

Energy Efficiency Case Study

Brought to you by National Grid

The Markley Group Data Center

About The Markley Group

The Markley Group owns and operates the largest data center and telecom facility in Boston and the New England region. It specializes in the development and operation of mission critical facilities and has developed thirteen data center and telecom buildings throughout Europe and North America, with the group's flagship facility in Boston.

Project Summary

Looking to increase power density and reduce data center operating costs at their Boston facility, the Markley Group sought the help of the Sponsors of Mass Save. The Markley Group leases mission critical digital storage space, and in the data center industry it's a necessity to have the best technology to attract and retain customers. The Markley Group's electric utility—a Sponsor of Mass Save—worked conjointly with approved installation contractors to analyze and evaluate the modular row-based cooling to ensure the design would be a cost-effective upgrade that generated energy savings. The utility then covered 75% of the additional cost to use the new energy-efficient technologies. The new data centers are now more cost-effective with less CO2 and NOx emissions, and the Markley Group benefits from the new cooling system and reduced operating costs which get passed on to their customers. It's a win-win situation.

"The Mass Save program was very user-friendly and helped us through the whole process. Our local utility supported us financially and we couldn't have completed this project without their help."

Donald Esson, The Markley Group Chief Infrastructure Manager

Mass Save as a Strategic Partner

The Sponsors of Mass Save offer technical assistance and financial incentives to customers who design energy efficiency into new construction or renovated commercial facilities. The Markley Group worked closely with their local utility to develop a long-term plan to increase its energy efficiency. Through the Mass Save program, the utility then committed \$183,358 in energy-saving incentives for this project which is 75% of the additional cost of using the new energy-efficient technology.

Whether you are building a new manufacturing facility, upgrading old, inefficient equipment or manage a property in need of energy improvements, the Sponsors of Mass Save will help you identify cost-effective energy efficiency improvements, provide technical assistance, and offer financial incentives in addition to interest-free loans to help kick-start your company's next big project. To learn about these and other commercial and industrial energy efficiency programs available, visit MassSave.com/Business.



By placing the cooling directly where it is needed (washing the face of the servers), and recirculating the discharge heat before it mixes with the remaining space, the Markley Group gets optimal efficiencies.

Solution

Installation of new, more efficient cooling equipment to increase power density and reduce operating costs of data center

Total Project Cost \$405,305

Mass Save Sponsor Incentives \$183,358

The Markley Group Contribution \$221,947

Annual Energy Savings 1,833,575 kWh

Annual Cost Savings \$307,671

Simple Payback Period 8 months

About Mass Save:

Together, we make good happen for Massachusetts: Berkshire Gas, Cape Light Compact, Eversource, Liberty Utilities, National Grid and Unitil. As one, we form Mass Save[®], with the common goal of helping residents and businesses across Massachusetts save money and energy, leading our state to a clean and energy efficient future.







🌑 Unitil



