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Greening Electronics Procurement with EPEAT™



Federal Environmental Symposium
Vicky Salazar, EPA
June 18, 2008



Agenda

- 1. Why Focus on Electronics?**
- 2. What is EPEAT?**
- 3. How Successful Has EPEAT Been to Date?**
- 4. How Can I Buy EPEAT Registered Products?**
- 5. Next Steps for EPEAT**
- 6. Measure your results**

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Why Focus on Electronics?



Why Focus on Electronics?

- **Energy use/costs**
- **Major contributor to solid waste stream**
- **Can contain toxic and/or hazardous substances - potential harm to public health and the environment if disposed improperly**
- **Big purchasers have big influence on market**
- **All stakeholders wanted to collaborate**



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What is EPEAT™?



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What is EPEAT™?

Electronic Product Environmental Assessment Tool

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





What is the EPEAT™ System?

- 1) Standard comprised of 51 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 these criteria (www.epeat.net)
- 3) Environmental Benefits Calculator



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



BRONZE

**Meets all 23
required
criteria**



SILVER

**Meets all
required
criteria plus 1/2
of optional**



GOLD

**Meets all
required
criteria plus 3/4
of optional**



EPEAT™ Verification Process

- Like ENERGY STAR®
- Companies:
 - Sign MOU to participate
 - Register products as compliant
 - Must meet specific verification for all criteria
- Products routinely scrutinized:
 - Products verified after registration
 - Verification focuses on:
 - a single attribute or set of attributes across all products
 - all attributes within a single product or a subset of all products



EPEAT™ Current Product Focus

- **Computer**
 - **Desktops**
 - **Laptops**
 - **Monitors**



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How Successful Has EPEAT™ Been to Date?



EPEATTM Registered Products

(as of 5/15/08)

EPEAT Registered Products Search Tool

| Product |  |  |  | Total |
|--------------------|--|---|---|------------|
| | BRONZE | SILVER | GOLD | |
| Desktops | 4 | 59 | 40 | 103 |
| Integrated Systems | 0 | 11 | 0 | 11 |
| Monitors | 19 | 280 | 12 | 311 |
| Notebooks | 4 | 130 | 14 | 148 |
| Totals | 27 | 480 | 66 | 573 |



25 Participating Manufacturers

- Apple
- CIARA-TECH
- CTL
- Dell
- Enano Computers
- Fujitsu Computer Systems Corporation
- Fujitsu Siemens Computers GmbH
- GETAC
- HP
- Hyundai IT America
- Lenovo
- LG Electronics
- MDG Computers Canada Inc.
- MPC Computers
- NCS Technologies
- NEC Display
- Northern Micro
- Panasonic
- Philips Electronics
- Prosys Tech Corporation
- Samsung
- Sony Electronics
- Toshiba
- Transource
- Viewsonic
- Zonbu

As of 5/15/2008



Requirements For Feds to Buy EPEAT™ Registered Electronics

- EPEAT® is now in the FAR:
 - **23.705 Electronic products environmental assessment tool.**
- (a) *General.* As required by E.O. 13423, agencies must ensure that they meet at least 95 percent of their annual acquisition requirement for electronic products with Electronic Product Environmental Assessment Tool (EPEAT)-registered electronic products, unless there is no EPEAT standard for such products. This policy applies to contracts performed in the United States, unless otherwise provided by agency procedures.



Requirements For Feds to Buy EPEATTM Registered Electronics

- Buying EPEAT[®] registered products directly impacts Agency OMB Environmental Scorecard Ratings
- EPEAT requirements being integrated into OMB IT Optimization Plans





Feds Using EPEAT™

| | |
|-----------------------------------|-----------------|
| Department of Defense, Army | \$15.0B |
| Department of Homeland Security | \$6.024B |
| NASA SEWP IV GWAC | \$15.0B |
| NASA ODIN Contract | \$.100B |
| GSA Alliant GWAC | \$5.0B |
| Department of Energy | \$0.4B |
| Department of the Interior | \$0.2B |
| Department of Transportation | \$0.04B |
| Environmental Protection Agency | \$0.04B |
| Executive Office of the President | \$0.007B |
| TOTAL | \$41.81B |



