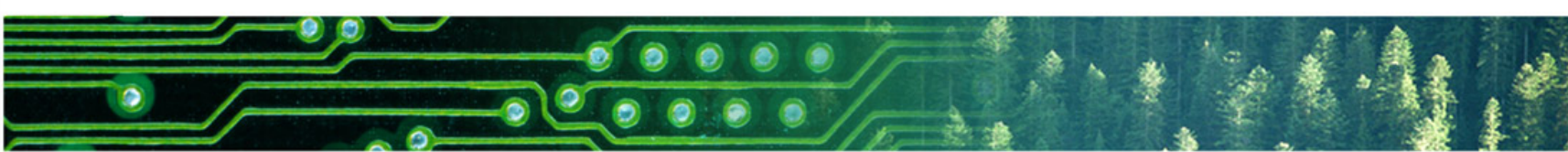# Greening Electronics Procurement with EPEAT™

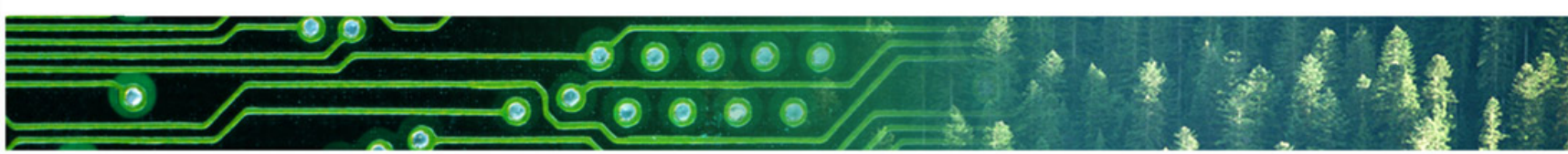**Sarah O'Brien, Green Electronics Council**

April 15, 2008

What is EPEAT™?

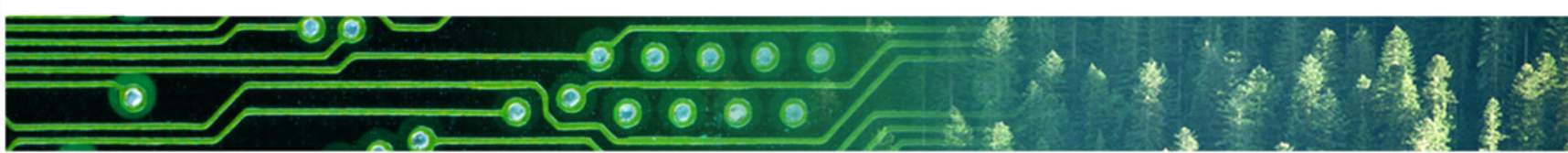### Electronic Product Environmental Assessment Tool

An environmental procurement tool designed to help IT purchasers address environmental concerns in their purchasing process for desktop computers, laptops, integrated systems and monitors.
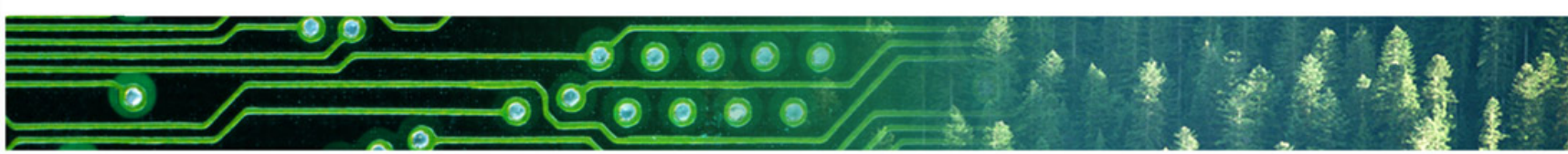
EPEAT™ Advantages

– Addresses multiple issues – design, corporate performance, packaging, use, refurbishment, end of life

