

Mass Save® Energy Efficiency Case Study

Beth Israel Deaconess Medical Center

PROJECT SUMMARY

The industry standard approach for laboratory ventilation is to provide a fixed or constant number of air changes (using 100% outdoor air) to dilute any potential buildup of contaminants within the lab, ensuring the safety of the researchers. However, this approach can also lead to increased costs and wasted energy by moving heated or air conditioned air out too quickly — providing excessive ventilation when indoor conditions are just right. A demand ventilation system that samples the air allows for a variable air change rate, giving Beth Israel Deaconess Medical Center (BIDMC) the assurance that the ventilation rates could be lowered by real time measurement of the laboratory environment, and increasing those flows if contaminants were sensed, providing a safer and more energy efficient operation for their laboratories.

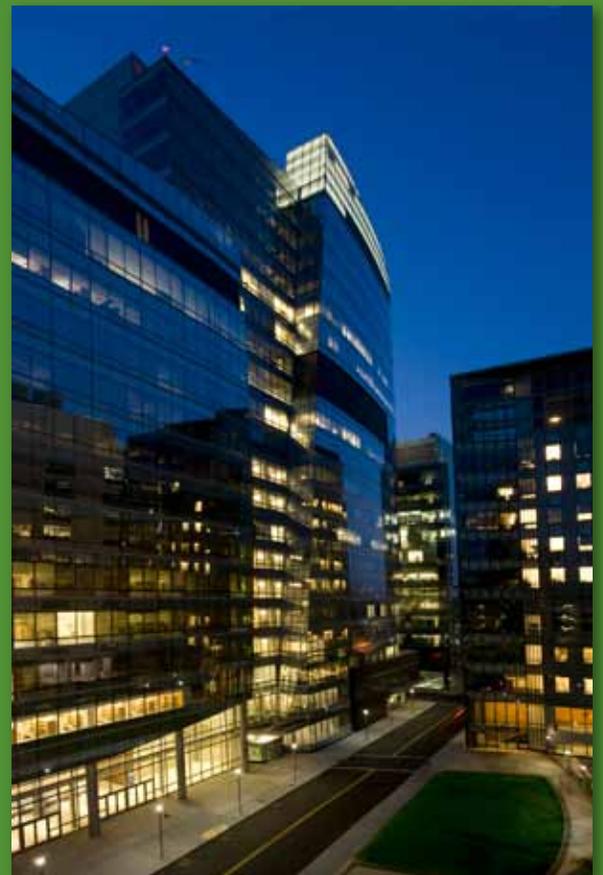
“The project installation went smoothly. Beth Israel Deaconess Medical Center has achieved spectacular savings and a quick payback.”

- **Mark Lukitsch,**

*Energy & Utilities Manager
Beth Israel Deaconess Medical Center*

Solution: Demand ventilation in lab spaces and setbacks in non-lab spaces.

- Total Project Cost \$644,423
- Mass Save Sponsor Incentive \$321,926
- BIDMC Contribution \$322,497
- Annual Gas Savings 159,913 Therms
- Annual Electric Savings 1.8 million kWh
- Return on Investment 71% (1.14 year payback)



About Beth Israel Deaconess Medical Center

Beth Israel Deaconess Medical Center (BIDMC) is a teaching hospital of Harvard Medical School, located in Boston, MA with a history dating back to 1896. Today, it is best known for its excellence in patient care, dedication to biomedical research and strong teaching and community service programs. As one of the leading facilities in a city with a rich history of medical and technological innovation, BIDMC had been looking for ways to lower its energy use, reduce its carbon footprint and become a more efficient, sustainable organization.

Mass Save® as a Strategic Partner

With the promise of safer, more efficient ventilation in its labs, and large incentives available from BIDMC's electric and gas utility providers, it made sense for the Medical Center to add to its sustainability initiative by tackling the ventilation in its facilities. Partnering with Mass Save brought additional scope, engineering verification and savings to the project. Additional ventilation and temperature setbacks in non-lab spaces increased the rate of return of the total project.

Whether you are building a new manufacturing facility, upgrading old, inefficient equipment or manage a property in need of energy improvements, the Mass Save program 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 or join the **Mass Save group on LinkedIn**.

About Mass Save

Mass Save is an initiative sponsored by Massachusetts' gas and electric utilities and energy efficiency service provider, including Berkshire Gas, Cape Light Compact, Columbia Gas of Massachusetts, National Grid, New England Gas Company, NSTAR, Unitil, and Western Massachusetts Electric Company. The Sponsors of Mass Save work closely with the Massachusetts Department of Energy Resources to provide a wide range of services, incentives, trainings, and information promoting energy efficiency that help residents and businesses manage energy use and related costs.

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