

A vertical strip on the left side of the slide shows a close-up, repeating pattern of green printed circuit boards (PCBs) with various electronic components, including integrated circuits and capacitors.

Greening Our Procurement of Computers with EPEAT

For the
Federal Electronics Stewardship
Conference

By Holly Elwood, EPA
February 7, 2007



Agenda

1. Why Green Our Computer Purchases?
2. What is EPEAT?
3. Who is Using EPEAT?
4. How Can I Use EPEAT?
5. Next Steps on EPEAT





Four Key Facts About Federal Government and Electronics

1. Feds are one of world's largest purchasers of electronics –
2. Average life span of a federal computer is 3 years
3. Approximately 10,000 federally owned computers could be deemed excess or surplus each week



Four Key Facts About Federal Government and Electronics

4. Electronics represent serious environmental costs and opportunities

- Contribute to our energy use/costs
- May contain toxic or hazardous substances when if not properly disposed of can harm public health and the environment
- Can result in environmental liabilities if not disposed of properly
- Contribute to our warehouse rental costs and/or staff costs during disposal



Requirements to Buy Environmentally Preferable Electronics

- New Executive Order, Section 2 (h) states that feds *need to: ensure that the agency (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,*
- EPEAT[®] FAR Case has been submitted by OMB to the FAR Council
- Executive Order 13101 and the FAR requires feds to buy more environmentally preferable products
- Energy Policy Act requires feds to buy Energy Star and FEMP compliant electronics



Requirements to Buy Environmentally Preferable Electronics

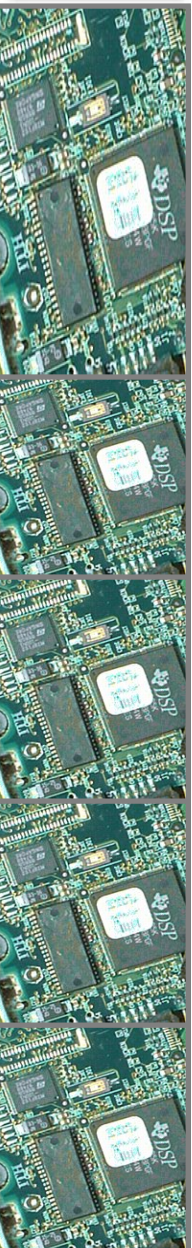
FAR SubPart 23.703 requires feds to:

- “(a) **Implement cost-effective contracting preference programs promoting energy-efficiency, water conservation, and the acquisition of environmentally preferable products and services;** and
- (b) Employ acquisition strategies that affirmatively implement the following environmental objectives:
 - (1) **Maximize the utilization of environmentally preferable products and services (based on EPA-issued guidance).“**



Requirements to Buy Environmentally Preferable Electronics

- FEC MOU Signatories have committed to meet the FEC procurement goal of 95% of computer units purchased by eligible FEC Partners are EPEAT[®] Bronze qualified or higher
- Buying EPEAT[®] registered products is the main way to meet FEC MOU green procurement objectives on OMB Scorecard



TM



Electronic Product Environmental Assessment Tool



What is EPEAT[®] ?

An easy to use environmental procurement tool designed to help institutional purchasers compare desktop computers, laptops and monitors based on their environmental attributes.





What is EPEAT[®]?

- 1) Set of voluntary environmental performance criteria (IEEE 1680 American National Standard for the Environmental Assessment of Personal Computer Products)
- 2) System for identifying and verifying products which meet this criteria (www.epeat.net)



EPEAT[®] Environmental Performance Categories

- Environmentally Sensitive Materials
- Materials Selection
- Design for End of Life
- Product Longevity/Life Cycle Extension
- Energy Conservation
- End of Life Management
- Corporate Performance
- Packaging



EPEAT[®] Tiers



TM
EPEAT Bronze– Meets the 23 mandatory criteria



TM
EPEAT Silver– Meets all mandatory criteria and 50% of the optional criteria



TM
EPEAT Gold– Meets all mandatory criteria and 75% of the optional criteria



What is EPEAT[®]?

Environmentally Sensitive Materials:

Required

- Comply with European RoHS Directive, restricts:
 - Cadmium,
 - Mercury,
 - Lead,
 - Hexavalent chromium,
 - Selected brominated flame retardants.
- Report amount of mercury in light sources

Optional

- Additional limits on mercury for light sources
- Eliminate intentionally added mercury for light sources



What is EPEAT[®]?