– Does not add cost

– Allows flexibility – Bronze, Silver, Gold

– Will continually increase stringency

EPEAT™ Development

- Developed in a 3-year multi-stakeholder process

  - Initiated to address purchaser difficulty with "greener computer" sourcing
  - Extensive engagement of environmental advocacy groups, manufacturers, private and public purchasers, technical experts, recyclers
  - Consensus achieved on environmental criteria and the EPEAT™ system
 - EPEAT™ was developed by *all stakeholders together*

The EPEAT™ System

1) Standard comprised of 51 environmental performance criteria (IEEE Standard 1680 for the Environmental Assessment of Personal Computer Products)

2) System for identifying and verifying products which meet these criteria

3) Environmental Benefits Calculator
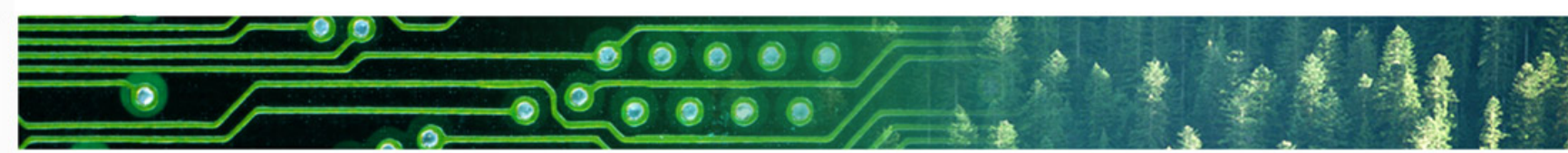
EPEAT™ Environmental Performance Categories

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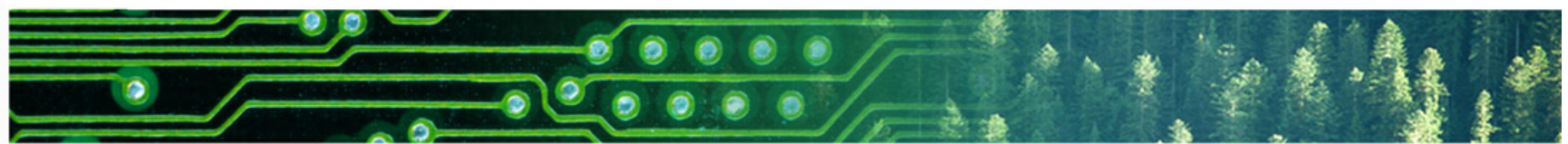- Corporate Performance
- Packaging
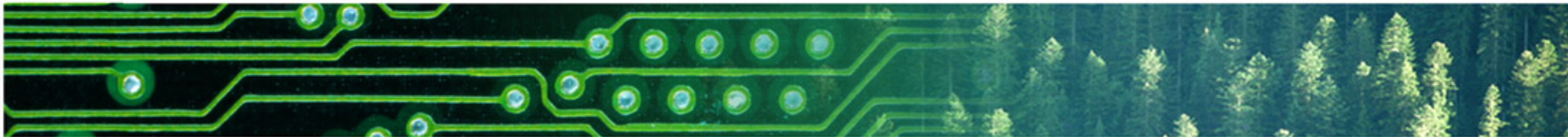
EPEAT™ Tiers

1. EPEAT Bronze– Meets all 23 mandatory criteria

2. EPEAT Silver– Meets all mandatory criteria and at least 50% of the optional criteria

3. EPEAT Gold– Meets all mandatory criteria and at least 75% of the optional criteria

EPEAT Registered Products

Product	BRONZE	SILVER	GOLD	Total
Desktops	4	60	32	96
Integrated Systems	0	11	0	11
Monitors	6	288	10	304
Notebooks	4	127	14	145
Totals	**14**	**486**	**56**	**556**

As of 04/07/2008. See www.epeat.net for current list.

