



# ENVIRONMENTAL BENEFITS OF 2010 EPEAT® PURCHASING

Fifth Year of Strong Growth  
and Significant Environmental Impact

EXECUTIVE SUMMARY



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Executive Summary and Report documents are available at <http://www.epeat.net/learn-more/environmental-benefits/>

# EXECUTIVE SUMMARY

Over the past five years, the EPEAT green electronics rating system has transformed the marketplace for environmentally preferable electronic products. EPEAT's breadth, depth and geographic reach have quickly made it one of the most widely used and trusted systems worldwide for assessing product environmental performance in the IT sector. A burgeoning roster of private and public purchasers around the world is using EPEAT to green their IT purchases, increasing interest among consumers has motivated EPEAT's gradual entry into the consumer market, and international demand has expanded the system's geographic reach.

Beginning in July 2006, the EPEAT program has evolved from three participating manufacturers—known in EPEAT as “Subscribers”—to 54, and from 60 registered products sold in the US to over 3000 unique products registered and sold in 41 countries worldwide.

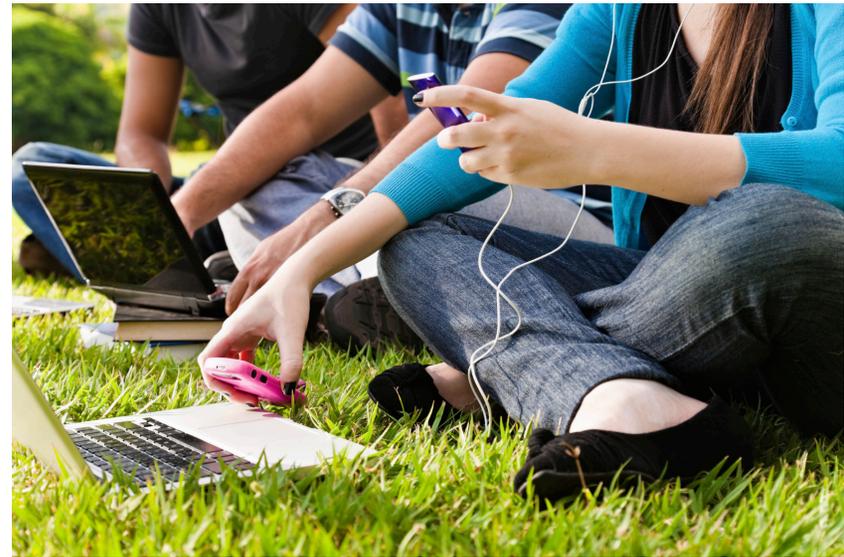
International usage has spread rapidly, with purchasers in Europe, Asia, and Latin America increasingly using EPEAT to identify and specify green IT products. In addition, the universe of EPEAT products will expand shortly, with IEEE work group processes to develop new 1680 standards for imaging devices (printers, faxes, copiers, etc.) and televisions in their final stages of completion.

This is the fifth 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 for design, production, energy use and recycling with ongoing independent verification of manufacturer claims.

EPEAT currently covers personal computer products—including desktops, laptops, integrated systems, displays, workstations, and thin client devices—offering purchasers a uniform measuring stick to assess products' lifecycle environmental impacts. Imaging Equipment and Television standards are currently in the final stages of development through the Institute of Electrical and Electronics Engineers (IEEE).



Products are rated in EPEAT according to the proportion of 28 optional criteria they meet on top of 23 required, baseline 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 an environmentally responsible purchasing option.

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.

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, which pushes innovation and environmental excellence forward.

Manufacturers of all sizes participate in EPEAT—from Fortune 50 global leaders, including all 10 top global producers, 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 embodied in the Institute of Electrical and Electronic Engineers (IEEE) 1680 and 1680.1 standards, and were developed through an open, consensus-based, multi-stakeholder process supported by the U.S. Environmental Protection Agency (US EPA). That process included participants from the public and private purchasing sectors, manufacturers, environmental advocates, recyclers, technology researchers and other interested parties and lasted several years.

Bringing these varied constituencies' needs and perspectives to bear on standard development enabled 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.

### 2010 EPEAT Registry Growth

2010 witnessed significant growth in EPEAT product registrations, with particularly rapid growth in Gold level registrations.

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.

Each unique product may be registered in as many as 41 different countries. The number of such country-specific registrations is the alternate way to assess EPEAT's scope, and is a useful indicator of the overall volume of EPEAT registered products available to purchasers in different markets around the world.