View the full list of users at www.epeat.net/RFP.aspx



EPEAT™ Success: Others Using EPEAT

- **Baxter Healthcare**
- **Concurrent Technologies**
- **California**
- **Canada**
- **Kaiser Permanente**
- **Maine**
- **Minnesota**
- **New York**
- **New Zealand Department of Defense**
- **Premier, Inc.**
- **San Jose, California**
- **University of California**
- **Wisconsin**





EPEAT™ Environmental Benefits of 2007 Reported Federal Sales

(1/1/07 – 12/30/07 Vs Conventional Products)



| Environmental Benefit | Reduction Achievement | Equivalent to |
|---|---|---|
| Energy savings (from ENERGY STAR) | 505 Million kWh | Electricity for 44,513 U.S. homes for one year |
| Primary material savings | 902,000 metric tons | Weight of 7 million refrigerators |
| Greenhouse gas emission savings (from ENERGY STAR) | Almost 40,000 metric tons of carbon equivalent (CE) | Removing 31,450 passenger cars from the road for 1 year |
| Air emission savings (from ENERGY STAR) | 2.08 million metric tons | |
| Water emission savings | 4,361 metric tons | |
| Toxic material savings | 34,600 kilograms | Weight of 17,289 bricks, including equivalent of 5,551 mercury thermometers |
| Hazardous waste savings | 1,290 metric tons | Weight of 644,857 million bricks |

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How Can I Buy EPEAT™ Registered Products?



Buying EPEAT™ Registered Products

1. New/existing BPAs, contracts or leases:
 - Use model contract language to reflect new FAR requirement and require EPEAT registered products
 - Use list of EPEAT registered products at www.epeat.net in market research, to determine EPEAT level to require
 - Require vendors to report number of EPEAT registered products purchased quarterly
 - Block non EPEAT registered products on e-catalogs
2. Government Wide Acquisition Contracts (GWACs)
(NASA SEWP IV, NIH ECS III)
 - Specify you want EPEAT products in every task order
 - Ask them to block EPEAT registered products in e-catalogs
 - If not possible, ask them to identify EPEAT registered products in e-catalogs
3. Resellers who identify EPEAT registered products
(Softchoice, Mooring Tech, Inc, Need These)
4. Resellers who don't identify EPEAT registered products
 - Ask them to indicate EPEAT products
 - Directions and resources located at:
<http://www.epeat.net/ParticipatingResellers.aspx>



FAR Required EPEAT™ Contract Language

“(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for contractor use at a Government-owned facility, only personal computer products that at the time of submission of proposals were EPEAT Bronze registered or higher. Bronze is the first level discussed in clause 1.4 of the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products.

(c) For information about the standard, see www.epeat.net.”

OR

Alternate 1 (Dec 2007). As prescribed in 23.706(b)(2), substitute the following paragraph (b) for paragraph (b) of the basic clause:

“(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for contractor use at a Government-owned facility, only personal computer products that at the time of submission of proposals were EPEAT Silver registered or higher. Silver is the second level discussed in clause 1.4 of the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products”



Recommended Language For New Contracts (cont'd)

- Suppliers are required to block non-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 Language For New Contracts - Reporting



| | Unregistered | Bronze | Silver | Gold | Total |
|--------------------|--------------|--------|--------|------|-------|
| Desktops | | | | | |
| Laptops | | | | | |
| Integrated Systems | | | | | |
| Monitors | | | | | |

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Next Steps for EPEAT™





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Long Term Strategy for EPEAT™

- Update existing computer standard
- Maintain and expand Electronics Environmental Benefits Calculator
- Develop new standards for four new electronic products





EPEAT™ Next Products

- **EPEAT solicited input from stakeholders to identify and prioritize the next product sets**
- **The four priority product categories are:**
 - **Imaging Products (Printers, copiers, etc.)**
 - **TVs**
 - **Servers**
 - **Handhelds (cell phones, PDAs, etc.)**

To join a workgroup, please send an email to Holly Elwood at elwood.holly@epa.gov



