



Office of the
Federal Environmental Executive
Promoting sustainable environmental stewardship throughout the federal government

EO 13423 and Electronics Stewardship



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Why Focusing on Electronics?

- **Rapid advances in IT has resulted in:**
 - **Increased sales of electronics worldwide**
 - **Increased energy consumption**
 - **A new stream of obsolete and discarded products**





Purchasing Facts

**Americans own
some 2 billion
electronic products
– about 25 products
per home!!!**

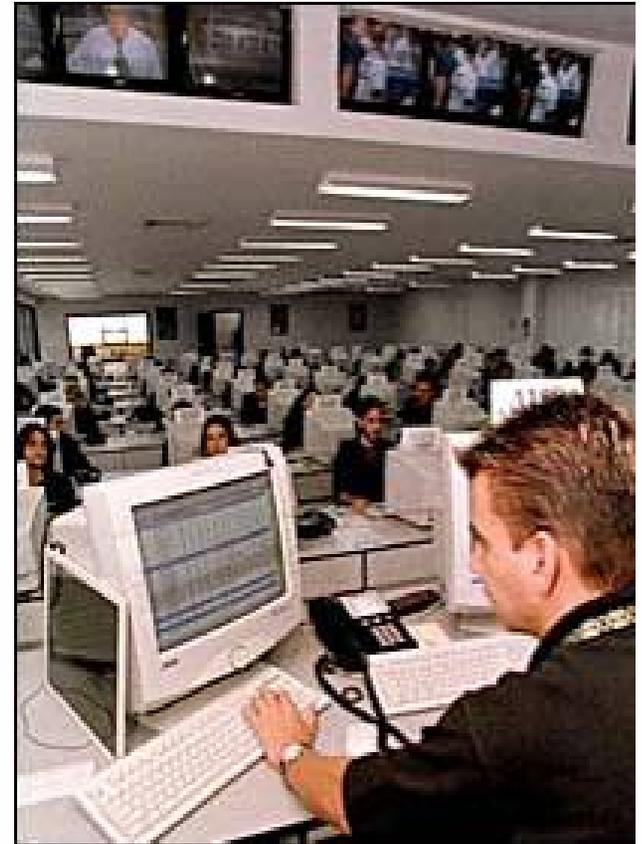
(Consumers Electronics Association)





Use Facts

- U.S. has more than **180 million computers** in use, which consume nearly **58 billion Kilowatt-hr/yr**, or about **2%** of the US annual electricity
- PCs and monitors consume between **5 to 13%** of all the electricity in the office
- It's estimated that **66%** of the electricity consumed by PCs and monitors is wasted.





End-of-life Facts

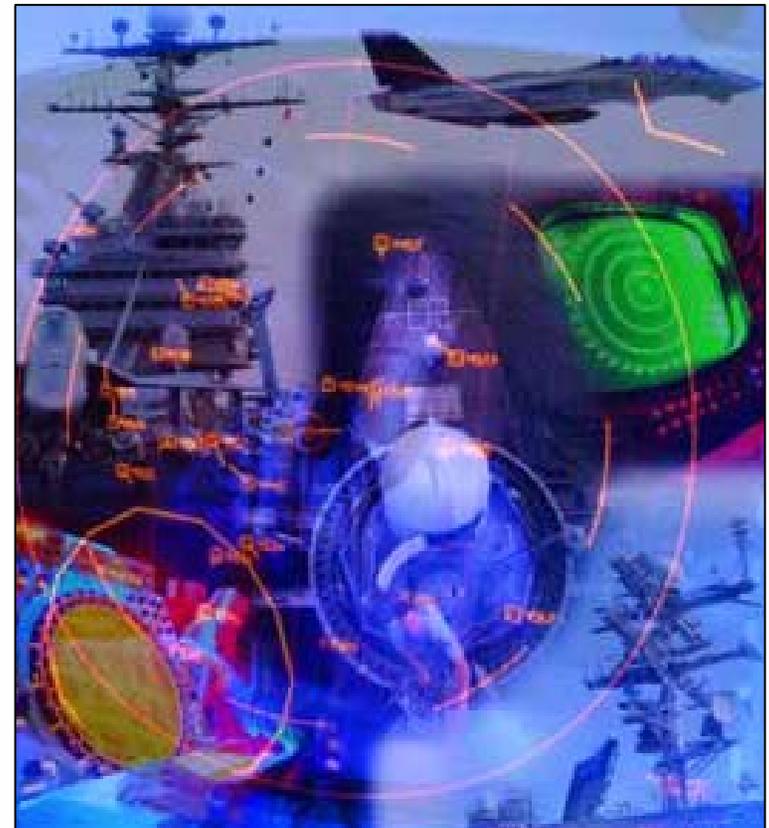
- U.S. homes and businesses discard an average of **130,000 PCs** a day
- In 2005, only about **330,000 tons** of consumer electronics were recycled (**12.5%**)
- Certain types of electronic equipment contain materials such as lead, mercury, and other toxic constituents
- Potential adverse effects on human health and the environment if improperly managed during disposal





The Federal Electronics 'Footprint'

- The Federal government is spending an average **\$63 billion** annually in IT products and services
- While the computers hardware is generally expected to last 7 yrs, the equipment is normally used for an average of **3 yrs**
- The Federal government disposes of an estimated **half a million computers** yearly!





