Case Study

Carrier ABOUND

PUMA races ahead to 'Forever Better' stores

PUMA deployed IoT-enabled managed services to save energy costs and improve the Indoor Air Quality (IAQ) at its stores in India.

The Client	PUMA, a multinational brand founded in 1948 in Germany, offers performance and sport-inspired footwear, apparel and accessories. PUMA believes in 'Performance On All Levels,' and aims to deliver high-quality products and great in-store experiences to customers.
The Challenge	Globally, PUMA follows its 'FOREVER. BETTER. Sustainability Strategy' and has integrated sustainability into all its core business functions.

The Challenge (continued)

Aligned with this strategy, PUMA embraced the Internet of Things (IoT) to achieve the following objectives and make its store operations in India more sustainable:

i) Increase the energy efficiency of stores through better monitoring and control of store equipment.

ii) Improve indoor air quality to elevate customer experience and offer a better working environment for employees.

iii) Improve compliance with operating standards across its stores.

The Solution

PUMA partnered with the Carrier Abound team to achieve its business and sustainability goals in India. The multi-year agreement commenced with select stores in 2021 and expanded to cover all company-owned and operated standalone stores across India within the next two years.

We implemented our managed services to drive operational transformation for PUMA at the enterprise level. Our primary aim was to optimize energy consumption while enhancing occupant comfort. We also worked to preserve merchandise quality through improving the compliance to operating policies and maintaining setpoints of parameters such as temperature, humidity, and other Indoor Air Quality (IAQ) aspects within defined limits.

Our team analyzed the historical energy spend of PUMA store equipment such as Heating, Ventilation and Air-Conditioning (HVAC), and lighting to identify store-specific strategies. All the stores of PUMA were integrated with the Abound™ Edge IoT system - a system of hardware, software, and a cloud-based orchestrator. The system enabled remote resolutions and empowered PUMA's facility team to control and manage connected equipment at their stores. Energy meters and temperature sensors were deployed that enabled near real-time tracking of HVAC equipment, lighting equipment and diesel generator sets. We initiated automated temperature logs and alerts on compliance breaches or policy violations with respect to temperature and voltage. This enabled prompt corrective actions.

PUMA was also supported by a BluEdge™ Command Center. The center is made up of specialized teams of domain experts and data scientists. The center worked to proactively manage store operations and equipment health. They provided quick responses and remote support to store managers. Further, the center monitored the adherence to PUMA's corporate store temperature policies and provided actionable worklists that prioritized actions across the store network. This empowered PUMA to effectively control and manage connected equipment at their stores, deliver inviting store experience to customers and make the environment better for employees.

The Result

PUMA was able to make store operations more proactive and achieve the objectives of saving energy, enhancing indoor air quality and improving compliance to corporate policies.

Key results across 90 connected stores:

i) Over 10% average energy saved[1] from October 2021 to September 2024. This is equivalent to carbon sequestered by 10,607 tree seedlings grown for 10 years[2].

ii) The humidity[3] level was maintained below 70% for 65 stores from July 2024 to October 2024, thus preserving merchandise quality.

In addition, 11 stores were certified for maintaining healthy indoor air quality by a laboratory, accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL)[4]. More stores are in line to be certified.

"With Carrier Abound's solution, my team and I can access the analytics and equipment insights anytime from anywhere, giving us complete view of store performance. We get a full view of all the connected stores across India and how they are consuming energy. This project reflects our commitment to climate action and environmental and social responsibility, and we are happy to work with Carrier Abound team to amplify its impact in the years to come."

Vishal Gupta - Senior Director, Retail
PUMA Sports India Pvt. Ltd.

1) The energy savings have been calculated as per the International Performance Measurement and verification protocol (IPMVP®) – website: https://evo-world.org/en/products-services-mainmenu-en/protocols/ipmvp.

2) The carbon sequestered from tree seedlings is computed using this calculator: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

3) Optimal RH Level maintained across 24 hours to prevent mold formation and retain fabric quality was compared in line with WHO guidelines available in public domain.

4) National Accreditation Board for Testing and Calibration Laboratories (NABL) a constituent board of Quality Council of India is an accreditation body, with its accreditation system established in accordance with ISO/ IEC 17011. Carrier Abound is not the certification agency nor has legal rights to certify anyone. The IoT data from the IAQ sensors deployed as part of the managed services, were used by PUMA to get the Indoor Air Quality Certificates from a third party NABL accredited laboratory.

Write to us at 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, global leader in intelligent climate and energy solutions.

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