



A large franchisee of a pizza restaurant chain takes a slice out of energy consumption

The award-winning project saved 21.3 million kWh in 6 years.

The Client

A large franchisee of an American multinational quick-service restaurant chain is the largest in California and Utah and the third-largest in the United States and operates approximately 300 quick-service restaurants (QSRs) in greater Los Angeles. The franchisee has always been invested in running highly efficient modern restaurants. Approximately 90% of the operator's units are highly efficient, modern delivery/carryout units that generate strong unit-level economics.

The Challenge

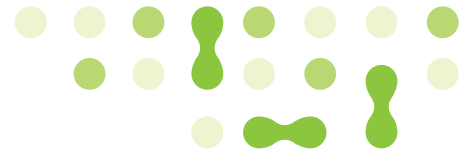
In 2015, the franchisee set a goal to achieve over 15% energy savings across their restaurant network. They engaged EcoEnergy Insights on a 5-year program with a vision to make its quick-service restaurant (QSR) network more sustainable and energy-efficient.

With over 220 restaurants with a total floor size of over 370,000 sq. ft. and 5,400+ pieces of equipment, it was important to deliver energy savings while assuring that the food safety compliance standards were met.

The Solution

EcoEnergy Insights' Connected Restaurant Program was deployed across the client's restaurant network. This program leveraged the power of the CORTIX™ Building IoT platform to identify opportunities to improve operations and conserve energy, thereby reducing costs. It leveraged IoT and advanced analytics to proactively identify Roof Top Unit (RTU) health issues, Hazard Analysis and Critical Control Points (HACCP) based deviations as well as refrigeration equipment performance. The program also identified operational issues leading to compliance deviations.

EcoEnergy Insights liaised with the client's technical team to understand the store equipment through data. The team studied energy consumption, temperature, and equipment performance data for the baseline period. This vast amount of data from all restaurants, equipment, sensors, controllers, energy meters and systems at numerous outlets was fed to the CORTIX platform. Upon complete integration, the platform processed over 12,200 data records per day. It provided actionable insights on three aspects of the equipment's performance - health, availability, and efficiency. The Command Center, a team of experts, drew correlations using data from weather feeds, energy utility data and preventive and



reactive maintenance data to execute maintenance effectiveness analysis and savings analysis. The team identified opportunities to overcome energy leakage, enhance occupant comfort, improve equipment health and optimize restaurant operations. In addition to this, strategies were developed and implemented to better manage thermal compliance of food storage areas across the restaurant network.

The Result

The Connected Restaurant Program addressed multiple challenges across the franchisee's network of connected restaurants. This program helped the franchisee reduce energy consumption, provide a better guest experience, enhance thermal compliance in food storage and improve equipment reliability. The performance of heating, ventilating, and air-conditioning (HVAC) equipment, as well as refrigeration and kitchen equipment, were continuously monitored to address inefficiencies.

This engagement won a 2018 Environmental Leader Top Project of the Year award.

Key results as of 2022:

- Over 21 million kWh saved
- Over 15,000 tons of CO₂ emissions reduced
- 13.5% energy saving delivered
- Food storage compliance maintained above 68.9%
- Occupant comfort maintained above 85%



“One of the nice things is that now we have a platform where we could have visibility to all of our restaurants' equipment whether it be an oven, an air-conditioner or any other pieces of equipment that we have in the restaurant. I would highly recommend them for anyone looking to use this type of technology in their restaurants.”

**Former CEO & President,
The franchisee of pizza restaurants**



EcoEnergy Insights won a 2020 IoT Global Award for the Connected Restaurant Program in the Retail, Marketing and Hospitality category



Write to us at info.ecoenergy@carrier.com and elevate your business now.

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.