# EPEAT™ Product Verification Process

- **Similar to ENERGY STAR®**

- **Companies:**
  - Sign legal agreement to participate
  - Register products as compliant
  - Must have specific verification evidence for all criteria

- **Product declarations routinely verified:**
  - A single attribute or set of attributes across products
  - Many attributes of a few products
  - Random timing, no advance notice
  - Conformance decided by independent panel
  - Results published, total transparency
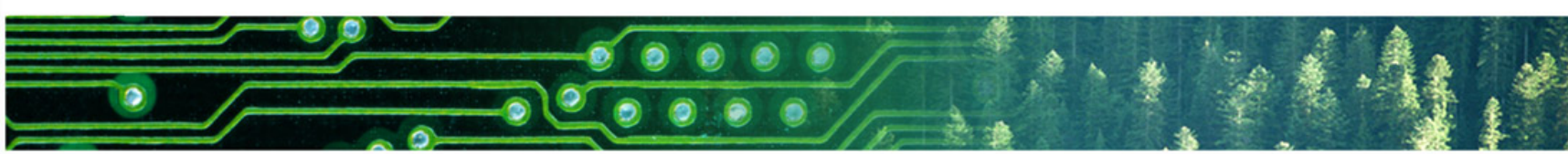
26 Participating Manufacturers

- **Apple**
- **CIARA-TECH**
- **CTL**
- **Dell**
- **Enano Computers**
- **Fujitsu**
- **GETAC**
- **Hewlett Packard**
- **Hyundai IT America**
- **Lenovo**
- **LG Electronics**
- **MDG Computers**
- **MPC Computers**

- **NCS Technologies**
- **NEC Display Solutions**
- **Northern Micro**
- **One Laptop per Child**
- **Panasonic**
- **Philips Electronics**
- **Prosys Tech**
- **Samsung**
- **Sony Electronics**
- **Toshiba**
- **Transource**
- **Viewsonic**
- **Zonbu**

As of 04/07/2008 See www.epeat.net for up to date list.
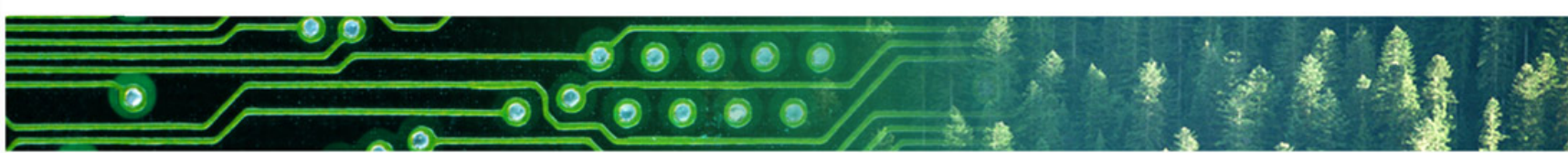
Purchasers Using EPEAT

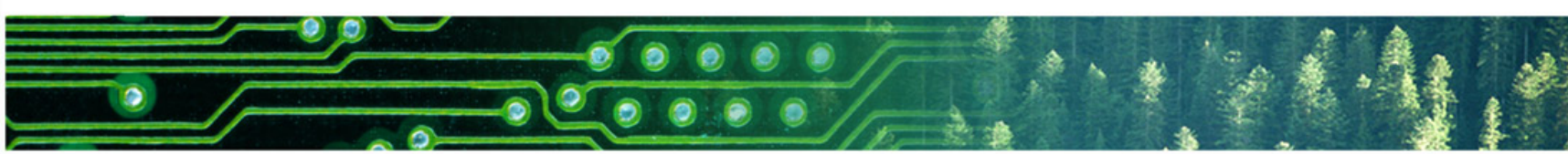- **US Federal Government** (approx $60 billion in contracts citing EPEAT) NASA, DOD, EPA, DHS, DOE, DOI, GSA. Now required by Federal Acquisition Regulations (FAR).

- **Canadian Federal Government** Master Agreement

- **New Zealand**: Environmental and Defense ministries

- **Private Sector**: Kaiser Permanente, Premier Inc., McKesson, HDR, Marriott International

- **Cities** including San Francisco, CA, Phoenix, AZ, San Jose, CA, Vancouver, BC, Seattle, WA, Portland OR

- **States/Provinces** including: Oregon, Washington, Wisconsin, Massachusetts, New York, California, Province of Nova Scotia, Ontario Lottery and Gaming

How Can I Use EPEAT?

