



ELECTRONIC PRODUCT ENVIRONMENTAL ASSESSMENT TOOL

VOLUNTARY ENVIRONMENTAL PERFORMANCE CRITERIA FOR COMPUTERS, LAPTOPS AND MONITORS

EPEAT is an environmental procurement tool designed to help institutional purchasers in the public and private sectors evaluate, compare and select desktop computers, laptops and monitors based on their environmental attributes.

The development of EPEAT was prompted by a growing demand by institutional purchasers for an easy-to-use evaluation tool that allows the comparison and selection of electronic products based on environmental performance. The electronics industry welcomed EPEAT as a tool to provide a clear and consistent set of performance criteria for the design of products, and provides an opportunity to secure market recognition for efforts to reduce the environmental impact of its products.

How EPEAT Will Work

EPEAT will evaluate electronic products according to three tiers of environmental performance – Bronze, Silver and Gold. The complete set of performance criteria includes 22 required criteria and 33 optional criteria in 8 categories. To qualify for acceptance as an EPEAT product, it must conform to all the required criteria. Manufacturers may pick and choose among the optional criteria to boost their EPEAT baseline “score” to achieve a higher-ranking level as follows.

Bronze: Product meets all required criteria

Silver: Product meets all required criteria plus at least 16 optional criteria.

Gold: Product meets all required criteria plus at least 25 optional criteria.

The three-tier system provides purchasers with the flexibility to select equipment that meets their minimum performance requirements or to give preference to models with more environmental attributes by specifying a higher EPEAT qualification level. For manufacturers, EPEAT provides flexibility to choose which optional criteria they would like to meet to achieve higher levels of EPEAT qualification.

Before listing their products on EPEAT, manufacturers will sign a formal Memorandum of Understanding (MOU) that commits them to provide accurate product and company information and provides for remedies should inaccuracies be discovered. The assessment tool will be structured to allow manufacturers to self-declare, via a web-based interface, that their specific products meet EPEAT requirements. For each criterion, producers must, on request of the EPEAT organization, provide a specified set of verification data in order to demonstrate EPEAT conformance.

Most criteria refer to environmental performance characteristics of the specific product, and the manufacturer declares to those product criteria for each product of their choice. Some criteria refer to general corporate programs, such as a Corporate Environmental Policy, and the manufacturer declares to those criteria in a report that is provided annually. To ensure that the self-declaration system functions in a transparent and verifiable manner, the EPEAT organization will randomly select a subset of qualified products each year to verify their qualification.

EPEAT Performance Categories

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

How the Performance Criteria Were Developed

The draft performance criteria and the procedures for validation represent the results of an 18 month-long multi-stakeholder process. The EPEAT Development Team was composed of stakeholders that represented manufacturers, trade associations, institutional purchasers, advocacy organizations, electronics recyclers, academics, and others. The process for developing the draft criteria included use of ANSI essential requirements¹, such as the need for openness, balance, consideration of all views, and consensus decision-making.

Each criterion was evaluated alongside the others to ensure that EPEAT is a balanced and comprehensive tool that covers multiple environmental attributes throughout the product's life cycle. The criteria are stringent enough to promote better environmental design, manufacture, and end-of-life management, while reflecting existing technologies and technical limitations so that a supply of EPEAT products will be available to purchasers. Specific criteria are drawn heavily from existing U.S. and international requirements and standards such as Energy Star®, the European Union's Restriction on Hazardous Substances Directive, and the IT-Eco Declaration, while creating some new elements that were agreed upon by the team. The EPEAT Development Team chose to build on existing legal and market requirements to reduce overlap and possibly conflicting requirements on product producers.

Process for Finalizing the Criteria

The Development Team has completed its work, and a smaller Implementation Team is now working to implement EPEAT. This work includes finalizing the EPEAT criteria into an American National Standard, and selecting a host organization to house vendor self declarations and manage spot checking of these claims. The criteria will be finalized into the IEEE Standard for Environmental Assessment of Personal Computer Products (P1680), which will go out for ballot in October and is expected to become final by Spring 2006. In order to be notified regarding the public comment period, please send your contact information to: epeat_comments@epeat.net. For further information on EPEAT see <http://www.epeat.net>

¹ "ANSI Essential Requirements: Due process requirements for American national standards", American National Standards Institute, January 2003.



Summary List of Criteria

(as of 9/28/05)

R = Required Criterion; O = Optional Point Criterion
Annual Report Criteria are designated as such in parentheses.

