

LABORATORY

SAVE ENERGY & MONEY in your laboratory.

Opportunity and Benefits

Safety is a top priority in all laboratory facilities. You can save energy and money while maintaining or even improving lab safety! Labs use tremendous volumes of exhaust air to flush out potentially hazardous air. This air must be replaced by fresh outside air that is heated in winter or cooled in summer to keep spaces comfortable. This uses a tremendous amount of energy, often 4 - 6 times more energy per square foot than a typical office building. Many existing labs have the ability to reduce their energy use by 30 percent or more.

The Mass Save program offers technical assistance to help you identify what energy-saving measures may be available for your lab facilities. Our energy specialists understand safety is the highest priority. They will find you ways to decrease costs without compromising lab safety or productivity.

Incentives and Financing

Program incentives and financing can help make your energy efficiency projects a reality so that you can start saving energy and money. Our energy specialists can help you with any questions.

Training

Educate your staff on the latest equipment and best practices available for labs by taking Labs21 training—available through the Mass Save program. Your staff can then apply the lessons learned to the everyday operation of your lab for optimal productivity and efficiency.



ABOUT MASS SAVE

Mass Save® is an initiative sponsored by Massachusetts' natural gas and electric utilities and energy efficiency service providers, including Berkshire Gas, Blackstone Gas Company, Cape Light Compact, Columbia Gas of Massachusetts, Eversource, Liberty Utilities, National Grid, and Until.

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.

Start saving now!

Get started on improving your laboratory performance today. Visit us online at MassSave.com Some restrictions may apply.



How can you save energy at your lab?

1 Manage Lab Air Changes:

Many older labs with low fume hood counts operate at 10 Air Changes per Hour (ACH) or above, 24 hours a day. This is by far the largest driver of energy costs in most labs. New technologies combined with new national standards for lab ventilation allow labs to substantially reduce lab ventilation rates. A systematic reassessment of lab airflow requirements often leads to a reduction in occupied ventilation rates, dramatically reducing fan, heating, and cooling energy use.

2 Reduce Fume Hood Exhaust:

Fume hoods are often the drivers of lab ventilation rates; measures that reduce fume hood exhaust can produce substantial savings.

- i. Sash monitoring programs
- ii. Sash positioners or modified sash systems
- iii. Proximity sensors
- iv. Reduced face velocity requirements
- v. High efficiency hoods

3 Optimize HVAC Operation

Implementing an unoccupied mode of HVAC operation can permit additional ventilation rate reductions, perhaps to as low as 4 – 6 ACH, for as many as 90 hours per week. You can implement this strategy while providing the override capability to accommodate intermittent after-hours use.

For new labs, installing a higher efficiency HVAC unit can produce additional energy savings since labs use significant amount of outside air which has to be conditioned for the work space.

4 Demand Controlled Ventilation:

Continuous air monitoring can enable your lab's control system to automatically adjust air flows based on the current conditions. This creates a safer environment for lab occupants while enabling lower minimum airflow rates. An added benefit is the ability to document lab environmental conditions.

5 High Efficiency Lighting & Controls:

High efficiency lighting can reduce lighting costs by 30 percent while improving light quality. Lighting can be controlled to match occupancy with sensors or by building automation controls. Integrated control of lab HVAC and lighting can provide enormous savings while providing clear indication for lab users of the space's ventilation status.



Brought to
you by:



BLACKSTONE
GAS COMPANY



Columbia Gas
of Massachusetts
A NiSource Company

EVERSOURCE



nationalgrid
HERE WITH YOU. HERE FOR YOU.

