

PURPOSE

Lehigh University is committed to energy efficiency, energy conservation, and mitigating energy-related impacts on the environment. This policy identifies energy conservation as a significant issue for Lehigh University and outlines steps to manage and reduce energy consumption and energy-related greenhouse gas emissions on campus in a manner that is consistent with the university's mission of education, research and service. (see Lehigh University Strategic Plan, Campus Master Plan, Sustainability Plan, and President's Climate Commitment)

POLICY

Lehigh's policy is to reduce energy consumption and energy-related greenhouse gas emissions on its campuses through infrastructural and technical strategies and everyday efforts of students, faculty, staff, and university visitors (the "university community"). At Lehigh University, energy includes electricity, chilled water, steam, natural gas, propane, and fuel oil. While maintaining the university's mission, the following energy conservation measures will be pursued:

- Education and outreach that encourage energy conservation and environmental stewardship on campus and beyond.
- Individual actions such as closing doors and windows and turning off lights, window air conditioning units and computers when not in use and at the end of each day. It is not uncommon to achieve total reductions of 10 percent or more through focused efforts of building occupants.
- Technical strategies like pursuing energy savings in equipment operations and maintenance, as well as in building renovation and new construction.
- Exploration and application of renewable energy sources to support Lehigh's operations.

EXPECTATIONS

- The university community will acknowledge the importance of energy conservation on campus by following the guidelines outlined in this policy (see Guidelines).
- Lehigh's Facilities Services and Campus Planning and the department(s) occupying each building will ensure that university buildings are operated, maintained, renovated, and constructed in order to achieve energy savings while protecting university assets and providing appropriate working and learning conditions for building occupants.
- All energy conservation measures, whether undertaken by the Facilities organization or by individual members of the university community, will be consistent with the university's mission.

MAKE A DIFFERENCE

Every member of the university community has the responsibility to actively participate in conserving energy. With up to 50 percent of building electricity being consumed by plug loads (things plugged in), individual occupants have significant power to reduce consumption. Additionally, occupant control of light switches, thermostats, doors, and windows can conserve significant amounts of energy as well. Supervisors should communicate this policy, monitor their work and living spaces, and discuss conservation opportunities with their respective teams. Gryphons, fraternity/sorority leaders, and eco-reps should make energy conservation a topic of discussion with students living in university housing. Faculty members are welcome to include energy conservation in their curricula. The university community is encouraged to make suggestions for additions or modifications to this policy, as well as other energy conservation suggestions, by emailing sustainability@lehigh.edu or calling 610-758-3976. This policy will be revised as needed to meet changing conditions and expectations.

GUIDELINES

The following guidelines for energy conservation are applicable in all Lehigh facilities:

Lighting

- 1 Lights should be turned off when not in use, when leaving a room unoccupied and at the end of the day, including lights in common spaces. Turning lights off, even for a few minutes, saves energy.
- 2 Energy-saving fixtures, lamps, ballasts and lighting control systems should be used to the fullest extent possible in routine maintenance and repair jobs, as well as in major renovation and new construction projects. Use of incandescent bulbs is highly discouraged.
- 3 Artificial lighting is to be used only when daylight is insufficient to perform the task at hand, or where campus safety would be compromised without artificial lighting.
- 4 Lighting levels recommended by the most recent edition of the Illuminating Engineering Society (IES) Lighting Handbook will be used as guidelines.
- 5 Energy-saving occupancy sensors and day lighting control systems will be installed whenever possible. Occupants may request installation of occupancy/vacancy sensors, if not currently installed, by calling 610-758-3940.
- 6 Day lighting should be used to the fullest extent possible in major renovation projects and new construction projects.

Water

- 1 Water is to be used sparingly. Showers and faucets should be turned off when not being actively used, for example while brushing your teeth.
- 2 Domestic cold water should be used whenever possible, unless sanitary or other special requirements necessitate the use of hot or chilled water.
- 3 Dual flush toilets and low flow toilets, showers and faucets will be installed whenever possible.
- 4 Domestic hot water temperatures will be controlled to 120 degrees Fahrenheit unless medical, instructional, research or other special requirements necessitate the use of other temperatures.

