

Retailer Reduces Energy Spend *with* Proactive Monitoring

A Canadian retailer of men's and women's clothing was under pressure to rein in energy costs. The company's Treasurer took on the challenge of finding a way to reduce energy consumption. With a culture of innovation, almost no idea was off the table. But given the Treasurer's financial mindset, there was one essential requirement . . . any solution they came up with had to be tested. This would assure payback was sufficient before it was rolled out across the portfolio.

Where to Begin

Before taking action, the company needed to understand the scope of the problem. Intuitively, the Treasurer knew that some stores were using more energy than others. He just didn't know how significant the difference was. Prenova analyzed the retailer's portfolio to identify sites with higher than normal energy consumption.

The process began with the development of an Energy Intensity Profile. Prenova's Energy Analytics team reviewed historic energy consumption data then categorized stores based on the amount of energy they used per square foot. The median kilowatt-hours (kWh) per square foot established a center point for grouping stores into four categories. Category One sites had the lowest energy intensity (i.e. lowest kWh per square foot), while Category Fours had the highest.

To compare store formats, groupings were further refined based on operating characteristics and other factors. Stores that operated 24 hours per day, for instance, were analyzed separately from stores that were only open part of the day.



Digging Deeper

The next step was to understand why some stores used more kWh per square foot than others.

"In addition to reducing energy costs, Remote Monitoring has saved the customer more than \$54,000 in maintenance-related expenses, with over 88% of field issues being resolved by phone."

Prenova worked with the customer to determine the possible causes. In some cases, it was easy to see why certain stores had higher energy consumption. One regional manager decided to keep his store's lights on 24/7 after it was robbed. Another wanted the lights at a mall location to stay on all night simply because other stores kept theirs on.

After removing anomalies such as these, Prenova generated a final list of Category Three and Four sites. From this list, the customer selected several stores for Proactive Monitoring. Prenova worked with the customer to define operating parameters for HVAC and lighting systems, including when to turn equipment on and off and thermostat set points. Store systems were also linked to Prenova's operations and control center where technicians monitored their performance to ensure they operated according to corporate standards.

Seeing the Value

Prenova began monitoring the test locations in March 2007. After only one month, the company saw a significant drop in energy consumption. On average, kilowatt-hours were down nearly 11%, with one store achieving a savings of over 21%. Before rolling out the solution to other stores, however, the Treasurer wanted to be certain these results were sustainable. They were. Twelve months after the original test began, the company was seeing a 12.76% reduction in energy spend.

As the project expands, results improve. To date, the customer has reduced consumption by almost 14%, a savings of nearly \$100,000.

For more information on Proactive Monitoring and other Prenova solutions visit: www.prenova.com.