



# ELECTRONICS STEWARDSHIP FOR IMAGING EQUIPMENT AND PRINT MANAGEMENT SERVICES

FEC Partner Call  
July 2013

# WHAT IS IMAGING EQUIPMENT (IE)?

- ⊙ Printers
- ⊙ Copiers
- ⊙ Fax machines
- ⊙ Scanners
- ⊙ All-in-one (AIOs), multifunction devices (MFDs), multifunction products (MFPs)
- ⊙ Digital duplicators
- ⊙ Mailing machines

# FEDERAL REQUIREMENTS

- ⊙ Purchasing
  - ⊙ [Federal Acquisition Regulation](#)
  - ⊙ Executive Orders [13514](#) and [13423](#)
- ⊙ Operations
  - ⊙ Executive Orders [13514](#) and [13589](#)
  - ⊙ [GSA Bulletin B-37](#), Federal Print Management Practices
- ⊙ Disposal
  - ⊙ [Federal Management Regulation](#)
  - ⊙ [GSA Bulletin B-34](#), Disposal of Federal Electronic Assets

# PURCHASING IMAGING EQUIPMENT

- ③ Buy EPEAT-registered
- ③ Buy ENERGY STAR qualified
- ③ FEMP low standby power requirements are met by EPEAT-registered and ENERGY STAR qualified products

# PURCHASING CONSUMABLES

- ◎ Buy recycled content print and copy paper
  - ◎ At least 30% post consumer recycled content
- ◎ Buy remanufactured/recycled ink and toner cartridges
- ◎ Buy ink and toner cartridges with biobased content
  - ◎ Required amounts differ for different ink and toner, check [BioPreferred®](#) website

# PURCHASING CONSIDERATIONS AND ALTERNATIVES

- ⊙ Used and remanufactured devices
  - ⊙ Multifunction devices
  - ⊙ Networked devices
  - ⊙ Automatic duplexing capable
  - ⊙ Leasing
  - ⊙ Use of Blanket Purchase Agreements and Government-Wide Acquisition Contracts
  - ⊙ Print management services
- VS**
- ⊙ New devices
  - ⊙ Single function devices
  - ⊙ Desktop devices
  - ⊙ Not automatic duplexing capable
  - ⊙ Buying
  - ⊙ Use of retail or online stores
  - ⊙ In-house technical support and supply purchasing

# DUPLEXING

- ⊙ Set automatic duplexing or double-sided printing on eligible equipment
  - ⊙ Set on imaging equipment and on computers that send jobs to IE
- ⊙ Saves resources (paper, ink, toner, etc.) and reduces waste
  - ⊙ Saves money!

# POWER MANAGEMENT

- ⊙ Most ENERGY STAR qualified equipment is required to automatically enter a low power **standby** mode which cannot be switched off
  - ⊙ Some ENERGY STAR qualified equipment do not have sleep or standby requirements
- ⊙ Power off at end of day
  - ⊙ Exceptions for solid state ink printers



# SET RESOURCE SAVING DEFAULTS

- ⦿ Set printing and copying defaults
  - ⦿ Black-and-white or grayscale printing
  - ⦿ Draft, economy or fast mode printing
- ⦿ Set document defaults
  - ⦿ Reduced margins
  - ⦿ Reduced line spacing
  - ⦿ Resource-saving font type
  - ⦿ Resource-saving font size

# BEST FONTS FOR PRINTING

- ◎ Century Gothic, Size 11 (save 30%)
- ◎ Times New Roman, Size 12 (save 28%)
- ◎ Calibri, Size 11 (save 23%)
- ◎ Verdana, Size 11 (save 8%)

# EMPLOYEE BEST PRACTICES

- ① Shrink to Fit or Shrink One Page for print jobs
- ① Print multiple slides or document pages to one page
- ① Review jobs in print preview and print only the necessary pages
- ① Remove unneeded content from print jobs
- ① Print in color only when necessary
- ① Reuse paper with non-sensitive printing on one side, as scrap paper
  - ① Paper that has been used on both sides and is no longer needed should be shredded or directly recycled, as appropriate

# WORK ELECTRONICALLY

- ⦿ Think before you print!
  - ⦿ Why do you need a paper copy?
  - ⦿ What will you do with a paper copy?
- ⦿ Utilize websites, intranets or network folders to share documents
- ⦿ Distribute meeting materials electronically
- ⦿ Utilize electronic subscriptions
- ⦿ Implement electronic forms

# DOCUMENT MESSAGING

- ⦿ For documents intended to be printed and distributed, consider sustainability messaging:
  - ⦿ “If you no longer need this document, please pass it along or recycle it.”
  - ⦿ “This document was printed on [*paper and ink/toner sustainable characteristics*].”

