

EnergyDashboard® ENABLED PERFORMANCE MONITORING

Facility achieves 39% reduction in energy usage and reduces

Carbon footprint by 182 Metric Tons of CO2 annually



VaCom
Technologies

INDUSTRY

FOOD & BEVERAGE

APPLICATION

REFRIGERATED WAREHOUSE

SOLUTIONS

// EnergyDashboard® PERFORMANCE MONITORING SERVICE

// CONTINUOUS IMPROVEMENT ENGAGEMENT

BENEFITS

// REDUCED ONSITE ENERGY CONSUMPTION AND OPERATING COSTS

// REDUCTION IN GREENHOUSE GAS(GHG) EMISSIONS

// IMPROVED SUSTAINABILITY AND RELIABILITY OF FUTURE OPERATING COSTS

THE CHALLENGE

A multi-national food and agricultural products company operating a 50,000+ sq. ft. protein storage warehouse in California noticed gradually rising utility costs, which had a significant effect upon the operating cost of the facility. It was noted that the largest user of energy was the refrigeration system, which had been declining in performance and efficiency over time, partly due to the facility's inability to retain onsite refrigeration or energy engineering personnel. Compounding the rising energy costs, the facility was not able to dedicate resources toward mitigating growing and changing demand charges on their utility bills.

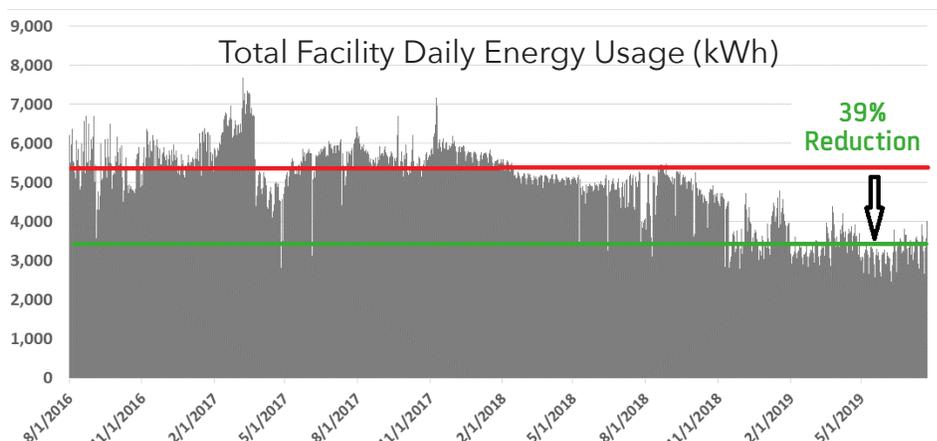
THE SOLUTION

The warehouse operator reached out to VaCom's Performance Monitoring Service Team, whose Refrigeration and Energy Engineers accessed the facility's refrigeration control system via a secure connection with VaCom's EnergyDashboard tool. System performance data was continuously measured, trended, and analyzed. Multiple energy-saving and performance improvements opportunities were identified. Opportunities ranged from equipment failures, behavioral changes, to setpoint changes. Each opportunity was furthermore analyzed financially and ranked according to its payback and criticality to operations.

During periodic review meetings, all stakeholders, including the facility operator, their refrigeration contractor, and the VaCom Engineers, each opportunity was assessed and the team formed a planned approach to address each opportunity for improvement. EnergyDashboard continued to measure the system's performance and the results of their work was manifested in the data.

THE RESULTS

Clear results measured a **39% reduction** in total facility daily energy usage (see graph below), and an annual savings of **800,000 kWh**, equating to **\$120,000** per year energy cost reduction. The energy savings equate to **182 Metric-tons of CO2** GHG emissions per year. Overall, the engagement with VaCom's Performance Monitoring Service has provided a Return on Investment (ROI) of greater than **700%**. The facility is dedicated to maintaining the savings through a continuous improvement program and team approach involving all stakeholders.



Before Performance Monitoring Average

With Performance Monitoring Average