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ECOENERGY INSIGHTS

One of the largest private sector banks in India goes sustainable with a transformative IoT enabled solution.

The bank reduced energy consumption by 12.7% using predictive insights from the CORTIX™ platform.

The Client

A large private bank in India, offering a spectrum of financial services with over 4,000 domestic branches and over 11,000 ATMs across the country.

The Challenge

The bank focuses on leveraging digital technologies to drive differentiation and accelerate its digital transformation journey.

One of the key challenges for the bank was controlling and monitoring critical equipment such as heating, ventilating, and air conditioning (HVAC), lighting, ATMs, servers, etc. across branches to increase equipment life and reduce maintenance costs. The size of the branches and their extensive geographical spread across the country made it difficult to control and optimize energy costs. Issues such as the power factor penalty and diesel generator running cost also increased the monthly energy expense. Through efficient energy consumption at bank branches and ATMs, the bank could not only save on costs but also decrease greenhouse gas emissions, reducing the impact on the environment on account of their operations.

In order to control the losses and optimize energy consumption without hampering customer and branch employee comfort, the bank engaged EcoEnergy Insights.

The Solution

The bank worked with EcoEnergy Insights to roll out a program across 125 branches in India after a successful pilot with 25 branches which achieved over 9% in energy savings. Initially, performance data was gathered from all existing building automation and energy management systems. The team analyzed the historical energy spend of branch equipment such as HVAC, lighting, IT Infrastructure (laptops, computers, printers, servers, ATMs, etc.) along with other miscellaneous loads to identify appropriate branch-specific energy-saving strategies.

The bank branches were integrated with EcoEnergy Insights' CORTIX™ building IoT platform. The platform collected and analyzed data from across the connected branch network and processed over 3.8 million data records per day from more than 2,600 pieces of equipment.

The CORTIX platform transformed the branch networks' maintenance processes by making them proactive to predict issues that could lead to equipment failure. These improvements enabled the branch teams to avoid equipment and process-related problems that typically lead to downtime. Reports were provided to the client for weekly and monthly summaries of deviations and recommended improvisations, enabling the operations manager to avoid energy wastage. Besides increasing the efficiency of the branch and ATM operations, the CORTIX platform empowered the maintenance manager with critical insights on equipment performance after a service activity was completed. This enabled them to determine whether the issue was correctly addressed or not, thereby ensuring the effectiveness of the maintenance activities.

The CORTIX platform utilizes the Service Window® framework. Service Windows are the unique energy profiles that a typical branch goes through during its daily operations. Based on effective monitoring of energy consumption in these Service Windows, the team detected and plugged energy deviations or leakages that occurred on a day-to-day basis.

This provided relevant information about branch energy consumption patterns and variations during business and non-business hours along with monthly insight reports. The branch operations manager could then easily navigate and understand operational anomalies and energy profiles, as well as customer, employee and equipment compliances.

The Result

Real-time tracking for energy equipment like diesel generator (DG) sets, uninterrupted power supplies (UPS), batteries, and HVAC equipment was enabled. Operation and maintenance alerts were deployed for HVAC equipment, ATMs, server rooms and other branch areas. Uniform energy policies were implemented to reduce the carbon footprint and improve the customer experience at the branches.

Key results achieved during 2019-2020 for 125 sites:

- **12.7%** reduction in energy consumption
- Average saving of **7,400 kWh** achieved per site, per month across the network of connected branches
- Schedule adherence compliance maintained at **99.97%**
- **2%** improvement in ATM area compliance as compared to baseline

Energy saved throughout the engagement since 2016 is equivalent to avoiding over 18,000 metric tons of carbon dioxide gas emission. With an average energy saving of 12% across the engagement, EcoEnergy Insights is extending its services across **an additional 600 bank branches** and deploying IoT hardware to connect, control and monitor the sites.

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, a leading provider of innovative HVAC, refrigeration, fire, security and building automation technologies. For more information on EcoEnergy Insights and the CORTIX™ platform, visit www.ecoenergyinsights.com and www.cortix.ai.

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