



ENVIRONMENTAL BENEFITS OF 2012 EPEAT PURCHASING

EXECUTIVE SUMMARY

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Over seven years, the EPEAT green electronics rating system has become the definitive tool for purchasers seeking environmentally preferable electronics. EPEAT's breadth, depth and geographic reach have made it one of the most widely used and trusted systems worldwide for assessing product environmental performance in the IT sector. The roster of private and public purchasers around the world using EPEAT to "green" their IT purchases continues to grow, increasing interest among consumers has motivated EPEAT's gradual entry into the consumer market, and international demand continues to support the system's geographic reach.

Beginning in July 2006, the EPEAT program has evolved from three participating manufacturers—known in EPEAT as "Subscribers"—to 50, and from 60 registered products sold in the US to over 3000 unique products registered and sold in 41 countries worldwide.

The universe of EPEAT products expanded in 2013 to cover imaging equipment and televisions. Development of a new server standard, a mobile device standard and a revision of the existing PC/Display standard are underway, with completion expected in the next 1-2 years.

International usage has spread rapidly, with purchasers in Europe, Asia and Latin America increasingly using EPEAT to identify and specify green IT products. In 2012, for the first time since EPEAT's inception, unit shipments in countries outside the US (59 million) surpassed United States unit shipments of EPEAT registered products (55 million). In late 2013 EPEAT's stakeholder Advisory Council and Board approved expansion to India, one of the world's largest single markets for IT and electronics, as the system's 43rd covered country

This is the seventh annual report on the environmental benefits resulting from the purchase of electronic products registered and evaluated under the EPEAT program.

EPEAT Essentials

EPEAT is the definitive global rating system for greener electronics, covering the most products from the broadest range of manufacturers. Only EPEAT combines comprehensive criteria including, but not limited to, design, production, energy use, and recycling with ongoing independent verification of manufacturer claims.

Products are rated in EPEAT according to a combination of more than 50 required and optional lifecycle performance criteria. PC and display products qualify for Bronze rating by meeting 23 required criteria. To qualify for Silver and Gold rating, products must meet 50% and 75% respectively, of the optional criteria. The EPEAT Gold designation is the hallmark of the highest environmental performance, meeting an extensive set of criteria. EPEAT Silver and Bronze products meet a broad set of criteria, making them also environmentally responsible purchasing options.

Products on the EPEAT registry are subject to unannounced audits at any time, and results are publicly reported—this ongoing verification system helps ensure environmental criteria are being met as declared. (See Appendix B for more on verification.)

Finally, by providing a central product registry, EPEAT enables purchasers to view and compare the specific environmental performance of registered products from all participating manufacturers—encouraging manufacturers to compete to meet higher numbers of criteria and qualify products at higher levels. This head to head comparison and competition pushes innovation and environmental excellence forward.

Manufacturers of all sizes participate in EPEAT—from Fortune 50 global leaders, including all top 10 global producers in both the PC and Imaging categories, to small regional companies. The system provides manufacturers with guidance for developing environmentally preferable products that will meet market demand.



EPEAT's environmental performance criteria, registration and verification processes, are based on standards developed in open, consensus-based, multi-stakeholder processes. The standards development processes have been supported by the U.S. Environmental Protection Agency (US EPA) and include participants from the public and private purchasing sectors, manufacturers, environmental advocates, recyclers, technology researchers and other interested parties. The EPEAT system may also grow through the submission of relevant and qualified standards. A set of stakeholder-approved Qualifications for Standards serves as a screen for all standards submitted for inclusion in EPEAT.

Deliberations for each product standard last several years, as stakeholders work out their differences and endorse criteria that reward leadership in environmental performance. Bringing these varied constituencies' needs and perspectives to bear on standard development enables the resulting system not only to address significant environmental issues, but also to fit within the existing structures and practices of the marketplace—making it easy to use and thus widely adopted.

As a result, EPEAT has revolutionized the environmental playing field for the electronic product sector, with very broad participation by manufacturers and purchasers of all sizes and an extensive registry of products that meet the system's demanding criteria.

2012 EPEAT Registry Growth

There are two ways to assess the EPEAT registry's growth—by unique product count and by registrations.

Unique product count reveals the number of individual products registered in the system, and offers a rough indicator of the volume of products on the market today that are able to meet EPEAT's stringent environmental performance requirements.

