Sustainable Information Technologies (IT) Guidelines

Why Go Green in Computing?

Computing saves time and creates efficiencies in the workplace. Computing also requires energy and has created a new, unwelcome waste stream.

Government estimates indicate that electronic or e-waste is growing at 2-3 times the rate of any other waste produced by American consumers. This waste, if not properly disposed of, is often hazardous to personal health and detrimental to the environment.

- By exercising your purchasing power, you can tell electronics producers that you do not want to buy products full of dangerous chemicals and poisonous metals.

- When using your computer, monitor, or other electronic devices, you can make minor changes to your daily routine that will save both energy and money.

- When it is time to dispose of your electronics, you can do your part to make sure your devices find their way back into the production cycle instead of a landfill.

Purchasing Guidelines

Computers and Monitors

- Purchase computers and monitors that are **EPEAT**-Gold certified. This third party certification evaluates machines from creation to final disposal and rates them on 51 different criteria, with an emphasis on reduction and elimination of hazardous materials.
  - http://www.epeat.net/
- **Energy Star** certification complements the advantages ensured by EPEAT certification but only rates energy efficiency.
  - www.energystar.gov

Printers/Copiers/Fax Machines

- When acquiring new machines, lease rather than purchase whenever possible. When you are finished using the machine or are considering an upgrade, the company will have the responsibility of refurbishing or recycling the machine and you will not have to dispose of it.

- Look for machines with duplex (double-sided printing) capability and use this feature to reduce the amount of paper consumed. You will cut your paper costs by up to 50%.

- Work with as few machines as possible. The more people networked to a machine, the more energy efficient and cost effective it will be.

- Purchase Energy Star rated machines, which will generally be more energy efficient than other similar machines on the market.

Other Electronics:

- When comparing vendors, look for a vendor that will be accountable for the entire lifecycle of the product, including disposal, when you can no longer use the device.

Sustainable Practices

Lose the Screen Saver

- Screen savers are now technologically obsolete. New monitor technology has eliminated the risk of burning a *phantom image* onto your screen.

- Using a screen saver often prevents your machine from entering hibernate or standby mode, consuming energy even when your machine is inactive for long periods of time. Graphic intensive screen savers use up to twice as much energy as a machine in active mode.

Enable Standby or Hibernate Modes
- Standby and hibernate modes drop energy use down to 1-3 watts.
- Enable your computer's energy saving modes. University issued ThinkPads automatically hibernate after a period of inactivity when not connected to a power source. Do not disable this feature.
- Set monitors and overhead projectors to sleep after 5 to 20 minutes of inactivity instead of using a screen saver. This will save energy and protect your privacy when a computer is left unattended.

Turn Off Electronic Devices
- Turn off your computer and monitor at the end of the day instead of putting them into hibernate mode. This will increase your energy savings by another small margin.
- Unplug your electronics before a long period of inactivity, particularly before you leave the office for the weekend. To make this easier, use a power strip or a SmartStrip. Cutting power at the wall is an important step in avoiding "vampire" or "phantom" energy use – the power that your electronics continue to draw even after you turn them off.
- Pay particular attention to chargers for mobile devices. These should be unplugged when not in use.
- Implement a "Last to Leave? Lights Out." policy in your office or shared space. The last person to leave the office should also shut off large shared equipment (like networked copiers or laser printers) before leaving.

Close the Loop
Reduce Waste
- Submit a technology equipment disposal request to Facilities and Campus Services for collection of broken or obsolete university-owned units. These units will be downcycled and properly disposed of by Synergy Recycling, LLP.

- Bring smaller electronics, cords, DVDs, CDs, jewel cases, and other small e-waste items to a TechnoTrash bin located in the Bookstore, ZSR Library, or Benson Copy Center. These items will be properly disposed of by Green Disk.
- Take your personal electronic waste, including printers, monitors, keyboards, mice and scanners, to the 3RC EnviroStation for proper disposal. They will reuse some components and properly handle those that cannot be reused or recycled.
- Out of ink? Return your empty ink jet cartridges to the University Bookstore where they will be refilled for a small fee. Bring all other empty cartridges to the Office of Sustainability, Reynolda Hall 101, for recycling.

ThinkPads
- ThinkPads collected by the university are not sent to the landfill. Most models are stripped of information and reallocated on campus (to graduate students or faculty/staff members) or offered for sale to the Forsyth County School District. Almost all models used for one or two years by students are reallocated or resold through this program.
- Older models that are non-functioning are recycled through Synergy Recycling, LLP. This group makes up a very small percentage of the university's total ThinkPads.

Resources
Want to learn more about certification programs or technology management? Check out these helpful resources:
- Greener Computing: Resources for environmentally responsible computing
- Greenpeace International Guide to Greener Electronics
- Silicon Valley Toxics Coalition: E-Waste disposal and reuse
- EPEAT: Computer and monitor certification
- Energy Star: Government energy efficiency certification