



## UNC Chapel Hill Energy Policy

UNC Chapel Hill is committed to promoting energy efficiency and conservation for the benefit of our students, faculty, staff and community. Beyond reducing utility bills, careful energy management benefits the environment and extends the life of equipment while simultaneously maintaining a comfortable environment for learning and working.

The University has already committed to climate neutrality by 2050. State legislation requires us to reduce energy consumption per square foot 30% by 2015, relative to a 2003 baseline. New buildings must be at least 30% more energy efficient than the current state building code. Petroleum consumption is to be reduced 20% by January 1, 2010 and 75% of new vehicles are supposed to run on alternative fuels. Achieving these goals requires active support and participation by all members of the campus community. Some of the savings will result from infrastructure changes, some from operations and maintenance practices, and some from occupant behavior. UNC's distinct categories of behavioral energy conservation are outlined below and are applicable to all members of the UNC community.

### **Building Management and Occupancy Schedules**

- Temperature Set Points:

	<b>Occupied Set Points</b>	<b>Unoccupied Set Points</b>
<b>Summer</b>	76-78 deg F	83 deg F max.
<b>Winter</b>	69– 71 deg F	64 deg F min.

- Set points are in accordance with ASHRAE recommendations for occupied spaces.

- Occupancy Schedules:

<b>Building Type</b>	<b>Occupied Time</b>
Standard building type	7 am to 7 pm, M-F
Gymnasiums	In accordance with listed hours of operation
Teaching labs	7 am – 8 pm, M-F during school year
Residence Halls	24 hours per day, except holidays and extended breaks
Libraries	24 hour temperature/humidity control, ventilation control by schedule only
Research labs	24 hours per day

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

### **Occupant Behavior**

- Dress for the weather.
- Turn off lights and equipment when leaving a room, even for short periods of time.
- Departments shall 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 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.

### **Purchasing Practices**

Energy efficiency should be standard criteria in all requests for proposals, specifications and contracts for products and/or 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**

- Renovation and construction projects shall comply with the UNC Design and Construction Standards, NC State Building Codes and NC 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 collocating programs with complementary schedules.

### **Transportation Practices**

- 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.

### **Feedback**

- Report energy saving opportunities to Save-Energy@unc.edu

### **References**

- ACUPCC <http://www.presidentsclimatecommitment.org/>
- NC General Statute 143-64 (Senate Bills 668 and 1946)
- 20% Petroleum Reduction, NC Session Law 2005-276, Section 19.5
- 75% Alternative Fuel Vehicles, US Energy Policy Act of 1992
- ASHRAE Standard 55-2004
- UNC Energy Efficient Lighting and Purchasing Policies