The number of unique products registered in EPEAT remained steady in 2012

- On January 1 2012, 49 manufacturers had some 3730 unique products registered across the system's 42 covered countries.
- On June 1, 2012, following registry updates, 49 manufacturers had 2727 unique products registered.
- By December 1, 2012, 47 manufacturers were registering 3412 unique products in total.

The volume of product registrations— i.e. instances of a given product being registered in any of the 42 covered countries -- is the alternate way to assess EPEAT's scope. Registration numbers are a useful indicator of the overall availability of EPEAT registered products to purchasers in different markets around the world. (See Appendix E for details).

In 2012, the number of US registrations remained fairly steady, but non-US registration climbed rapidly

- In January 2012, there were 2860 product registrations for the US and 15,484 outside the US – 18,344 registrations in total.
- In June 2012, US registrations were reduced 1996 due to archiving of older products and other updates, but registrations outside the US grew to 17,377 and overall registrations expanded to 19,373 worldwide.
- By December 2012, there were 2351 US registrations and 22,654 product registrations across the 41 other covered countries – 25,005 EPEAT product registrations in total.

In total, 50 manufacturers participated in EPEAT during 2012.

2012 EPEAT Environmental Benefits

The lifecycle environmental benefits of the reported EPEAT registered product sales are calculated using the Electronics Environmental Benefits Calculator (EEBC). The EEBC was originally developed by the University of Tennessee Center for Clean Products





under a grant from the US EPA, and revised several times under EPA contract. (See methodology section - Appendix A - for more detail.) This year's calculations omit benefits related to RoHS regulations, as the majority of products produced by global manufacturers now meet those requirements. The calculation reveals remarkable lifecycle environmental benefits linked to 2012 EPEAT purchasing.

Over their lifetime, compared to products that do not meet EPEAT criteria, the 55 million EPEAT registered PCs and monitors purchased in the US alone in 2012 will:

- Reduce use of primary materials by 1.96 million metric tons, equivalent to the weight of 6 Empire State Buildings
- Reduce use of toxic materials, including mercury, by 377 metric tons.
- Eliminate use of enough mercury to fill 618,716 household mercury fever thermometers
- Avoid the disposal of 33,000 metric tons of hazardous waste, equivalent to the weight of 3 Eiffel Towers
- Eliminate the equivalent of more than 33,988 US households' annual solid waste—63,000 metric tons

Worldwide, the more than 114 million EPEAT registered PCs and Displays purchased in 2012 over their lifetime, compared with products that do not meet the EPEAT criteria, will:

- Reduce use of primary materials by 4.4 million metric tons, equivalent to the weight of 13 Empire State Buildings
- Reduce use of toxic materials, including eliminating use of enough mercury to fill 1,295,448 household mercury fever thermometers
- Avoid the disposal of 69,000 metric tons of hazardous waste, equivalent to the weight of 7 Eiffel Towers
- Eliminate the equivalent of more than 78,392 US households' annual solid waste—146,000 metric tons

In addition, due to EPEAT's requirement that registered products meet the latest ENERGY STAR efficiency specifications, all EPEAT registered products sold worldwide will consume less energy throughout their useful life, resulting in:

- Savings of over 12.6 billion kWh of electricity—enough to power 987,837 US homes for a year
- Avoidance of 8.5 million metric tons of air emissions (including greenhouse gas emissions) and over 20 thousand metric tons of water pollutant emissions
- Reduction of over 8.5 million metric tons of greenhouse gas emissions—equivalent to taking over 1,551,772 average US passenger cars off the road for a year

Conclusion

In its sixth year the EPEAT system continued to motivate, communicate and measure reduction of electronic products' environmental impact. The system's constructive role will increase in 2012–2013, as EPEAT expands to Imaging Equipment and Televisions, adds new geographies and as the existing PC/Display standard is updated to increase the breadth and challenge of its criteria.

For thousands of purchasers who use the system worldwide, EPEAT simply works - enabling them to easily and effectively select products that reduce their organizations' environmental impact. The fact that dozens of manufacturers of all sizes and multiple nationalities redesign products and services to satisfy EPEAT's demanding environmental performance criteria demonstrates that EPEAT is a hugely successful driver of change in the electronics sector. The benefits quantified in this report reflect the concrete outcome of that success.

For more information, visit www.epeat.net.