses run smarter, more efficient, comfortable, and sustainable buildings. The Abound platform solutions and Carrier Customer Command Centers have enabled us to save customers over 7 billion kWh and optimize over 63,000 buildings across the globe. Carrier Abound is part of Carrier Global Corporation, a global leader in intelligent climate and energy solutions.

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The Impact



Energy savings offset software deployment cost within 4 months



11.6K+ kWh 11.6K+ kWh energy savings achieved in first 3 months after deployment



8% reduction in Air Handling Unit (AHU) energy consumption in Q4 '25 versus Q4 '24



Improved performance during peak summer load



Launched insight-driven repairs and maintenance, supported by data-led upgrade decisions



Implemented Air and water-side optimization

The shopping center transitioned from reactive maintenance to performance-led operations.