Materials Selection:

Required

- Declare post-consumer recycled plastic content
- Declare renewable/biobased plastic materials content

Optional

- Meet minimum post-consumer recycled plastic content
- Meet minimum renewable/biobased plastic material content





What is EPEAT[®]?

Design for End of Life:

Required

- Design case to be easily disassembled
- Label plastic components by type
- Make it easy to identify & remove components with hazardous materials

Optional

- Reduce number of plastic types used
- Ensure a minimum % of product is recyclable or reusable





What is EPEAT[®]?

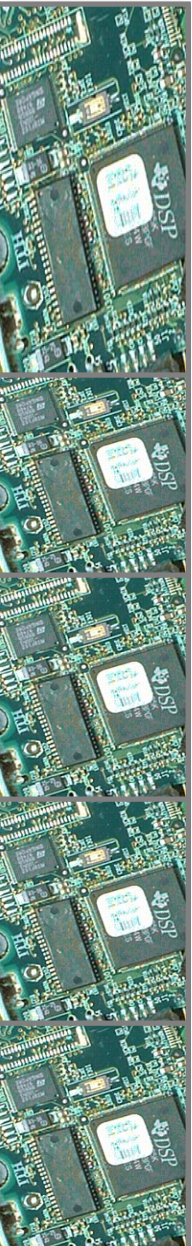
Energy Conservation:

Required

- ENERGY STAR qualified

Optional

- Early adoption of new ENERGY STAR specifications (version 4.0 effective June 2007)
- Renewable energy accessory





What is EPEAT[®]?

End-of-life management: Required

- Take-back service offered to institutional purchasers, commitment to recycle all products in accordance with EPA Plug in to Recycling Guidelines
- Rechargeable battery recycling offered

Optional

- Auditing of recycling vendors





What is EPEAT[®]?

Corporate performance:

Required

- Environmental policy consistent with ISO 14001
- Self-certified EMS covering design and manufacturing operations consistent with ISO 14001
- Annual corporate environmental performance report consistent with certain Performance Track or GRI guidelines

Optional

- Third-party certified EMS covering design and manufacturing operations consistent with ISO 14001
- Annual corporate environmental performance report based on Performance Track or GRI guidelines





What is EPEAT[®]?

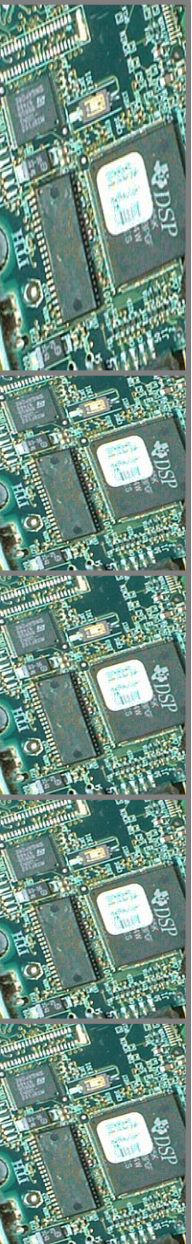
Packaging:

Required

- Reduction/elimination of RoHS metals in packaging
- Separable packing materials
- Declaration of recycled content

Optional

- Packaging 90% recyclable and plastics labeled
- Minimum post-consumer recycled content
- Provision of packaging take-back program
- Use of re-useable packaging





EPEAT[®] Verification Process

- Like ENERGY STAR[®] Companies:
 - ✓ Sign MOU to participate
 - ✓ Products verified after registered
- Products routinely tested:
 - Test a single attribute or set of attributes across all products
 - Test all attributes within a single product or a subset of all products



Product Registration Status

(As of January 24, 2007)


- The online EPEAT registry contains a fully searchable database – www.epeat.net
- More than 333 EPEAT registered products.
- Products from thirteen manufacturers:
 - Apple
 - CTL
 - Dell
 - Gateway
 - HP
 - Lenovo
 - Mind Computer Products
 - NEC
 - Northern Micro
 - Panasonic
 - Sona Computer
 - Sony
 - Toshiba



Who is Using EPEAT[®] ?

Sample of Current EPEAT Users

(As of January 2007)

A vertical strip of images showing various electronic circuit boards, including one with a DSP chip, is positioned on the left side of the slide.

Department of Defense, Army	\$15.0B
Department of Homeland Security	\$6.0B
NASA SEWP IV GWAC	\$15.0B
GSA Alliant GWAC	\$5.0B
Department of Energy	\$0.4B
Department of Interior	\$0.2B
Department of Transportation	\$0.04B
Environmental Protection Agency	\$0.04B
Massachusetts	\$0.07B
TOTAL	\$41.75B



How Can Feds Buy EPEAT[®] Registered Products?