Existing Contracts:

- Ask supplier to provide a list of EPEAT-registered products already available on contract

- Prefer/purchase EPEAT products

- Ask supplier to provide identification of all EPEAT-registered products in catalog/web ordering portals

- Require reporting on sales by product and tier

- Communicate about EPEAT to end users

- Establish EPEAT as baseline in contract refresh

How Can I Use EPEAT?

New purchase contracts

- Specify EPEAT registration for all eligible products, and prefer higher levels (Gold, Silver)

- Request number/percentage of EPEAT-qualified products by tier as part of bid qualification

- Require restrictions (only EPEAT listings) in catalog/online sales portals

- Require EPEAT reporting by product and tier

- Sample contract language on EPEAT website
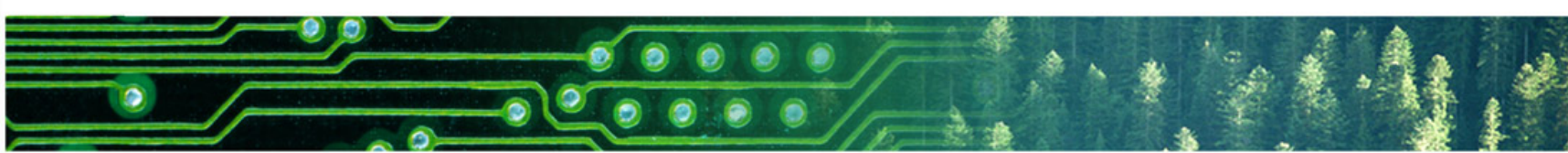
Successful Teamwork

- Involve IT staff early – IT can take the lead

- Collaborative effort between Purchasing, Waste Management, IT, Facilities

- Involve vendor reps to get up-to-date information on suppliers' EPEAT efforts

- Work through existing Green Team or other environmental committee
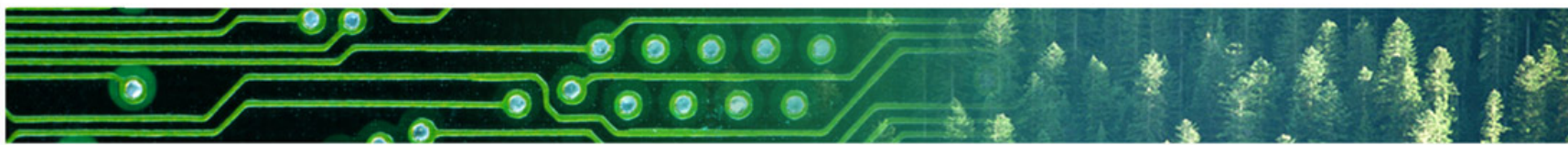
IT Involvement

- Work with CIO or other IT leaders to develop state IT hardware standards that incorporate EPEAT

- Support your outreach with information from current vendors about EPEAT products already in use

- Encourage IT managers to search the database, do an analysis of current IT hardware for EPEAT status
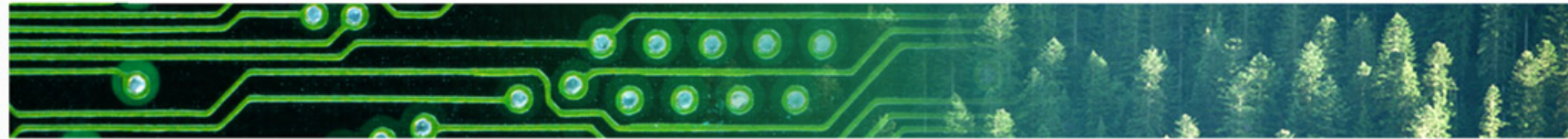
Locating products – www.epeat.net

