A large multinational retailer realized USD 71 million in energy savings.

Improved efficiency and limited retrofits in an engagement spanning 5 years.

The Client

A multinational retailer and provider of consumer technology products and services across North America. This large retail chain operates over 1,200 stores with an average size of 35,000 sq. ft.

The Challenge

In 2011, the retailer aimed at reducing overall energy consumption by 20%, by 2020. Apart from this, the retailer was looking to implement a building optimization program across their nation-wide store network to achieve the following goals:

- Reduced greenhouse gas emissions for the entire store network
- Enhanced in-store experience for customers
- Reduced effort for store associates
- Seamless management of multiple vendors for electrical and HVAC services

Throughout the years, this retailer has focused on delivering exceptional customer experience. As business grew, they sought to improve store comfort levels and reduce energy and maintenance costs. To realize this vision, this retailer engaged EcoEnergy Insights for a 5-year program in 2012.

The Solution

EcoEnergy Insights offered a comprehensive solution based on its unique 3 Waves Approach. On discovering immense savings potential during the initial assessment, we initiated changes in store controls almost immediately. In line with the 3 Waves Approach, we implemented controls optimization and delivered significant savings in the first year in Wave 1 – even with limited energy infrastructure-related data. In Wave 2, our analytics platform was integrated and deviations were continuously detected and rectified, and more savings were delivered through short-range analytics.

Wave 3 involved long-range analytics on richer data that helped maximize the effectiveness of the deployed saving strategies. Chronic issues pertaining to performance and efficiency of equipment were also addressed in this Wave.

EcoEnergy Insights integrated the CORTIX™ building IoT platform covering the entire store network. The platform's actionable insights enabled proactive service management. During the course of the engagement, the self-learning platform became increasingly accurate in its predictions and uncovered more opportunities to optimize operations.

We deployed our Command Center, with a 24/7 technical service desk, and provided highly responsive remote resolution support. This helped reduce the maintenance costs associated with store support dispatch. Service management was given a more structured setup across the retailer's vendors for superior service delivery. Our Command Center ensured that the holiday schedule, critical for the retailer, experienced zero deviations. With a real-time monitoring dashboard, any issue with the store's availability and comfort was proactively monitored. This offered centralized visibility at the highest levels in the organization.

Policies were standardized for store associates to achieve customer comfort across all stores. Our strategies enabled the retailer to focus better on service improvement. Based on equipment performance and sub-metering data, we offered recommendations to the retailer on how to minimize CAPEX and where to invest it. Demand response programs were introduced and executed flawlessly, generating additional savings for the retailer.

The Result	The retailer was able to accomplish – and in some cases exceed – its ambitious goals. For instance, it achieved the US Department of Energy Better Buildings Challenge goals in 2014, six years ahead of schedule. It has also been recognized by the CDP (formerly Carbon Disclosure Project) as an environmental leader on the Climate A List, which puts it among the top 5 percent of companies participating in the CDP's climate change program. While retrofitting was avoided, the capital expenditure was limited through other means too – such as reducing equipment run hours of stores and deploying sub-metering across all stores using existing controls, to name a few. We also used skylight sensor data to create a logic for skylights, allowing us to control interior lighting. This contributed to the energy consumption reduction. We also helped the retailer deploy and analyze the impact from the demand response program.

Across the 5 years engagement:

- **USD 71 million** was realized through energy savings
- **13%** average annual energy savings was achieved compared to the baseline year
- **98%** service levels (SLA) maintained towards resolution of Emergency & Non-Emergency Work Orders

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for delivering excellence in Customer Service**

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About EcoEnergy Insights - EcoEnergy Insights is a leading provider of AI and IoT-enabled solutions to digitally transform building and equipment operations. Their CORTIX™ platform collects data from multiple sources, analyzes it, acts on defined deviations autonomously and offers predictive actionable insights. The platform, combined with expert human analytics, has been delivering award-winning outcomes in comfort, maintenance and energy efficiency across multiple industries such as retail, hospitality and banking. EcoEnergy Insights is a part of Carrier Global Corporation, global leader in intelligent climate and energy solutions that matter for people and our planet for generations to come.

For more information on EcoEnergy Insights and the CORTIX™ platform, visit ecoenergyinsights.com and cortix.ai. Join the conversation on LinkedIn, Twitter and Facebook.