# PRINT AND COPY CENTERS

- ⦿ If print and copy centers are available at your site, set policy or guidance for mandatory use:
  - ⦿ Jobs over a certain number of pages
  - ⦿ Jobs requiring non-standard paper type (i.e., cardstock, glossy, photograph) or size
- ⦿ Set automatic notification if user attempts to print a job that should go to the print and copy center

# END-OF-LIFE MANAGEMENT

- ◎ Same as other electronics
  - ◎ Follow GSA personal property disposition process
- ◎ Media sanitization considerations
  - ◎ Wipe memory or hard drive
    - Check user manual
  - ◎ Remember to remove paper!

# END-OF-LIFE MANAGEMENT

- ◎ Reuse
  - ◎ Commercial grade IE, particularly MFDs, have significant reuse demand
- ◎ Recycle
  - ◎ Desktop printers may be considered junk
  - ◎ Utilize certified electronics recyclers
  - ◎ Remember paper and toner/ink cartridge recycling



# LEASING AND PRINT MANAGEMENT

- ◎ Same equipment and consumable requirements as direct purchasing
  - ◎ EPEAT-registered and ENERGY STAR qualified
  - ◎ Recycled and biobased content, remanufactured cartridges
- ◎ Require operations and maintenance best practices
- ◎ Require responsible reuse and recycling of both equipment and supplies

# USER-EQUIPMENT RATIO/ NETWORK EQUIPMENT PLACEMENT

- ⊙ Determine maximum number of users per network device
  - ⊙ One ratio for high performance MFDs with color printing capability
  - ⊙ One ratio for high volume black-and-white printers
- ⊙ Aids in device acquisition and placement
- ⊙ Exceptions may be made for unusual space configurations and print volume requirements

# DESKTOP PRINTER PHASE-OUT

- ⊙ Install high volume, high quality networked MFDs
  - ⊙ Locate appropriately
  - ⊙ Color printing and scanning desirable
- ⊙ Remove desktop printers
  - ⊙ Eliminate technical support and maintenance
  - ⊙ Eliminate supply buys
- ⊙ Enable secure/PIN printing
- ⊙ Plan ahead and prepare for complaints

# SECURE/PIN PRINTING

- ① Enable Personal Identification Number (PIN) or smart card/badge printing
  - ① Users can utilize network devices for secure jobs
  - ① Job does not print until user enter PIN or swipes badge at printer

# PRINT MANAGEMENT SOFTWARE

- ⦿ Network-enabled software applications are available to encourage responsible printing practices
  - ⦿ Automate duplexing and other sustainability defaults
  - ⦿ Provide a warning when a black and white job is sent to a color device
  - ⦿ Prohibit and provide user notification when employee attempts to print from a non-work related website
  - ⦿ Indicate the cost for large print jobs and require confirmation
  - ⦿ Keep a running tally of pages printed by user for leasing and management contracts with quotas
  - ⦿ Provide user notification for jobs over a certain of pages, suggesting use of the print and copy center onsite

# PRINT MANAGEMENT SOFTWARE

- ⦿ Free software applications may be approved for individual installation and use
  - ⦿ Eliminate ads from web page printing
  - ⦿ Shrink and consolidate documents
  - ⦿ Eliminate pages with only time/date stamps or web URLs
  - ⦿ Install fonts that utilize non-visible holes to reduce ink and toner usage

# WAIVERS AND EXCEPTIONS

- ⦿ Define acceptable exceptions for
  - ⦿ Automatic duplexing
  - ⦿ Printing and document default
  - ⦿ Deployment and use of desktop printers
- ⦿ Decide which exceptions can be made at the discretion of the employee and which may require a written waiver

# TRAINING

- ① Training is critical to outline the roles and responsibilities of all employees
- ① Educate users on best practices and why your agency or facility is employing them
- ① Provide information on when and how to override defaults, or obtain waivers



# TRACKING AND REPORTING

- ⊙ Many of these activities are federal requirements and adherence to them must be reported to the Office of Management and Budget and Office of the Federal Environmental Executive
- ⊙ Assign responsibility for designing and implementing a tracking and reporting system for these activities

# GSA FSSI PRINT MANAGEMENT

- ⦿ FSSI Print Management is a commodity management approach
  - ⦿ Implement printing behavior change management program
  - ⦿ Implement improvements to the acquisition of print and copy devices and services
  - ⦿ Allows federal agencies to achieve cost and environmental savings
- ⦿ More information at <http://www.gsa.gov/portal/content/111983>

# RESOURCES OR CONTACT US

- ⦿ FEC Printing and Copying Resources
  - ⦿ <http://www2.epa.gov/fec/publications-and-resources#oduplex>
- ⦿ FEC Champions
  - ⦿ <http://www2.epa.gov/fec/technical-assistance>
- ⦿ Partner E-mail
  - ⦿ [fec@epa.gov](mailto:fec@epa.gov)