



## A national specialty retailer optimizes operations with the ABOUND™ Insights platform

An award-winning case of improving energy efficiency and reducing maintenance costs.

### The Client

A specialty retailer and leading supplier of office products and services with approximately 1,300 stores in the USA, with a large portfolio of exclusive products and various brands. The retail stores have an average area exceeding 20,000 sq. ft. with over 18,500 total units of connected equipment across all stores.

### The Challenge

The retailer was facing strong competition and increasing utility and maintenance costs. To address these issues, it was imperative that they focused on reducing energy consumption. Carrier ABOUND targeted 4% energy consumption reduction during the first year of engagement across their national store network, while maintaining occupant comfort.

### The Solution

Carrier ABOUND seamlessly integrated the ABOUND Insights platform with the retailer's existing building management systems (BMS), of multiple types, in over 1,200 stores. This enabled a uniform representation and analysis of the stores, independent of the technology used.

The platform started generating actionable insights and recommendations based on the unique context in which each store operated. Every day, the AI-enabled platform processed around 9.6 million records across approximately 100,000 data points from over 18,500 units of connected equipment. These data points included parameters related to heating, ventilation and air-conditioning (HVAC) operations, temperature, humidity and lighting lux level, to name a few. The platform drew correlations using data from weather feeds, maintenance management, and billing management systems.

Carrier ABOUND also deployed a team of data scientists, analysts, controls engineers, and domain experts from the BluEdge™ Command Centers, to provide round-the-clock support. The team remotely diagnosed and resolved store issues related to lighting, HVAC, and occupant comfort. The team guided field technicians during site interventions and equipment breakdowns, ultimately reducing technician field visits and resolution times.

### The Result

This engagement enabled the retailer to move to data-driven store operations and the field technicians to act more effectively.

Carrier ABOUND helped deliver a 5.33% cumulative reduction in energy consumption in the first year of the project. Within 23 months, the reduction was 7.92%. Throughout the engagement, monthly saving targets were exceeded and a massive energy saving of over 48 million kWh was delivered across over 1,200 sites.

Alarms were set in place for deviations in set-points, schedules, and equipment operation. As a result, the time taken to resolve issues as well as the number of service disruptions and costs due to equipment downtime were all reduced. First-call resolutions were improved through proactive monitoring and problem management. The Command Center team remotely diagnosed and resolved store issues related to lighting, HVAC, and occupant comfort, and minimized technician field visits by resolving 82% of the work orders remotely.

This project's success helped improve the retailer's utilization of resources by channelizing them towards tactical and strategic improvements in store planning and operations. The project was cash positive from the start as Carrier Abound was able to leverage the existing BMS infrastructure.

Write to us at [abound@carrier.com](mailto:abound@carrier.com) for more on how we can help your company achieve its business and sustainability goals.

#### **About Carrier Abound**

Carrier Abound provides digitally connected lifecycle solutions and services for diverse building portfolios. The solutions and services enable building management to see deeply and broadly across their assets, prioritize and act on real-time insights, and refine, adapt, and scale on a continual basis to improve energy efficiency and asset performance, enhance occupant comfort and productivity, and streamline compliance reporting. Carrier Abound is part of Carrier Global Corporation.

For more information, please visit [abound.carrier.com](https://abound.carrier.com). Join the conversation on [LinkedIn](#).