1. Reduction/Elimination of Environmentally Sensitive Materials

- 1.1 Reduction of Use of Hazardous Substances
 - R** 1.1.1 Compliance with provisions of European RoHS directive
- 1.2 Hexavalent Chromium
 - O** 1.2.1 Elimination of intentional use of Hexavalent Chromium
- 1.3 Cadmium
 - R** 1.3.1 Elimination of intentional use of Cadmium
- 1.4 Lead
 - O** 1.4.1 Elimination of intentional use of Lead in certain applications
- 1.5 Mercury
 - R** 1.5.1 Reporting on amount of Mercury used in light sources
 - O** 1.5.2 Low threshold for amount of Mercury used in light sources
- 1.6 Flame Retardants and Plasticizers
 - R** 1.6.1 Elimination of intentional use of SCCP flame retardants and plasticizers in certain applications
 - O** 1.6.2 Larger plastic parts free of flame retardants
- 1.7 Batteries
 - O** 1.7.1 Batteries free of Lead, Cadmium and Mercury
- 1.8 PVC and Chlorinated Plastics
 - O** 1.8.1 Large plastic parts free of PVC

2. Materials Selection

- 2.1 Total Recycled Content
 - R** 2.1.1 Declaration of post-consumer recycled content
 - O** 2.1.2 Minimum content of post-consumer recycled material
 - O** 2.1.3 Higher content of post-consumer recycled material
- 2.2 Renewable/Bio-Based Materials
 - R** 2.2.1 Content declaration of renewable/bio-based materials
 - O** 2.2.2 Minimum content of renewable/bio-based material
- 2.3 Dematerialization
 - R** 2.3.1 Declaration of product weight

3. Design for End of Life

- 3.1 Design for Recovery through Recycling Systems that Utilize Shredding
 - R** 3.1.1 Identification of materials with special handling needs
 - R** 3.1.2 No incompatible paints or coatings
 - R** 3.1.3 Easy disassembly of housings
 - R** 3.1.4 Marking of plastics
 - R** 3.1.5 Identification and removal of batteries and circuit boards
 - O** 3.1.6 Reduced number of plastic resins
 - O** 3.1.7 Molded/glued in metal eliminated or removable
 - O** 3.1.8 Minimum 65 percent reusable/recyclable

- 3.1.9 Minimum 90 percent reusable/recyclable
- 3.2 Design for Recovery through Disassembly
 - 3.2.1 Manual separation of plastics
 - 3.2.2 Marking of plastics

4. Product Longevity / Life cycle Extension

- 4.1 Manufacturer Warranty/Service Agreement
 - 4.1.1 Availability of additional warranty or service agreement
- 4.2 Upgradeability
 - 4.2.1 Upgradeable with common tools
 - 4.2.2 Modular design
- 4.3 Product Life Extension
 - 4.3.1 Availability of replacement parts

5. Energy Conservation

- 5.1 Power Management System
 - 5.1.1 Energy Star® 3.0
 - 5.1.2 Lower power usage
 - 5.1.3 Tier 2 Energy Star® 4.0
 - 5.1.4 FEMP "Executive Order 13221"
- 5.2 Power Management
 - 5.2.1 Documented power management features
- 5.3 Use of Renewable Energy
 - 5.3.1 Renewable energy accessory available
 - 5.3.2 Renewable energy accessory standard
- 5.4 Efficiency of Power Supplies
 - 5.4.1 Efficiency threshold and disclosure of efficiency

6. End of Life Management

- 6.1 Product take-back
 - 6.1.1 Provision of product take-back service (*Annual Report Criterion*)
- 6.2 Rechargeable Battery Recycling
 - 6.2.1 Provision of a rechargeable battery recycling program (*Annual Report Criterion*)

7. Corporate Performance

- 7.1 Corporate Environmental Policy
 - 7.1.1 Demonstration of corporate environmental policy consistent with ISO 14001 (*Annual Report Criterion*)
- 7.2 Environmental Management System
 - 7.2.1 Self-certified environmental management system for manufacturing facilities (*Annual Report Criterion*)
 - 7.2.2 Third-party certified environmental management system for manufacturing facilities (*Annual Report Criterion*)
- 7.3 Corporate Reporting
 - 7.3.1 Corporate report consistent with Performance Track (*Annual Report Criterion*)
 - 7.3.2 Corporate report based on Global Reporting Initiative (GRI) (*Annual Report Criterion*)

8. Packaging

- 8.1 Toxics in Packaging
 - 8.1.1 Reduction/elimination of toxics in packaging
- 8.2 Recyclable packaging materials
 - 8.2.1 Separable packing materials
 - 8.2.2 Packaging 90% recyclable and plastics labeled
- 8.3 Recycled Content
 - 8.3.1 Declaration of recycled content
 - 8.3.2 Minimum post-consumer content guidelines
- 8.4 Take-Back Option
 - 8.4.1 Provision of take-back program for packaging
- 8.5 Reuse Option
 - 8.5.1 Documentation of reusable packaging