Product Search

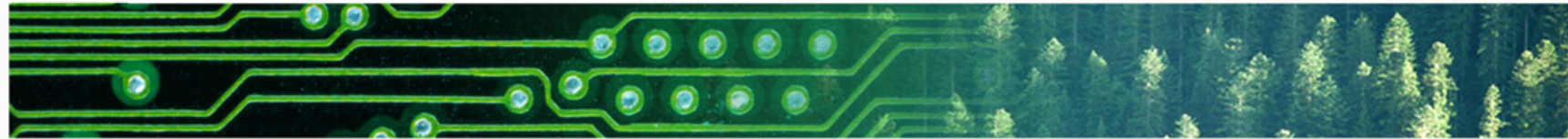**Product Type:** ⦿ All Product Types ◯ Desktops
◯ Integrated Systems ◯ Monitors
◯ Notebooks

Product: [Starts with ▾] [   ]

Manufacturer:
To select more than one manufacturer, hold down the "Ctrl" key and click the manufacturer names

All companies
Apple Inc.
CTL Corporation
Dell, Inc.

Rating: ⦿ Bronze or better ◯ Silver or better ◯ Gold

Search by Optional Criteria

[Search] [Reset]

Product Information

Product Type: Monitors

Product: MultiSync LCD2170NX

Manufacturer: NEC Display Solutions, Inc.

URL: http://www.necdisplay.com

Rating: **EPEAT** SILVER™

Listing Date: 9/1/2006

Monitor Type: Flat Panel

Monitor Size: 21 in

Product Status: ■ Active

Exceptions:

| IEEE 1680-2006 Criteria Category Summary	Optional Points
4.1 Reduction/elimination of environmentally sensitive materials	4/7
4.2 Materials selection	2/3
4.3 Design for end of life	4/5
4.4 Product longevity/life cycle extension	1/1
4.5 Energy conservation	0/3
Corporate Annual Report Points	
4.6 End of life management	1/1
4.7 Corporate performance	2/2
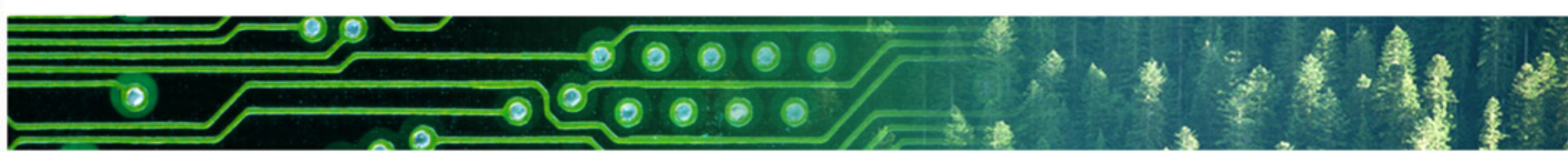
Electronics Environmental Benefits Calculator

- Developed under a US EPA grant by the University of Tennessee Clean Products/Clean Technologies Center – lifecycle analysis think tank

- Measures benefit of specific purchases (by amounts purchased and registration levels) compared with conventional models

- http://eerc.ra.utk.edu/ccpct/eebc/eebc.html

EPEAT Benefits Snapshot

For every 1,000 EPEAT™ Silver registered desktops purchased & discarded units recycled:

- ↓ Energy use by 1.2 million kWh
  = electricity to power 101 households annually

- ↓ Greenhouse gas emissions by 90 MTCE
  = removing 71 passenger cars from the road per year

- ↓ Hazardous waste by 17 metric tons

- ↓ Toxic materials, incl. lead & mercury, by 340 pounds

- ↓ Municipal solid wastes by 34.7 metric tons
  = waste generated by 18 households annually
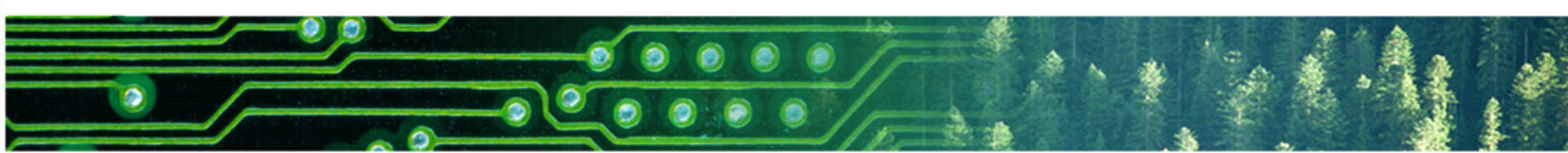
Actual Environmental Benefits 2006