Federal Electronics Stewardship

- **Eleven Federal agencies and EOP signed a historic **MOU** on November 15, 2004**
- **Agencies committed to:**
 - **Increase the demand for greener electronic products**
 - **Promote best management practices**
 - **Reduce the economic and environmental life cycle costs**
 - **Encourage growth of the infrastructure for reuse, demanufacturing, and recycling of electronics**





Executive Order 13423

“Strengthening Federal Environmental, Energy, and Transportation Management.”

- **Signed on January 24th, 2007**
- **Consolidates prior E.O.s and integrates sustainable practices**
- **Adopts Memorandums of Understanding:**
 - **High Performance Buildings**
 - **Electronics Stewardship**
- **Sets goals in several sustainable areas including electronics stewardship**
- **New goals as stringent or more stringent than before**





Executive Order 13243

Section 2 (h) Goals for Agencies -- ensures that:

(i) When acquiring an electronic product to meet its requirements, meets **at least 95 percent** of those requirements with an Electronic Product Environmental Assessment Tool (EPEAT)-registered electronic product, unless there is no EPEAT standard for such product.





Greening Federal Electronics Procurement with EPEAT

- Environmental procurement tool designed to help institutional purchasers compare **desktop computers, laptops and monitors** based on their environmental attributes.
- Set of voluntary environmental performance criteria (IEEE 1680 American National Standard for the Environmental Assessment of Personal Computer Products)
- System for identifying and verifying products which meet this criteria (www.epeat.net)





Executive Order 13243

**Section 2 (h) Goals for
Agencies -- ensures that:**

**(ii) Enables the Energy Star
feature on agency
computers and monitors.**





Executive Order 13243

Section 2 (h) Goals for Agencies -- ensures that:

(iii) Establishes and implements policies to extend the useful life of agency electronic equipment.





Executive Order 13243

Section 2 (h) Goals for Agencies -- ensures that:

(iv) Uses environmentally sound practices with respect to disposition of agency electronic equipment that has reached the end of its useful life.





Executive Order 13423

“Strengthening Federal Environmental, Energy, and Transportation Management.”

Implementing the new EO:

- **Existing and new working groups will help develop the necessary tools and guidance**
 - **FESWG – Federal Electronics Stewardship Working Group**
 - **Progress will be measured and reported the OMB scorecard process**
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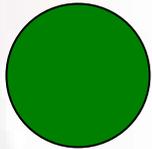


OMB Environmental Stewardship Scorecard

- Includes 5 metrics:
 - **Meet Environmental Management Systems (EMS) protocol for Agency and all appropriate facilities**
 - **Comprehensive Green Purchasing Program**
 - **Implement Sustainable Green Building Program**
 - **Implement Sustainability Program for Electronic Stewardship**
 - **Compliance Management Plan & Implementation Strategy**
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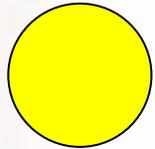
OMB SCORECARD STANDARDS FOR SUCCESS



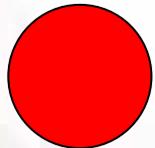
Demonstrates comprehensive implementation of a sustainability program for Electronic Stewardship (ES), that at a minimum promotes the purchase, operation, and use of end-of-life management strategies for electronic assets consistent with the EO 13423 Electronics Stewardship goal and implementing instructions.



OMB SCORECARD STANDARDS FOR SUCCESS



Has developed an Electronic Stewardship program and is on track in implementing 100% of planned milestones to meet the EO 13423 ES goal, no later than 2010.



Does not have a program to implement the EO 13423 Electronic Stewardship goal and/or has missed planned ES milestones.



