

LIGHTING: “Watt” can you do to reduce energy consumption?

- Utilize the natural light of your building instead of electricity when possible. Adjustable blinds can let in light while reducing glare.
- Turn off lights when not in use. Post signs by light switches and equipment, encouraging people to turn off power when not in use.
- Turn-off lights during peak summer energy demand (2-4 pm).
- Ask Plant Operations to install occupancy sensors in restrooms, break rooms, and file rooms.
- Halogen floor lamps and standard incandescent light bulbs are **ENERGY HOGS**. Potential lighting alternatives include Compact Fluorescent Light (CFL) bulbs that use 75% less electricity and save money.

A Quick Fact on Lighting

Headache, stress, fatigue and worker error all generally increase with the common *over-illumination* present in many workplace settings. (*Cambridge Handbook of Psychology, Health and Medicine*, 1997)

For more Quick Facts on Lighting, go to www.vanderbilt.edu/sustainvu

CFLs are energy efficient



Motion-activated lights save energy

HEATING AND COOLING: *save energy and be comfortable!*

- Set thermostat controls at reasonable temperatures. Suggested temperatures are 75°F in the summer and 70°F in the winter.
- Have programmable thermostats installed in your office areas and utilize the night time settings. Contact Plant Operations for purchasing and installation information.
- Avoid the use of space heaters – they are **ENERGY HOGS** and potentially dangerous.
- Use window blinds to adjust the amount of light and heat that can enter the room.
- Don’t block air vents with paper or cardboard or accidentally block vents with bookcases, large plants, or other items. Contact Plant Operations for assistance if needed.
- Dress for the season.



Programmable thermostats save energy



Sub-meters are used to monitor power use by department or floor

A Quick Fact on Heating and Cooling

In 2006, select voluntary energy conservation practices resulted in a 10% reduction in energy consumption during those voluntary periods. Energy-saving practices included shutting down unused computers and turning off extra lights.

For more Quick Facts on Heating and Cooling, go to www.vanderbilt.edu/sustainvu

EQUIPMENT USE: *How You Can Compute Energy Savings*

- Utilize your computer's energy-saving "sleep mode" to turn on following 20-30 minutes of inactivity. For assistance in activating the "sleep mode" or "hibernate" functions on a computer, contact Vanderbilt's Information Technology Services (ITS) Department at <http://its.vanderbilt.edu/helpdesk> or call 343-9999.
- Turn off office lights and equipment at the end of the day.
- Unplug devices that are rarely used, rather than having them plugged in and on "stand-by".
- Purchase equipment with an ENERGY STAR rating – the Federal Government's energy efficiency "seal of approval". Go to www.energystar.gov for more information.



Quick Facts on Computer Use

According to Harvard University's *Campus Energy Reduction Program (2007)*:

- One computer left on "24/7" costs \$120-\$150 per year to power, and equals 1,500 pounds of carbon dioxide (CO₂) emissions per year.
- Putting 800 computers on "sleep mode" reduces CO₂ emissions equivalent to the CO₂ output of 15 cars annually.
- Turning off your computer on evenings and weekends can eliminate one ton of CO₂ emissions each year.

For more Quick Facts on Computers and Equipment Use, go to www.vanderbilt.edu/sustainvu

DEPARTMENTAL INITIATIVES:

Talk to your members about energy savings; it will save you money!

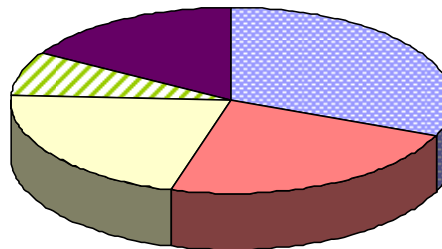
- *Incentivize* energy savings for your group, and put that energy savings towards your department's "pet project".
- Require that all computers be set on "sleep mode".
- Have copiers/printers/fax machines turned off at the end of the day.
- Allow staff to adjust window blinds and lower lighting levels.
- Consider allowing your staff to participate in the Alternative Work Arrangements Policy.
- Discuss your departments' "wants" and "needs" in terms of energy usage.

A Quick Fact

on electricity at Vanderbilt

35% of the electricity consumed by Vanderbilt is generated at the on-campus Power House. Two new generators are being installed at the Power House, increasing on-campus power generation to 45% and reducing our need to buy electricity from "the grid".

Average Energy Use by U.S. Universities



- 32% Heating Buildings
- 24% Water Heating
- 22% Lighting
- 8% Building Cooling and Ventilation
- 17% Office Equipment, Computers, Appliances

Source: U.S. Department of Energy