cmr

Leading restaurant operator uses insights to avoid $1.2 million in unnecessary energy costs

One of the largest restaurant operators in Mexico, CMR, worked with S2G Energy to implement Centrica Business Solutions' Panoramic Power™ technology, reducing their energy consumption and unlocking significant cost savings.

Effectively managing energy consumption

Established in 1965, CMR is one of the largest restaurant operators in Mexico, with a brand portfolio that includes Wings, Chili's, Olive Garden, Red Lobster, The Capital Grille and Sushi Itto, among others.

In 2016, CMR partnered with S2G Energy to reduce its energy consumption through its Energy Management-as-a-Service (EMaaS) program. They wanted to provide local restaurant managers with the insight required to manage energy usage more effectively in order to reduce their operational costs and environmental impact, without negatively affecting the performance of the restaurant.

As a partner of Centrica Business Solutions, S2G Energy deployed their Panoramic Power wireless sensor technology to deliver the desired results, as these collect real-time energy data and analytics from CMR's equipment at a circuit-level of granularity. In addition, site electricity meter consumption is captured in real-time using communication bridges. This enables restaurant managers to comprehensively understand their energy consumption and take steps to ensure they are using power daily in the most efficient way.

A network of sensors

After initially piloting the Panoramic Power technology across eight restaurants, CMR expanded the solution to 44 Chili's restaurants in the following year. Initially, the focus was on optimizing energy consumption across HVAC, lighting and refrigeration loads. Over just 22 days, 1,300 Panoramic Power wireless sensors were installed, with an average of 30 sensors deployed in each restaurant and no dependence on local IT networks.

During this pilot, it was identified that some refrigeration chambers were not being closed properly, due to operational behavior and maintenance issues. Furthermore, air conditioning units were left running outside of the restaurants' set operating hours. By resolving these issues and optimizing their operation schedule for air conditioning and ventilation equipment, S2G Energy were able to reduce energy wastage by 6% and reduce peak power usage across these restaurants.

Within the first twelve months, CMR reduced their energy usage by 2.5 GWh compared to their consumption prior to the start of the program in 2017 — a 13% energy reduction that saved them

11.4 GWh
cumulative energy reduction in 34 months

$1.2M USD
in avoided costs

308%
return on investment

"

The biggest advantage of this program is that our people get to live and feel their business. Managers have more control over their restaurants' energy usage and are empowered to make the right decisions"

Rodolfo Navarijo
VP of Operations, CMR

Why Panoramic Power™ from Centrica Business Solutions?

- Gain a comprehensive understanding of your entire energy infrastructure with real-time, device-level monitoring.

- Lower your electricity costs by proactively taking action when you identify inefficiencies and energy waste.

- Maximize operational efficiencies and spend by benchmarking and managing energy consumption

- Reduce risk of equipment failure and costly downtime with predictive analytics and sophisticated alerts.

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$180,000 in costs. By reducing their carbon emissions by 1,403 tCO_2e, it was the equivalent of taking 300 cars off the road for 12 months. This saving was also equivalent to the energy consumption of seven restaurants for one year.

These positive results led to CMR choosing to expand the roll-out of the Energy Management-as-a-Service program to an additional 21 restaurants across their Olive Garden, El Lago and The Capital Grille brands within Mexico. During this expansion, gas and water consumption monitoring tests were also carried out using Panoramic Power technology.

Aiding agile decision-making
In 2019, the number of restaurants participating in the program expanded to 69, with the inclusion of several Wings and La Destileria restaurants.

When the COVID-19 pandemic began in early 2020, S2G Energy was able to leverage their energy data — together with other business intelligence data provided by CMR — to aid CMR's decision-making and enhance their resilience towards changing market demand. During the pandemic, CMR adopted three modes of operation across its restaurants, to minimize the impact of the pandemic of the business: reduce occupancy to meet social distancing requirements, switch to a delivery-only option, or switch to a take-out only option.

Harnessing the energy data, S2G Energy was able to help CMR forecast how each of these options would affect energy consumption — enabling managers to determine how energy costs would change, and therefore forecasting how profitable each restaurant would be in each scenario. Decision-making could be made in real-time at a restaurant, regional or national level. This helped CMR to maintain cashflow and make agile decisions on how best to operate each of their restaurants, in line with the protocols defined by local authorities during the ongoing pandemic.

Leveraging energy data, S2G Energy helped CMR forecast how each of these three approaches would affect energy consumption at each restaurant. This meant that restaurant managers were able to determine how best to manage their energy consumption, by looking at how profitable each restaurant would be in each of the three possible scenarios. Decision-making could be done in real-time, both regionally and nationally. This helped CMR to maintain cash flow and make agile decisions on the best way to operate each of its units, in accordance with local authority protocols.

Had CMR not invested in the Energy Management-as-a-Service program, they would have been unable to determine the impact that the COVID-19 pandemic would have had on their energy consumption, and therefore how it would affect overall profitability of their restaurants.

Reducing energy usage and unlocking cost savings
By scaling the program and changing the way its restaurants use energy, CMR reduced their cumulative energy consumption by 11.4 GWh for the first quarter of 2020, which represents an 17% reduction. This is the equivalent of operating 30 restaurants for a year and has enabled them to avoid $1.2 million in unnecessary costs. In total, 1,900 sensors have been deployed across CMR's restaurants to date, which collect and analyze almost 60 billion data points every year to help inform CMR's decision-making.

For every dollar CMR has spent on the program since the start of 2020, they have achieved a return on investment of $4.08 through energy efficiency and other operational adjustments. Through effective predictive maintenance, the program has also enabled CMR to make additional operations and maintenance (O&M) cost savings, in addition to the direct cost savings achieved through efficiency measures.