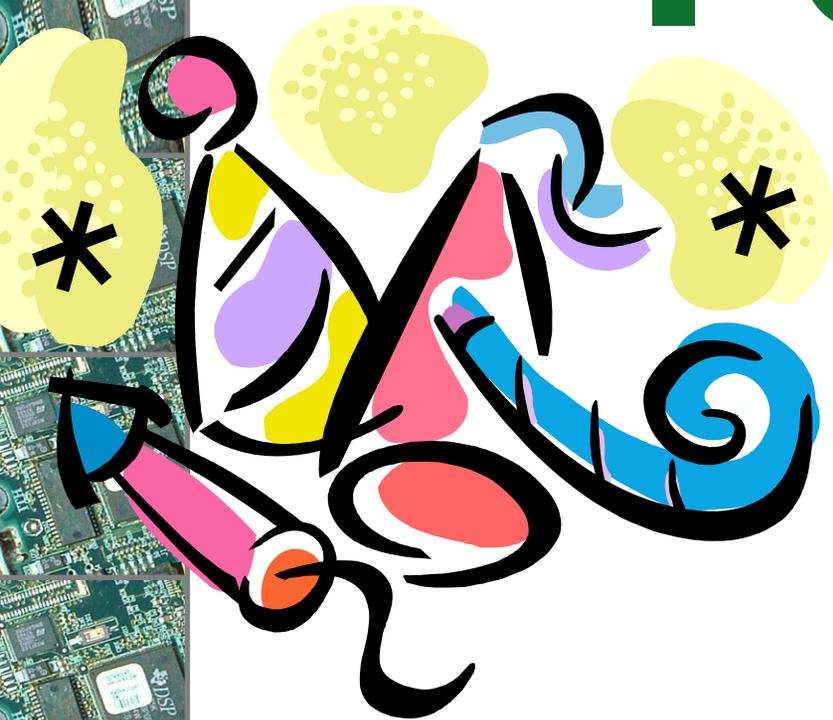
EPEAT™ Next Products

- Develop standards for:

| | |
|-------------------|---|
| Imaging Equipment | Held Scoping Meeting 2/20, 2/21 in SF Begin Summer 2008 |
| TVs | Holding Scoping meeting 4/21 in DC Begin Summer 2008 |
| Servers | Begin after first two standards completed |
| Cell Phones | Begin after first two standards completed |



I did it!



Now what??

Measure your results...



Electronics Environmental Benefits Calculator

Translates EPEAT purchase into quantifiable environmental benefits and cost savings

<http://eerc.ra.utk.edu/ccpct/eebc/eebc.html>





Sample Data from Calculator

Purchase 1,000 EPEAT[®]-registered products

Agency achieved the following environmental benefits:

- X kWh of energy use reduced
- X pounds of GHG emissions reduced
- X pounds of toxic materials & hazardous wastes reduced
- X pounds of non-hazardous materials reduced
- X pounds of air & water emissions reduced
- X pounds of waste diverted from landfills
- X dollars of costs reduced or saved



**BUT.... Don't forget the rest of the lifecycle.
If, in addition to buying EPEAT, you**

Extend life on your Electronic Assets

Enable your Energy Saving Features

Recycle your Electronics

**You save even more and meet your
Federal Electronics Challenge Goals!**

**And of course, buy only what you need.
Do you really need 1,000 products?**



For example, if I –

- 1) **Purchase** 1,000 EPEAT© Silver desktops w/LCDs & 500 EPEAT © Silver notebooks
- 2) **Reuse** 200 desktops, 200 CRTs
- 3) **Recycle** 800 desktops, 800 CRTs

Then, I could prevent...

- **Energy*** 2.7 million kWh 237 households/yr
- **GHG Emissions*** 211 MTCE 168 cars off road/yr
- **Primary Materials*** 1,620 tons 12,542 refrigerators (by wt)
- **Toxic Materials** 158 kg (all) 79 bricks (all toxics)
6 grams 10 Hg thermometers
- **Hazardous Waste** 17.3 tons 8,673 bricks (by wt)
- **MSW** 34.7 tons 18 households/yr
- **Cost Savings*** \$233,281**

*Incorporates life cycle benefits

** Product & life cycle energy costs



For Further Info on EPEAT™



EPEAT Website www.epeat.net

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