THE UNIVERSITY OF ALABAMA IN HUNTSVILLE

ENERGY MANAGEMENT POLICY

- **Number** 06.06.14
- **Division** Administration Facilities and Operations
- Date November 1, 2008: Reviewed/Revised June 28, 2022; Reviewed/Revised April 28, 2025
- **Purpose** It is essential that the campus adopt an energy policy to promote the conservation of energy. This will result in savings that can be invested in The University of Alabama in Huntsville ("UAH" or "University") infrastructure needs in addition to conserving our natural resources.
- **Policy** The Energy Management Policy of the University is designed to establish an understanding of the need for energy conservation and to implement methods of conserving energy and lowering energy costs. These are the principles the University applies to achieve comfortable working and learning conditions:
 - The University community embraces the importance of this energy policy and the need for energy conservation.
 - Occupants of UAH facilities are encouraged to support energy conservation measures.
 - Facilities & Operations (F&O) staff work collaboratively to ensure that energy conservation measures are implemented while equipment is operated and maintained according to best management practices.
 - Planning, Design, and Construction activities meet applicable regulatory requirements while also striving to be consistent with recommended energy guidelines and energy codes.
 - The University coordinates courses and activities according to time and location that provide an optimal learning environment that also maximizes energy conservation and reduces utility consumption.
 - The University has adopted temperature guidelines for the heating and cooling of classrooms, offices, and general use/purpose spaces.
 - The University follows industry lighting level standards for classrooms, offices, and general use/purpose spaces.
 - The University ensures that lighting for security purposes will be maintained and improved as opportunities arise.

• F&O manages the University's Energy Management Policy, the energy management strategy, energy conservation projects, and utility metrics.

Energy conservation suggestions and/or ideas can be emailed to the Director of Facilities Maintenance & Energy Management at energymanagement@uah.edu.

Requests for exceptions to this policy must be submitted with justification to the <u>F&O Service Desk</u> at facilities@uah.edu or 256-824-6490.

Lighting Levels

New interior lighting will be high efficiency LED fixtures, whenever possible. New LED fixtures will be used to replace existing, less efficient lighting whenever economically feasible and appropriate. Exterior lighting being replaced with LED will meet current code requirements. The most recent edition of the IES (Illuminating Engineering Society) The Lighting Library® will be used as a guideline for recommended lighting levels.

Vacancy/motion sensors are recommended to turn off lights in appropriate areas not currently controlled by the building automation system (BAS). Day-light harvesting controls are recommended in areas with more than adequate day-lighting to automatically adjust lighting levels throughout the day as appropriate. Users are encouraged to turn off lights in unoccupied offices/classrooms.

Space Temperatures

In order to maintain reasonable comfort and lower energy expenditures, windows and doors should be kept closed during heating season and during cooling season in those areas that are conditioned.

The University has established the following standards for comfort heating and cooling based on ASHRAE Standards and Guidelines:

	Summer (air conditioning)	Winter (heating)
Occupied Space	70-74 degrees F	68-72 degrees F
Unoccupied Space	80 degrees F	64 degrees F

Space Heaters and Window Air Conditioning Units

The use of space heaters and window air conditioning units are generally not permitted due to concerns with fire safety, energy consumption, and noise. These units are a very costly means of heating/cooling. If a member of the campus community believes that one of these units is necessary for adequate warmth/cooling, this may indicate that the central heating/cooling system needs repair. Please submit maintenance requests through the <u>F&O Service Desk</u> at facilities@uah.edu or calling 256-824-6490.

All space heaters must be authorized by F&O and meet safety requirements as classified by the National Fire Protection Association. All space heaters must meet the following four specifications:

- be UL approved
- have elements that are protected from contact
- be tilt-proof (when tipped over, heater goes off)
- be thermostat-controlled

Plug Loads

During off-hours many computers perform backups or update and patch software (such as antivirus definitions) and the operating system, and it is therefore important to configure energy- saving features so as to not interfere with these critical update processes.

Many modern devices, monitors in particular, continue to draw 9-16 watts of power even when turned off. To eliminate this draw, utilize a power strip that has the ability to switch off certain devices without turning off other devices that need to remain powered, such as a CPU.

The following office equipment should be turned off (or, if possible, put in Sleep Mode) at the end of the day, over weekends, or holiday shutdowns:

- Office task lighting;
- Office computers, printers, monitors, copiers, scanners, and;
- all other electronically operated devices, including radios, personal fans.

The following cooking equipment should be used in properly equipped break or kitchen areas and only plugged into standard wall outlets:

- Hot plates;
- Toasters and toaster ovens;
- Grills

The following equipment should only be plugged into standard wall outlets (no extension cords):

- Microwaves;
- Coffee pots;
- Refrigerators

<u>Scheduling</u>

Schedulers of classes, meetings, and other campus activities should endeavor to minimize energy use. Evening classes should be concentrated in the fewest buildings possible. Requests for temperature adjustments for after hour events

should be submitted through <u>F&O Service Desk</u> at facilities@uah.edu or 256-824-6490 during the time of scheduling.

Planning, Design & Construction

The University seeks to reduce future energy costs in new facility construction and renovation, whenever feasible. Current standards outlined in The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard No. 90.1 *Energy Efficient Design of New Buildings Except Low Rise Residential Buildings* as well as local energy codes are taken into consideration during each phase of construction.

Procurement

Planning for major construction and/or equipment purchase/installation should include life cycle costing, whenever feasible and current energy management best practices.

Holiday Periods

A period of closure for the University offers a great opportunity to save money on utilities that can be spent in other areas. Past history has shown that very few people occupy the buildings for any substantial time during the holidays. With this in mind, buildings will be only minimally heated/cooled during holiday periods except for buildings that contain special collections or sensitive equipment or buildings that are officially open during the holidays. Users should shut down their work area prior to leaving for the holidays and reference the Holiday Shutdown Procedure below:

Classrooms / Offices

- Switch off all unnecessary lighting.
- Power down all computers, copiers, printers, etc.
- Unplug miscellaneous equipment such as radios, televisions, chargers, and power supplies.
- Turn off all classroom equipment (Smart boards, projectors).
- Leave reminders to "switch off when leaving" for staff who may come in during the holiday break.

Common Areas

- Make sure all equipment and lighting are switched off in meeting rooms, restrooms, hallways, and other common areas.
- Set manually controlled thermostats to set-point for unoccupied space.

Kitchen Areas

- Defrost, empty and unplug refrigerators. (Christmas break only)
- Unplug microwaves, coffee machines, etc.

Laboratories

- Coordinate with Office of Environmental Health & Safety (OEHS) personnel for additional guidance.
- Deactivate all equipment not being used.
- Ensure all pumps are turned off. (peristaltic, vacuum, etc.)
- Turn off all water sources to deactivated equipment.
- Store all gas cylinders and chemical, biological, and radiological hazards securely.
- Close / turn off all gas cylinders valves/supplies.
- Ensure all biological waste is autoclaved/disposed of and removed from the building.
- Ensure secondary containment to retain the material for all equipment / materials with a risk of leaking.
- Post emergency contact name and number on all entrances to laboratories and research areas.
- Ensure all fume-hood sashes are closed/lights off.
- Consolidate environmentally conditioned items into a single cold room whenever possible.

University Housing

University Housing and Residence Life has published policies to inform students of their energy management responsibilities within their campus living environment. Housing and Residence Life can be contacted at <u>housing@uah.edu</u> or 256-824-6108.

Review Facilities & Operations will be responsible for the review of this policy every five (5) years (or whenever circumstances require).