- Update all contracts to reflect new EO requirement to buy EPEAT registered products
- Specify you want EPEAT products in every task order
- Use list of EPEAT registered products at www.epeat.net
- Buy from resellers who identify EPEAT registered products
- Buy off Government Wide Acquisition Contracts which identify EPEAT registered products (NASA SEWP IV)



How Can I Use EPEAT[®] ?

[Search by Manufacturer](#)

[Search by Criteria](#)

EPEAT Registered Products Search Tool			
Product	 BRONZE or better	 SILVER or better	 GOLD
Desktops	69	67	0
Integrated Systems	6	6	0
Monitors	75	68	0
Notebooks	169	155	0

* Integrated System is a desktop and integrated monitor as one product

<www.epeat.net>

(Date: January 4, 2007)



Recommended Contract Language For Feds

- There are a number of mandates that require federal procurement officials to assess and give preference to those products and services that are environmentally preferable, including Executive Order *****, the Energy Policy Act of 2005, and the Federal Acquisition Regulations (FAR) subpart 23.703. (Agency/Department) is also one of the twelve Federal Agencies participating in the White House's Federal Electronics Challenge (<http://www.federalelectronicschallenge.net>), demonstrating our commitment to reducing the impact of electronics on the natural environment throughout their life cycle. As part of our work under this Challenge, (Agency/Department) has committed to buying products that meet the mandatory criteria of the Electronic Products Environmental Assessment Tool (EPEAT). All desktops, laptops, and computer monitors provided under this contract are required to have achieved Bronze registration or higher under the Electronic Products Environmental Assessment Tool (EPEAT). EPEAT is a procurement tool designed to help large volume purchasers evaluate, compare, and select desktop computers, laptops, and monitors based upon their environmental attributes as specified in the consensus-based IEEE Standard for the Environmental Assessment of Personal Computer Products (1680). Additional consideration will be provided for products that have achieved EPEAT Silver or EPEAT Gold registration. The registration criteria and a list of all registered equipment are provided at <http://www.epeat.net>.



Recommended Contract Language For Feds

- Suppliers are required to indicate EPEAT registered products on their electronic catalogs that customers may buy from through this contract. Suppliers are required to provide quarterly reports quantifying the number of EPEAT registered products purchased under this contract. The information must be reported in a matrix providing the following data for the current quarter, the fiscal year, and the duration of the contract.





Recommended Contract Language For Feds - Reporting

	Unregistered	Bronze	Silver	Gold	Total
Desktops					
Laptops					
Monitors					



EPEAT[®] in Your EMS



	Environmental Aspects		
	Consumption of Toxic and Hazardous Substances	Energy Use	Solid and Hazardous Waste Generation
Buying EPEAT Registered Products	Purchase electronics with reduced amounts of toxic and/or hazardous substances	Buy Energy Star qualified products	Require reduced product packaging and packaging take back in purchasing specifications



Next Steps for EPEAT[®]

- Development of Environmental Performance Standard for New Electronic Product
- Verification of Manufacturers Claims
- Publication of Environmental Benefits of Total EPEAT Buys to Date





EPA IT BPA Clause

- **H.XX. Greening Requirement**
- All electronic hardware procured under this contract is required to meet or exceed the minimum Bronze registration requirements under the Electronic Products Environmental Assessment Tool (EPEAT). EPEAT is a procurement tool designed to help institutional purchasers evaluate, compare, and select desktop computers, laptops, and monitors based upon their environmental attributes as specified in the consensus-based IEEE Standard for the Environmental Assessment of Personal Computer Products (1680).
- Additional consideration will be provided for products meeting EPEAT Silver or EPEAT Gold registration requirements. The contractor shall be responsible for ensuring equipment meets the latest EPEAT registration requirements before it is delivered. The registration requirements and a list of all equipment meeting the requirements are provided at www.epeat.net.



EPA IT BPAs

- EPA will issue multiple BPAs for each of the following categories:
 - Administrative Desktop PCs / Laptops
 - Mid-level Desktop PCs / Laptops
 - High-end Scientific PCs / Laptops
 - Servers
 - Monitors



Contact Information

- **Website**
 - www.epeat.net
- **EPEAT[®] Federal Purchaser Liaison**

Holly Elwood
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- **Green Electronics Council**

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