



Optimizing Operations and Maintenance of Electronic Equipment

Federal Electronics Stewardship Conference

February 7-8, 2006

Liza Hearn

U.S. EPA, Office of Environmental Information

How the FEC Works

- ❑ The FEC is a management challenge issued to federal facilities.
- ❑ The challenge is designed to encourage agencies to:
 - Purchase greener electronic products
 - Manage their electronic assets in an environmentally sound manner
 - Change their current practices in order to encourage electronic stewardship

Greener Operations

- You can make your IT Operations Greener ...

Energy Efficiency

- ❑ Purchase Energy Star Products
- ❑ Activate the Energy Star Features
- ❑ Implement network level monitor or computer monitoring and power management tools (EZ Save and EZ GPO)
 - This can be gradually implemented so users do not even notice it
- ❑ Establish and promote policy to power off PCs when agency employees leave.

Energy Efficiency vs. Remote Management

- Many organizations leave PCs on in order to remotely manage the PCs for installing new security patches or upgrading Software.....
 - Consider having users leave computers on only during the weekends so IT can remote manage the units on weekends
 - Or -
 - Consider providing notifications to users to “leave your PC on tonight for the patch/upgrade or it will be installed during the day”

- Energy savings= 1/5 of a PC’s annual energy usage

Extending the Lifecycle of PCs

- Extending the lifespan of a product
 - Question whether equipment needs to be replaced
 - Do you need a new printer/PC/copier? Can you upgrade it? Will other available resource fill the need?
 - Is this a need or a want? Is this just another toy?
 - Minimize local printers, maximize network printers

- Applied Economic Analysis evaluating conducted by EPA on the lifecycle of computers led to a change in policy from a 3-year to 4 –year replacement cycle.
 - For a 4 yr life cycle leasing may be more cost effective. (Over 4 yrs there is significant maintenance/support costs.)

Thin Client

- Remote desktop solutions
 - Server-based, server-centric, or network computing
 - No hard disk drives
 - Centrally-managed
- Can be cost-effective for remote and/or small facilities

Duplex Printing and Copying

- Implement a policy across your agency to purchase duplex printers & copiers
 - Train IT folks to enable duplex systematically
 - Have double-sided copying set as default on network printers and copiers



Managed Print Services (MPS)

- EPA has a managed print service that provides for centralized management or all network printing
 - When toner is low, new toner is delivered automatically. No stockpiling of toner. Old cartridges are recycled.
 - Provides high level of availability which reduces need for local printers.

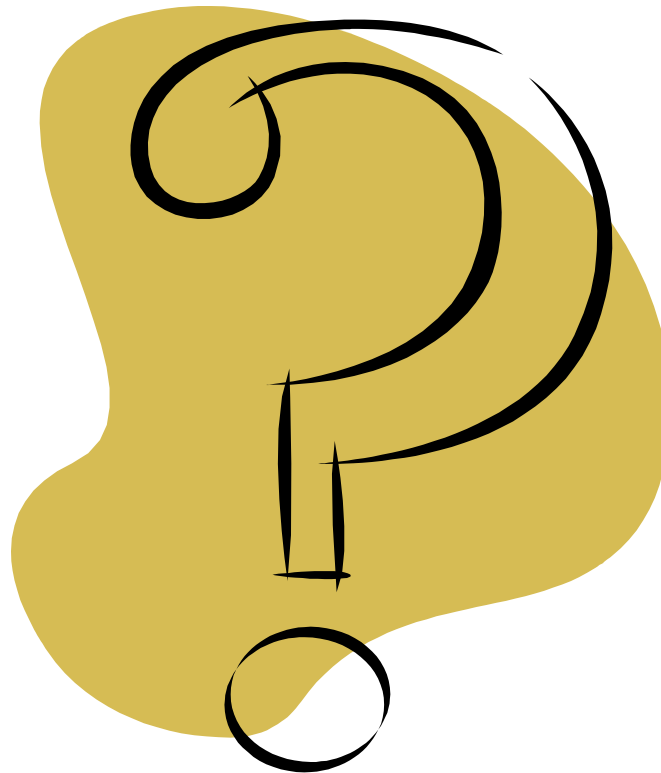
Additional ideas

- ❑ Purchase small-form factor units.
 - Smaller units = less resources to construct
 - Smaller units = less resources to dispose
- ❑ Limit the number of PCs to 1 per person.
 - Laptops as the primary and sole computer
- ❑ Trickle down approach - reuse equipment for less sophisticated operations
- ❑ Reduce toner use - Utilize color backgrounds sparingly. (White space is good!)
- ❑ Conduct online Web conference sharing presentations on-line instead of in print
- ❑ Print presentations as 2 slides per page, doublesided and you have cut the paper use by 3/4

Consider the End-of-Life Management Phase

- Reuse of equipment
 - Within your Office, your facility, the Agency
 - IT Folks talking to IT Folks about excess parts and equipment
 - Donations to Schools through Computers for Learning Program
 - Provide recipients of any donated equipment proper instructions on how to recycle and dispose of equipment in an environmentally sound manner.
- Recycle Equipment using Recycling Electronics and Asset Disposition (READ) GWAC
- Recycle Toner Cartridges (from local and network printers, fax machines, and copier machines) through vendors or organizations such as the Funding Factory that provide supplies to schools.

What are you doing ?



Need More Information?

□ FEC Website:

<http://www.federalelectronicschallenge.net>

- Educational materials
- Fact sheets
- Checklists
- Implementation guidance
- Presentations
- FEC Forms

