

The University of North Carolina at Chapel Hill

Energy Use Policy

Background

The University of North Carolina at Chapel Hill is committed to promoting energy efficiency and conservation to benefit students, faculty, staff and the campus community. Beyond reducing utility bills, careful energy management helps protect the environment and extends the life of equipment while also maintaining a comfortable setting in which to learn, teach and work.

The University has already committed to climate neutrality by 2050. State legislation requires the University to reduce energy consumption by 30 percent per square foot by 2015 using baseline levels from 2003. New buildings must be at least 30 percent more energy efficient than the current state building code. Petroleum consumption will be reduced 20 percent by January 1, 2010, and 75 percent of new vehicles will be required to run on alternative fuels.

The University will only reach these goals with support and participation from students, faculty and staff. With the new Energy Use Policy in place, the University will achieve some savings through infrastructure changes, as well as operations and maintenance practices. But to be successful, it will require people who use campus buildings to change their behavior in ways that promote energy savings, including turning off lights and computers after normal hours.

Scope of the Policy

This policy outlines new energy conservation practices and schedules for heating, cooling and using electricity in campus buildings; lists steps students, faculty and staff should take when using campus buildings; modifies purchasing practices for products and services; sets new energy-related requirements for renovation and construction projects; and encourages people on campus to use environmentally friendly transportation. The policy also establishes a dedicated e-mail address to encourage students, faculty and staff to share ideas for additional energy savings.

Applicability

This policy applies to all University students and employees, including faculty, EPA non-faculty, staff and student employees. It is the responsibility of every member of the University community to conduct himself or herself in compliance with this policy.

Energy Conservation Measures

Heating and Cooling Standards for Campus Buildings

- Temperatures in campus buildings will be set as follows:

| | When Occupied | When Unoccupied |
|---------------|-----------------------------|-------------------------------|
| Summer | 76 to 78 degrees Fahrenheit | 83 degrees Fahrenheit maximum |
| Winter | 69 to 71 degrees Fahrenheit | 64 degrees Fahrenheit minimum |

These temperature set points are based on recommendations from the American Society of Heating, Refrigerating, and Air-Conditioning Engineers for occupied spaces. The Facilities Services Division is responsible for coordinating implementation of these new temperature standards according to the occupancy schedules below.

Occupancy Schedules

| Building Type | Occupied Time |
|-----------------------|--|
| Standard building | 7 a.m. to 7 p.m., Monday through Friday |
| Gymnasiums | In accordance with listed hours of operation |
| Teaching laboratories | 7 a.m. to 8 p.m., Monday through Friday during the academic year |
| Residence halls | 24 hours per day, except holidays and extended breaks |
| Libraries | 24 hour temperature and humidity control; ventilation control by schedule only |
| Research laboratories | 24 hours per day |

- Operation schedules and temperature setpoints will be modified in cooperation with the building manager as needed to accommodate non-standard building operations.
- Humidity limit is 60 percent in all cases.
- Occupied temperature set points will be achieved during normal building hours.

Purchasing Practices

Energy efficiency should be standard criteria in all requests for proposals, specifications and contracts for products and services.

- Purchase ENERGY STAR-rated equipment per the UNC Energy Efficient Purchasing Policy.
- Purchase and install laboratory equipment that minimizes energy and water use.
- Purchase fuel-efficient vehicles that run on alternative energy sources.
- Prohibited equipment includes:
 - Incandescent and halogen lighting without prior written approval from UNC Energy Management.
- Discouraged equipment includes:
 - Office refrigerators, hot plates and personal heaters, except as needed to achieve specified temperature ranges and for medical purposes.

Renovation and Construction

All campus renovation and construction projects should adhere to the Energy Use Policy. Specifically:

- Renovation and construction projects shall comply with the UNC Design and Construction Standards, NC State Building Codes and North Carolina General Statute 143-64.
- Manage space to reduce the need for new square footage.
- Co-locate spaces with high ventilation requirements and place in separate air handling zones.
- Co-locate spaces with high cooling requirements and place in separate air handling zones.
- Space management practices should encourage co-locating programs with complementary schedules.

Campus Community

Faculty, staff and students are instrumental to the success of the Energy Use Policy. To support the energy conservation measures outlined in this policy, members of the campus community can take the following actions:

- Dress for the weather.
- Turn off lights and equipment when leaving a room, even for short periods of time.
- Ensure that lights and equipment are turned off in common areas at the end of the workday.
- Ensure doors and windows are closed overnight and when the building is heating or cooling.
- Unless required for remote access, turn off personal computers and equipment at night; configure to power down automatically when not in use.
- Walk or bike when traveling around campus whenever possible.
- Use public transportation or carpool whenever possible.
- Plan activities to eliminate or combine trips and reduce vehicle use.
- Refer to additional information about transportation resources at <http://www.dps.unc.edu/Transit/transitnav.cfm>.

Feedback from the Campus Community

The Facilities Services Division has established a designated e-mail address for members of the campus community to report energy saving opportunities. Send ideas to Save-Energy@unc.edu.

Effective Date

This policy is effective July 1, 2009.

References

- American College and University Presidents Climate Commitment (<http://www.presidentsclimatecommitment.org/>)
- N.C. General Statute 143-64 (Senate Bill 668 and 1946)
- 20% Petroleum Reduction, NC Session Law 2005-276, Section 19.5
- 75% Alternative Fuel Vehicles, U.S. Energy Policy Act of 1992
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers Standard 55-2004

This Policy is maintained by the Facilities Services Division.