

MIDDLEBURY

ENERGY2028

OVERVIEW OF 2025 BICENTENNIAL HALL HVAC CONTROL UPGRADES

The MBH building now features a Point-of-Use HVAC control system that uses motion sensors to detect occupancy in offices, labs, and classrooms. This energy-efficient approach helps reduce heating and cooling in spaces that are not actively in use.

New light indicator beacons and motion sensors have been installed in many classrooms & laboratories. Motion sensors are mounted in the ceiling, and in some rooms, existing light sensors have been repurposed for this function. When motion is detected, the amber light on the beacon will turn off, signaling the system has activated. Rooms may feel cooler or warmer when first entered, especially in the morning. It may take a few minutes for the room to reach the desired temperature.

UNOCCUPIED



When the amber beacon is ON, the room is in unoccupied mode. This means that temperature control and airflow is reduced.

OCCUPIED



When the amber beacon is OFF, the room is in occupied mode. This means that temperature control and airflow are set to normal conditions.

KEYED SWITCHES



Some specialized labs now have a keyed switch for maintaining 24/7 occupied mode. This mode is only to be used when required for experiments needing consistent temperature/ventilation.

These switches will be managed by a building manager and should be returned to Auto mode when continuous use is no longer needed.

RED BEACON



In labs with fume hoods, there is a red beacon that will illuminate if the room airflow is positive with respect to the hallway. Typically, the flow of air in labs with fume hoods moves from the hallway into the room, thus making the room negative to the hallway.

If the red beacon is on, please contact a building manager so the issue can be resolved.

IMPACT

In the 30 days that this energy initiative has been active, we have saved 2,876 MMBTUs of thermal energy and 55,405 KWHs of electrical energy for a cost savings of \$40,000 over the same period as last year.

The Energy & Technology Manager will continue working with Efficiency Vermont MBH energy models to understand the energy savings associated with this improvement.

LOOKING FOR ADDITIONAL INFORMATION?

For MBH specific information, please contact Cathy Ekstrom or Jody Smith.

For more information about Energy 2028 initiatives, visit [go/energy2028](https://go.energy2028)