EO 13423 Implementing Instructions

Electronics Stewardship Plan

- **By *May 1, 2007*, each agency shall develop and submit to OFEE a plan to implement electronics stewardship practices for all eligible owned or leased electronic equipment in support of the goals in section 2(h) of the E.O**
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EO 13423 Implementing Instructions

Electronics Stewardship Plan

- **The plan shall:**
 - **Address the three life-cycle phases for electronics assets: acquisition, operations and maintenance, and end-of life**
 - **Be developed and implemented in coordination with the energy, environmental, information technology, acquisition, financial and property officers, and facility managers and maintenance personnel, within each agency**
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EO 13423 Implementing Instructions

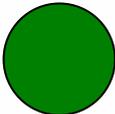
Electronics Stewardship Plan

The plan shall address how to:

- **Acquire 95 percent EPEAT)-registered products**
 - **Ensure that Energy Star® features are enabled on 100 percent of computers and monitors**
 - **Have policies and programs to extend the useful lifetime of electronic equipment**
 - **Ensure that all non-usable electronic products are reused, donated, sold, or recycled using environmentally sound management practices at end of life**
 - **Address reporting procedures to be used in measuring progress toward meeting goals (FESWG)**
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Managing for Results

- Agencies want to get to 
- Scorecard promotes faster progress and better use of available tools/resources
- OMB, OFEE, & FESWG are ready to assist
- Already seeing positive impact



***“When the final scorecard is tallied,
shame on us if it’s not a field of green.”***

– Clay Johnson III

**Deputy Director for Management
Office of Management and Budget**



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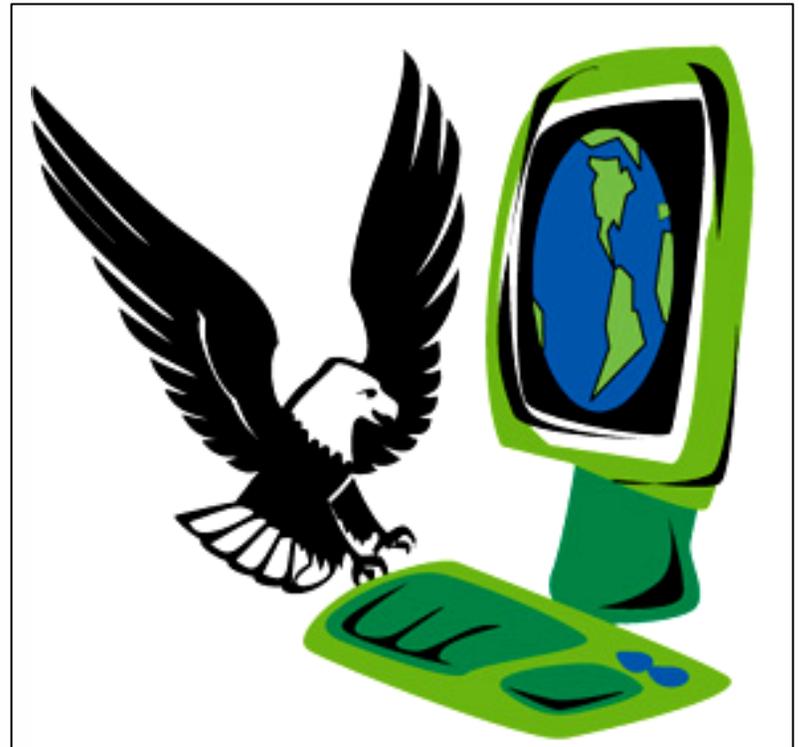
Federal E-nitiatives





Federal Electronics Challenge (FEC)

- **FEC** is a partnership program that encourages Federal procurement and leasing environmentally preferable electronics, and reduce the impacts of electronics during use and disposal
- In addition to the MOU agencies, 150 Federal facilities, covering more than 475,000 employees, have signed up for the challenge.
- The **FEC** provides resources and technical assistance for improving electronics management practices, and gives annual recognition to Partners that have achieved program goals





Promoting Environmentally Preferable End-of-Life Management Practices

- The **Federal Electronics Reuse and Recycling Challenge (ERRC)** encourages Federal facilities to recycle, or donate their used computers and other electronic equipment to local schools
- In 2006, 14 winners were selected from 12 agencies and **124 facilities** that participated in the Challenge
- The program successfully reused and recycled approximately **2.4 million pounds** of electronics during the five-month period between November 11, 2006 and Earth Day 2007





Providing Training



Federal Electronics Stewardship Conference



Federal Environmental Symposium



**West Coast Federal Electronics
Stewardship Workshop**



FEC Partners Conference Calls



Rewarding Efforts



**FEC Gold Level
White House
Awards Winners**



**ERRC
Awards Winners**



**FEC Silver and Bronze Level
Awards Winners**



MODEL PROGRAMS



**Department
of
Veterans Affairs**



EPA region IV



**Pacific Northwest
Laboratory (PNNL)**



LEADING BY EXAMPLE

- Federal agencies and their facilities are committed to:
 - **Promoting** the designing and purchasing of environmentally preferable electronic products
 - **Extending** the useful life of electronic equipment
 - **Improving** on sound end-of-life management practices
 - **Saving** energy, and conserving natural resources





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