



Hotel Monaco Energy-based Control System Optimization

Project Overview

The award-winning Hotel Monaco, located in downtown Seattle, tasked ATS with investigating, developing and implementing energy-saving measures with a financial payback of five years or less. ATS not only reduced Hotel Monaco’s energy consumption while upgrading the Alerton Energy Management and Control System, but provided a financial payback of 2.4 years with a 41% return on investment for the project.

ATS and Seattle City Light

ATS was one of the few companies chosen to be a part of Seattle City Light’s control system retro-commissioning pilot program. This involves examining the control systems already installed in buildings and optimizing them to work as efficiently and economically as possible. Working with Seattle City Light, ATS was able to secure \$46,117 in utility rebates and retro-commissioning incentives for Hotel Monaco.

One year of data collected since implementation illustrates the following benefits:

- 490,352 kilowatt hours saved
- 17.6 point drop in Energy Usage Index
- \$46,117 in utility rebates received
- \$60,004 reduction in total energy spent

Summary of Energy Conservation Measures

ATS implemented over a dozen control-focused Energy Conservation Measures (ECMs) to optimize the Alerton system already in the 150,000 square foot building. This included upgrading the original IBEX system to the newer, enhanced Envision for BACtalk system which has become Alerton’s standard since the building was originally outfitted.

Retro-commissioning Energy Conservation Measures deployed included:

- Adding Variable Frequency Drives
- Repairing energy-wasting valves and actuators
- Optimizing the chilled and hot water plants with new, load-based sequences of operations
- Reducing equipment run times

“Everyone benefits from control system optimization and retro-commissioning. Building operating costs were reduced, fewer guests complained, systems were easier to maintain, and our Engineering staff received valuable training and improved documentation. Overall, our hotel and restaurant guests are more comfortable.”

-Dan Muncy Chief Engineer, Hotel Monaco

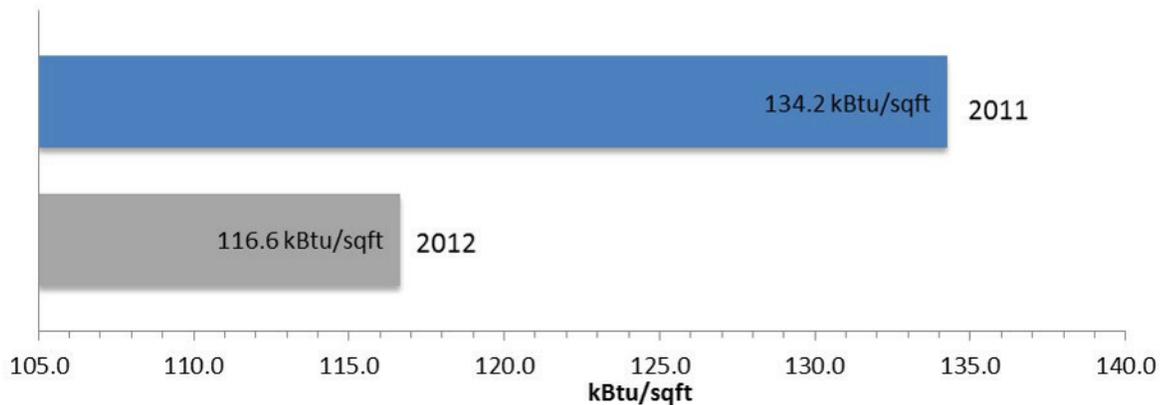
Final Project Results

Final Project Cost	Final Utility Rebates	Cost After Rebates	Energy Bill Reduction	Simple Payback	Return on Investment
\$192,967	\$46,117	\$146,850	\$60,004	2.4 years	41%

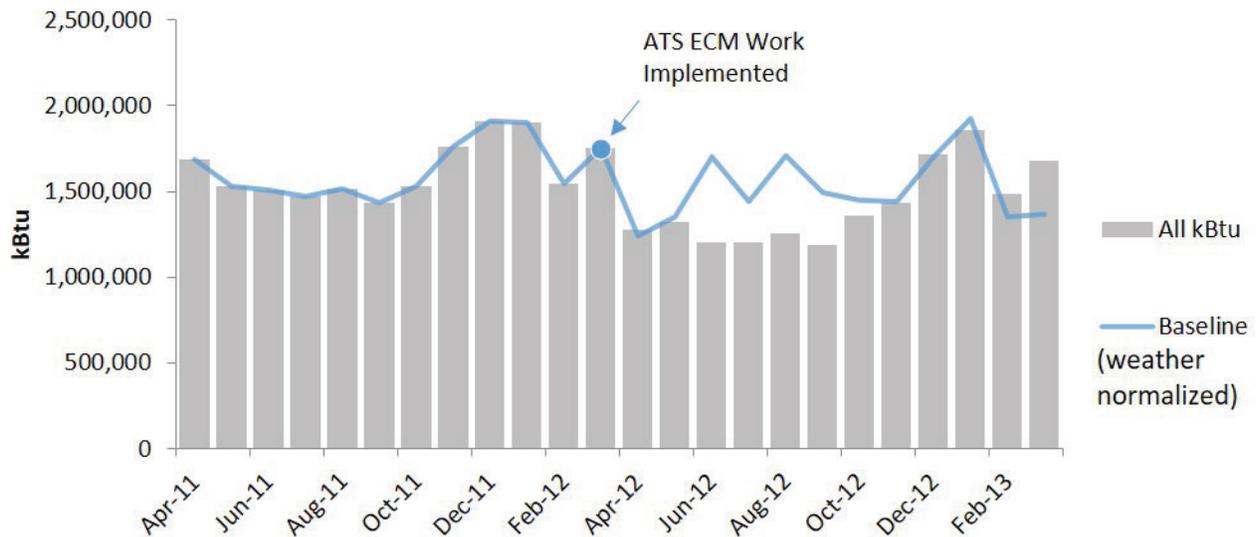
Breakdown of Energy Savings at Hotel Monaco

Since ATS completed this commissioning at Hotel Monaco, the amount of energy used has considerably dropped. The Hotel Monaco now enjoys a smaller ecological impact and greater ongoing financial savings.

Energy Usage Index



Monthly Consumption



About ATS

ATS, established in 1986, specializes in custom engineered and installed Building Automation Systems control solutions for buildings' mechanical and electrical systems, allowing owners to reduce energy consumption and maximize effectiveness of facilities management personnel. ATS has offices in Washington, Idaho, Montana, Colorado and Alaska. Contact your local ATS representative to find out how you can start running your building more efficiently and economically. Visit www.atsinc.org to find the location near you.

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