ENERGY MODULE

What Does it Mean to Use Energy Efficiently in the Workplace?

Energy conservation and efficiency in the office environment is easy to overlook. In your home, you see your utility bill each month and your choices have financial implications. In your workplace, without a financial incentive to conserve, wasteful habits might go unrecognized. Yet even when the financial costs of energy use are invisible, your habits can make a visible impact on the environment, such as global climate change, air pollution, and the impacts of mining and drilling.

A large part of understanding energy consumption is recognizing that it all adds up. Having personal appliances, such as mini-fridges, printers, and heaters, in the office, leaving windows open, and not completely turning off computers and lights at the end of the day, can add up to a huge amount of energy when multiplied by UNC's 13,000 employees. Adopting and maintaining energy-efficient habits can reduce your office's energy footprint, and the tools you learn to save energy at UNC can be utilized in your home as well!

Why is Energy Important at UNC?

The employees in your office are key partners in achieving Sustainable Carolina's <u>net zero</u> <u>greenhouse gas emissions goal</u> by 2040. Since 2007, UNC has reduced its greenhouse gas emissions by 40% despite a 27% increase in campus square footage and a 9% increase in campus population. We've done this by becoming more energy efficient, transitioning away from fossil fuels, and relying more on renewable energy. Behavior change is another key component of achieving this goal.

How Can My Office Save Energy?

The first step to saving energy is recognizing where and when energy is being used. Overhead lights, for example, can feel like a "fixed" part of the office environment. But overhead lights consume energy and should be turned off whenever they are not in use.

Key Questions to Consider:

- 1. Am I actively using this item throughout my workday? Does it have to remain on even when I am not using it? Should it be unplugged? HINT: If it's warm, it's drawing energy.
- 2. Do I know if or when this item gets turned off when I leave for the day?

Knowing how and when office fixtures and appliances get turned on and off is a great first step to making energy-saving decisions. Do you completely turn off your desktop computer at the end of the day? Do the breakroom, hallway, and bathroom lights get turned off, so they don't remain on throughout the night? NOTE: Egress lighting remains on for occupant safety. These are all questions worth considering.

Green Office Tasks

To green your office and complete the Energy module:

- 1. Complete an Energy Inventory.
- 2. Complete 8 out of 12 energy tasks
- 3. Consider implementing a community based social marketing (CBSM) campaign that addresses a specific problem related to energy in your office. Required for Sprouts and above.

Take Inventory of Your Energy-Intensive Items and Their Use

PREREQUISITE: Do this before tackling anything else!

Before you begin, it's important to take account of energy-intensive items in your workplace.

- 1. Meet with your office manager and create an inventory of office energy use.
 - a. How many personal appliances are in your office/s? These can include mini fridges, personal microwaves, coffee makers, personal space heaters, personal printers, etc.
 - b. How many desktop monitors are not LED flat screens?
 - c. How many lamps ceiling and desk don't have LED bulbs?
 - d. Which lights are routinely left on?
 - e. How many chargers, appliances, or other items in unused spaces are left plugged in AND drawing energy? (HINT: Are they warm?)

Speak with your department head or manager to ensure they support your commitment to creating an energy-saving culture in your workplace.

Energy Tasks

Complete 8 out of the 12 tasks below.

Task	Resources	Check
Enable power management features on all computers and electronics (printers, copy machines, etc.) so they enter a low-power "sleep mode" after a designated period of inactivity. (Screensavers are SO out of fashion!)	<u>How to adjust power and sleep</u> <u>settings</u>	

Reduce personal appliance use by providing communal microwaves, fridges, printers, etc.	Purchase Energy Star Equipment	
Replace non-LED light bulbs in lamps and overhead light fixtures.	Campus Building Project Request	
Place "Turn Me Off, Please!" sign on light switches.	<u>"Please Turn Me Off" Sign</u>	
Maintain an air-gap of at least three inches between the back of refrigerators, water coolers, and freezers and the wall, and ensure that their condenser coils are cleaned twice a year.	<u>Fridge Maintenance Checklist</u>	
Ensure that office thermostats are set to 75- 78 degrees (summer) and 69-72 (winter). If your office is still uncomfortable, contact Facilities Services.	Facilities Services	
Before holidays and break periods, send out an email to the entire office asking for it to be "powered down" and unplugged where appropriate. Use our checklist to ensure it gets done.	<u>Holiday Power-Down Checklist</u>	
Exchange older computers and monitors for flat-screen, energy efficient ones.	IT Hardware Order Support	
Contact Facilities Services to evaluate your common spaces for motion sensors or to put your lights on timers.	<u>Campus Maintenance Request</u>	
Check with Facilities Services to see when your building's "set-back" time is (the scheduled time for when your building's HVAC comes on and turns off). Change the set-back time to better fit your office's work schedule.	Facilities Services	

Make a plan to encourage employees to turn off lights and unneeded equipment and close windows at the end of the day. Implement it.	<u>"Turn Off Your Computer" Sign</u>	
Wildcard: Have an idea for another task not listed? Reach out to Sustainable Carolina's Green Office Program to see if it will work!	Sustainable Carolina Contact	
	TOTAL	

Community Based Social Marketing (CBSM) Campaign

Identify an ongoing energy challenge in your office (Sprout). Develop a plan to address the challenge (Sapling). Implement a campaign designed to address the challenge (Tree).

Link to CBSM Word Document Link to CBSM Worksheet PDF

Resources & Contacts

Sustainable Carolina | Green Office Program Cindy Shea | greenoffice@unc.edu

Energy Management | Cindy Register

Facilities Contact | Maintenance Request