Space heating and cooling

- 1 University buildings shall be managed to provide for the following temperature ranges:

	When Occupied (*)	When Unoccupied
Cooling Season	75 – 78 degrees Fahrenheit	83 degrees Fahrenheit maximum
Heating Season	69 – 72 degrees Fahrenheit	64 degrees Fahrenheit minimum

(*)The following general occupancy schedules will be assumed:

Building Type	Occupied Time
Administrative	7 a.m. to 7 p.m., Monday through Friday
Academic	7 a.m. to 7 p.m., Monday through Friday
Athletic facilities	In accordance with use or hours of operation
Residence halls and Greek houses	24 hours per day, 7 days per week except for holidays and extended breaks
Libraries	24 hour per day, 7 days per week temperature and humidity control, ventilation by operating hours
Research Labs	24 hours per day, 7 days per week
Other	As appropriate

Energy conservation should be a consideration when class schedules are established and events are scheduled. Activities requiring extended hours of operation should be consolidated into fewer buildings as much as possible.

- 2 Building occupants should not adjust thermostats to settings outside of above ranges. Occupants are encouraged to dress appropriately for the season to minimize the need for excessive heating and cooling.
- 3 Temperature exceptions, either on a one-time or permanent basis, may be granted when required to support the missions of the university (see Exceptions).
- 4 While buildings are being heated or cooled, outside doors and windows should remain closed and as secure as possible to prevent loss of conditioned air.
- 5 Chemical fume hood sashes should be closed when not needed to prevent loss of conditioned air.
- 6 Whenever possible, exhaust fans should be turned off when hoods are not in use.
- 7 Window air conditioning units (where applicable), should be turned off when not in use and at the end of the day.
- 8 Due to the energy they consume, use of portable space heaters, electric blankets, and heat lamps is highly discouraged unless the building cannot be controlled within the above temperature ranges.

Purchasing

- 1 ENERGY STAR qualified equipment, systems and appliances (see www.energystar.gov) or EPEAT registered equipment (www.epeat.net) should be purchased whenever such products are available and the following two conditions are satisfied:
 - a The quality and function of the ENERGY STAR/EPEAT product is equal or superior to that of non-ENERGY STAR/EPEAT products; and,

- b The additional upfront cost of the ENERGY STAR/EPEAT product is less than its resulting lifecycle energy savings.

If it is not possible to satisfy both of these conditions, then the most energy efficient equipment, systems and appliances possible should be purchased.

- 2 When comparing non-ENERGY STAR/EPEAT to ENERGY STAR/EPEAT products, consider operating efficiencies in purchasing decisions.

Computers

- 1 Faculty and staff should ensure power settings on computers and other electronic office equipment are adjusted to maximize energy savings, unless research or instructional requirements require full power. The following power settings should be used for computers:
 - a CPUs: Set to enter system standby or hibernate mode after 30-60 minutes of inactivity; and,
 - b Monitors and hard disks: Set to enter sleep mode after 5-20 minutes of inactivity.
- 2 Computers set up by Library and Technology Services (LTS) will be configured accordingly. For detailed instructions on how to activate power settings on your computer, please consult the ENERGY STAR website or contact LTS.
- 3 Unless accessed remotely after working hours, computers and other electronic office equipment should be turned off when not in use for extended periods and at the end of the day.

Miscellaneous

- 1 Minimize the use of elevators by taking the stairs whenever possible.
- 2 Shared use of office refrigerators, microwaves and coffee makers is highly encouraged.
- 3 Additional energy conservation strategies are available at <https://sustainability.lehigh.edu/energy-conservation-tips>.

EXCEPTIONS

Exceptions from this policy can be granted when necessary to accommodate instructional, research, medical, or other special requirements. Exception requests shall be evaluated on a case-by-case basis. To request an exception, call 610-758-3940.

REPORTING BUILDING PROBLEMS

Faculty and staff are encouraged to report building conditions that are inconsistent with the guidelines outlined in this policy by placing a work request with Facilities Services and Campus Planning online at <http://www.lehigh.edu/~infac/> or by phone at 610-758-3940.

ENERGY PLAN

A companion document to this policy will provide a specific, action-oriented energy plan for implementation of energy conservation measures.