University of Victoria | Systems

PO Box 3045 STN CSC, Room CLE-C040, Victoria, BC V8W 3P4
Tel: (250) 721-8208 Fax: (250) 721-8778 Web: http://cass.uvic.ca

M E M O R A N D U M

PLEASE CIRCULATE

16 December, 2010

To: University community

From: University Systems

RE: Best Practices in Desktop and Notebook Efficiency

While there are many different ways to improve environmental friendliness with regards to computing devices, one of the easiest ways is to manage electricity consumption. This guide is focuses on making a case for reducing power consumption and provides recommendations for best practices to achieve these goals. By following these guidelines, our organization can realize maximum benefits of reduced energy bills, lower carbon emissions and derive the benefits of being a "greener" organization.

Many companies use the default power management settings shipped with Microsoft Windows, or, even worse, disable power management altogether for reasons ranging from ease of software patching during off hours to fear of premature wear and tear on internal components due to power cycling.

A successful power management strategy contains the following 3 items:

- Purchasing hardware configurations which consume less power
- Implementing a organization wide power management policy utilizing industry best practices and enforcing their use throughout
- Modifying these policies as necessary based on individual business needs, measuring the savings and reporting the results back to management

University Systems offers the following recommendations:

- **HARDWARE CONFIGURATIONS**

- An LCD monitor uses about one-third the power of a CRT display with the same screen area
- Forgo the screen saver. Most monitors no longer are in danger of having images burned into them, and screen savers actually use up monitor power

- Look for the Energy Star certification when purchasing new computer systems or electronic devices
- Look for energy efficient power supplies (80% or greater). Today's power supplies are 10-12% more efficient than last year and 20-30% more efficient than 2 years ago
- If you'll be away from your computer or other devices for a long period of time (say, while on vacation), consider unplugging them completely

- **POWER MANAGEMENT POLICIES**

- Configure your monitor to turn off after 20 minutes of inactivity, your hard drive to turn off after 30 minutes of inactivity, and your desktop computer or laptop to go into a standby or sleep mode after 90 minutes of inactivity
- You may be able to select a more aggressive power management policy assuming there is no negative impact to your unit

- **LAPTOP TIPS FOR EXTENDING BATTER LIFE**

- Choose integrated graphics unless there is a clear and specific need for a discrete graphics solution
- Dial down your screen brightness. The brighter your screen, the more power it uses
- Turn off your laptop's Bluetooth or wireless capabilities when not in use to get some extra minutes, or even hours, out of the device before the battery dies
- Solid state hard drives can save significant amounts of power over and spinning disk technology but the current high cost of the technology will not offer a payback period within the lifetime of a notebook, netbook or laptop

Please contact the Computer Help Desk at 250-721-7687 or helpdesk@uvic.ca if you have any questions regarding best practices in desktop and notebook power efficiency.

Thank you.