



Maximizing savings by combining EMS upgrades with a custom utility incentive

400 CROWN COLONY DRIVE



BACNET

An open protocol for building communications which allows devices throughout the building to communicate with one another regardless of the manufacturer

ENERGY SAVINGS:
\$83,000 / year

PAYBACK PERIOD:
2.7 years

Lincoln Property Company, an international real estate firm, was looking to reduce operating expenses at 400 Crown Colony Drive in Quincy, MA. The building's existing energy management system (EMS) was outdated and had limited control over the HVAC equipment. Lincoln Property Company partnered with FMC Technologies (FMC) to create an advanced energy-efficiency and cost-saving solution.

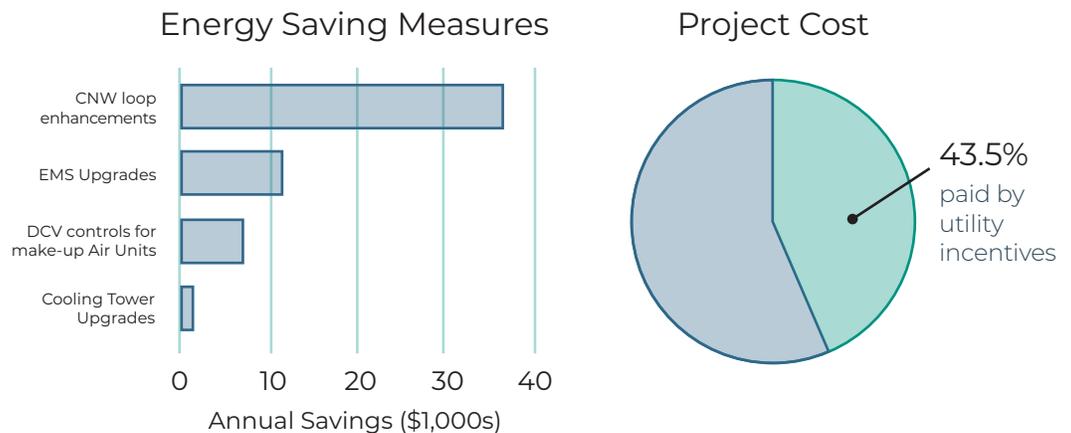
UPGRADING THE HVAC PERFORMANCE OF 400 CROWN COLONY DRIVE

Lincoln Property Company is an international real estate firm offering a comprehensive suite of value-added services for their clients. However, their building at 400 Crown Colony Drive lacked modern EMS capabilities and needed upgrading. Lincoln contracted FMC to identify energy and cost-savings opportunities for the aging EMS.

IDENTIFYING ENERGY SAVING MEASURES

FMC focused on creating a solution that would meet budgetary needs and provide maximum energy savings while delivering a high quality indoor environment. FMC did this with two courses of action: identifying energy efficiency opportunities and working with the local utility, National Grid, to create a custom utility incentive.

After several site walk-throughs, FMC assessed the existing HVAC mechanical equipment and identified four energy-saving measures for the building. The most significant of the energy-saving measures was reducing the condenser water (CNW) loop flow. This was accomplished by installing isolation valves on the CNW at every heat pump and variable speed drives on the main condenser water pumps. This measure alone included savings of over \$36,000 per year. Other measures included a new Energy Management System, implementing demand controlled ventilation (DCV) for the make-up air and cooling tower upgrades.



DELIVERING A CUSTOM UTILITY INCENTIVE

FMC's close relationship with both National Grid and Lincoln Property Company helped make this project feasible. National Grid agreed to pay for 43.5% of the project in a custom utility incentive, while also offering a 0% interest on-bill repayment plan for the remaining balance. Combined with the annual savings estimates, this ultimately led to a speedy payback period and a successful advanced energy-efficiency project.

About FMC

FMC Technologies provides advanced building systems that reduce building operating expenses, increase productivity, and provide a safe, comfortable working environment.

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