The number of unique products registered in EPEAT more than doubled in 2010. On December 31, 2009, 37 manufacturers had some 1,400 unique products registered in the US, and 277 registered across the other 39 covered countries. By June 2010, manufacturers were registering 2139 unique products across 41 countries and by the end of December 2010, 2830 unique products were registered in total.

Numbers of product registrations— i.e. each instance of a given product being registered in a specific country—also nearly doubled (see Appendix E). In late December 2009 there were just over 1400 product registrations for the US and 8300 outside the US - 9700 total.

By June 2010, there were 14,709 EPEAT product registrations in total, with 5,465 at the Gold level and 9,149 at the Silver level. By the end of December 2010, US product registrations stood at 2219 and there were just under 18,000 product registrations in total across the 41 covered countries, including 6,645 registrations at Gold and 11,350 at Silver.

In total, 54 manufacturers participated in EPEAT during 2010.

### 2010 EPEAT Registered Product Sales

EPEAT's manufacturer Subscribers reported worldwide sales of 93,363,415 EPEAT registered products in 2010.

Because EPEAT only covers 41 of the world's countries, we can only make a rough comparison between unit sales of EPEAT registered product purchases and total products that are sold worldwide. However the comparison gives a useful indication of the prevalence of EPEAT registered products in the global market. Reviewing the 2010 EPEAT registered product sales in comparison with previous years' data and with 2010 data on worldwide and regional unit sales<sup>1</sup> reveals that:

- **Sales of EPEAT registered products in the US increased 5% over 2009, with sales exceeding 51 million products.**
- **Canadian sales increased more than 33%, with more than 4.2 million EPEAT-registered units sold in 2010.**
- **Combined unit sales of EPEAT-registered notebooks and desktops constituted more than 22% of 2010 worldwide sales of notebooks and desktops, and 57% of US 2010 combined product sales.**
- **EPEAT rating continues to play a significant role in the notebook market, with EPEAT-registered products constituting 72% of notebooks sold in the US and over 30% of notebook sales worldwide in 2010.**

The number of unique products registered in EPEAT and the number of country specific product registrations more than doubled in 2010.

<sup>1</sup> Thanks to Gartner for sharing their 2010 unit sales data for the purposes of this comparison.

### 2010 EPEAT Environmental Benefits

The lifecycle environmental benefits of the reported EPEAT registered product sales are calculated using the Electronics Environmental Benefits Calculator (EEBC) originally developed by the University of Tennessee Center for Clean Products under a grant from the US EPA. (See methodology section for more detail.) This calculation reveals remarkable lifecycle environmental benefits linked to 2010 EPEAT purchasing.

Over their lifetime, compared to products that do not meet EPEAT criteria, EPEAT registered notebooks, desktops, and monitors purchased worldwide in 2010 will:

- **Reduce use of primary materials by 15.7 million metric tons, equivalent to the weight of 48 Empire State Buildings**
- **Reduce use of toxic materials, including mercury, by 1,156 metric tons, equivalent to the weight of 192 elephants.**
- **Eliminate use of enough mercury to fill 437,048 household mercury fever thermometers.**
- **Avoid the disposal of 59,525 metric tons of hazardous waste, equivalent to the weight of 4 Eiffel Towers.**
- **Eliminate the equivalent of more than 16,052 US households' annual solid waste—31,991 metric tons**

Combined 2010 purchases of EPEAT registered notebooks and desktops constituted close to 57% of total US sales and more than 22% of worldwide desktop and notebook unit sales.

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

- **Savings of over 9 billion kWh of electricity—enough to power 757,416 US homes for a year.**
- **Avoidance of 36 million metric tons of air emissions (including greenhouse gas emissions) and over 77 thousand metric tons of water pollutant emissions.**
- **Reduction of over 1.6 million metric tons of greenhouse gas emissions—equivalent to taking nearly 1.1 million US passenger cars off the road for a year**

### Conclusion

In its fifth year of operation the EPEAT system continued to serve a significant global role in motivating, communicating and measuring reduction of electronic products' environmental impact. That constructive role will continue and increase as EPEAT expands to additional geographies and product types in 2012 and beyond.

More broadly, EPEAT's novel approach to environmental assessment—rating based on public, stakeholder consensus-based standards, tiered rankings that encourage competition and continuous improvement, pre-market declaration followed by ongoing independent verification, and easy access to a single registry of qualified products to compare and select among them—continues to show its merit, by engaging dozens of manufacturers of all sizes and differing nationalities, and thousands of purchasers worldwide, in a complementary process of creating and rewarding more sustainable product design and delivery.

For more information, visit [www.epeat.net](http://www.epeat.net).