

LARGE-SCALE HVAC

Transformative Wave's CATALYST & eIQ Platform



How H&M Hennes & Mauritz L.P. (H&M) utilizes Transformative Wave's CATALYST and eIQ Platform technology in their NY stores as part of their uniform energy management strategy to promote energy efficiency and sustainability.

“The Catalyst provides an intuitive portfolio dashboard which we use to easily identify comfort issues and mechanical faults across multiple sites at once.”

— KYLE HOPKINS

THE CHALLENGE

As Energy Specialist for H&M, Kyle Hopkins is responsible for managing energy across H&M's portfolio of U.S. retail store locations. Until recently, one of Kyle's challenges was that their stores were served by multiple building management systems (BMS) that varied in capabilities and lacked a single portal for enterprise oversight. Further, Kyle was concerned that H&M's HVAC systems were not performing as efficiently as possible with mechanical faults going undetected, impacting both occupant comfort and operating costs.

In Transformative Wave, Kyle found a partner with the technology to solve both problems. The CATALYST and eIQ Platform significantly improves the energy efficiency of H&M's rooftop HVAC units, provides deep insight into individual store performance and communicates industry-leading fault detection and operational data.

PROJECT AT A GLANCE

Customer	Kyle Hopkins, H&M
Location	7 stores in New York
Installation Date	November 2016—Present
Equipment	CATALYST with eIQ Platform
Installation Cost	\$1,000 to \$2,600 per unit*
Annual Cost Savings	\$35,000 to \$40,000
Average HVAC Energy Savings	Estimated 40% annually**

*Installation cost including incentives

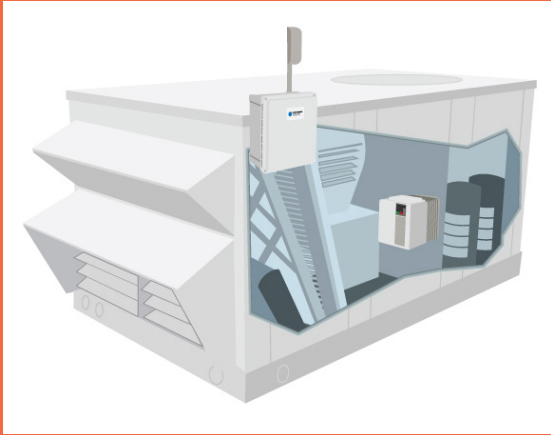
**Estimated values extrapolated from first two installations

THE SOLUTION

Transformative Wave worked with Kyle to assess his multi-location project for utility rebate eligibility and energy savings potential in order to maximize his ROI. The CATALYST's energy savings and associated rebates helped to subsidize the cost of the enterprise BMS that along with HVAC asset management, includes lighting control and energy monitoring. Transformative Wave prioritized according to Kyle's main concerns: energy conservations, occupant comfort, and consolidated control. H&M now has a complete solution that centralizes control over their portfolio of stores and reduced HVAC energy use by 40%. This translates to nearly \$40,000 of annual savings for just 7 of the H&M stores in New York which benefited from NYSERDA funding.

THE CATALYST/eIQ PLATFORM

The CATALYST is an easy-to-install RTU retrofit kit designed to optimize energy consumption. The CATALYST enables variable speed fan modulation, differential economizer control, and demand control ventilation. The CATALYST kit also includes several sensors that monitor temperatures and identify potential mechanical failures. The eIQ Platform is the user-friendly web-based interface to the CATALYST. It is used to measure HVAC energy use, monitor equipment health, control set points, and set schedules.



ENERGY CONSERVATION BENEFITS

- The CATALYST operates supply air fans at variable speeds to optimize energy consumption.
- The CATALYST enhances the economizer function to maximize the use of outside air as a free cooling resource.
- The CATALYST deploys Demand Control Ventilation (DCV) which optimizes energy usage based on real-time occupancy.



BUILDING AUTOMATION BENEFITS

- The eIQ Platform is a web-enabled communication platform that can act as a full-featured building automation system controlling HVAC, lighting and other assets.
- The eIQ Platform allows facility managers to manage schedules and setpoint changes globally across multiple locations.
- The eIQ Platform communicates alarms and alerts generated by Transformative Wave's powerful fault detection algorithms that identifies issues and allows H&M to resolve them quickly before occupant comfort suffers.
- The eIQ Platform's intuitive, web-enabled interface makes the system accessible and easy to use.

ADDITIONAL BENEFITS TO H&M

- The eIQ Platform was able to deliver a lighting panel solution for H&M that leverages much of their existing hardware to minimize cost while meeting their needs.
- The eIQ Platform integrated a customized control solution to communicate with their existing "smart breaker" panels.
- The eIQ Platform enabled an added feature for energy monitoring of each store's total power usage.

GET STARTED TODAY

- To learn more about the technology: visit transformativewave.com or email info@wavetech.com.