First 6 MONTHS vs. conventional products:

- 13.7 b. kWh saved = usage of 1.2 million US homes/ 1yr

- 24.4 million metric tons materials reduced

- 56.5 million tons air pollution, including 1.07 million tons of GHG = 852,000 cars/yr

- Prevented 118,000 metric tons water pollution

- Reduced toxic materials use by 1,070 metric tons

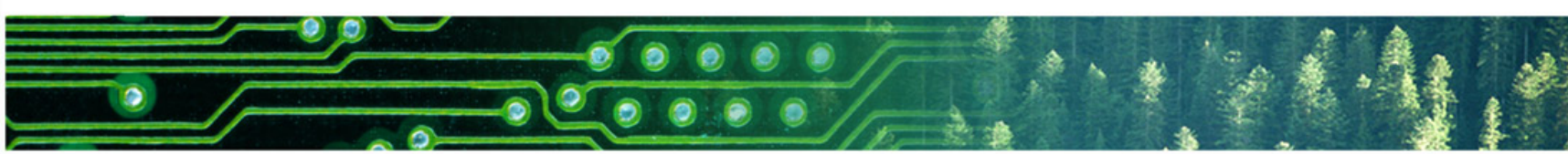- Avoided disposal of 41,000 metric tons of hazardous materials
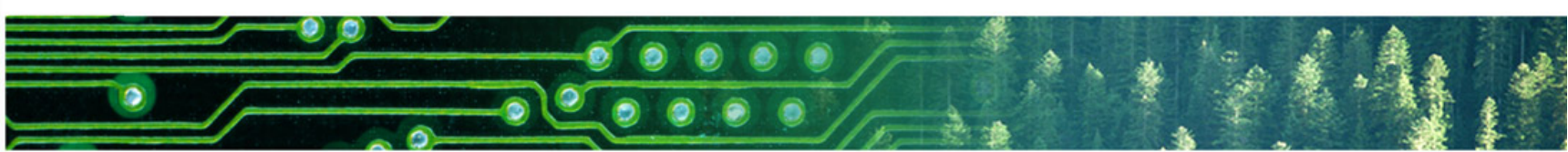
Why add EPEAT™ to IT Specs?

- Ease of use

- Guarantees you are getting top performers

- Volume/range of registered products

- Transparency/Credibility/Verification

- Searchable database for research

- Calculator for assessment/reporting

- Tiers promote competition to improve

- Keeping up with the market through updates
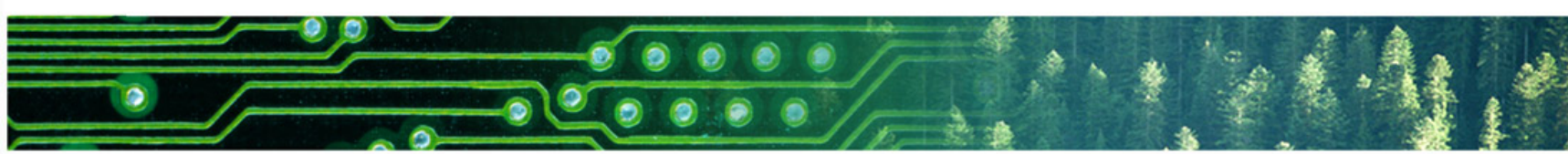
Institutional Commitment to EPEAT

- Guarantees ongoing purchase of environmentally preferable products

- Demonstrates commitment to environmental improvement

- Encourages/rewards manufacturers' efforts to green their products

- Contributes to market transformation

Contact

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www.epeat.net