



EPEAT

The Green IT Revolution

**Responsible Purchasing Goes
High Tech**

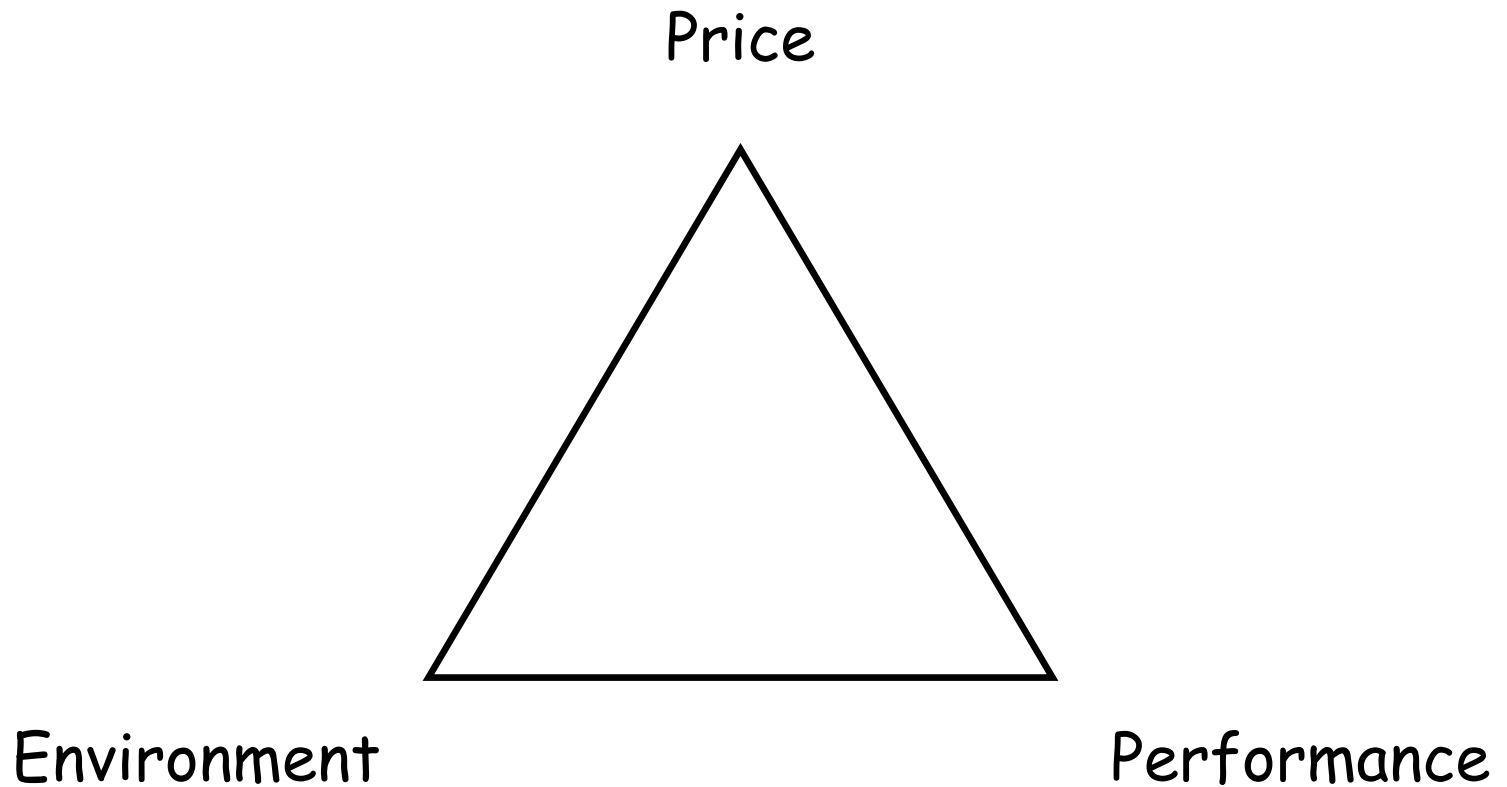


EPEAT

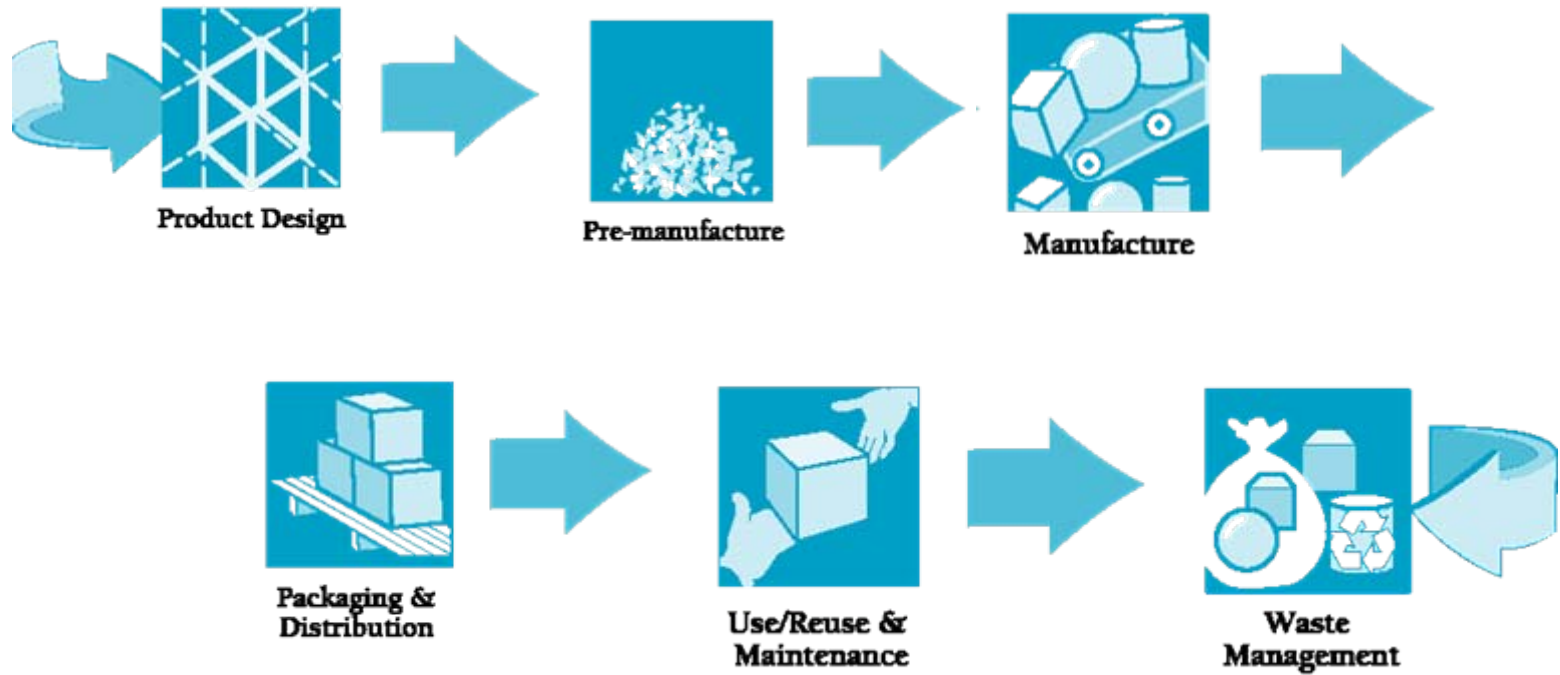
Defining Responsible Purchasing



Responsible Purchasing



Lifecycle Perspective



Energy Consumption

- Every gallon of gas burned emits 19 pounds of carbon dioxide.
- A single 1/10 ounce, 14-carat gold ring requires 2.8 tons of ore

Reducing Impacts

- When recycled materials are used to produce paper, aluminum, and glass, energy consumption can be reduced by up to 95%, water consumption by up to 50%, air pollution by 95%, and water pollution by up to 97%.
 - When scrap iron is used instead of iron ore to make steel, mining wastes are reduced by 97%, air pollution effluents by 80%, and water pollution by 76%.
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Opportunities

- Buildings
 - New construction
 - Renovation
 - Maintenance
 - Cafeteria Supplies
 - Cleaning Products
 - Computers
 - Copiers
 - Electricity
 - Furniture
 - Landscaping/Pest Management
 - Lodging
 - Meetings
 - Office Supplies
 - Paint
 - Paper
 - Printing
 - Vehicle Fleets
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Why Computers?

- Manufacturing a typical desktop computer creates 139-pounds of waste and 49 pounds of hazardous materials.
- Producing the six-inch silicon wafer from which computer chips are cut generates 2,840 gallons of wastewater and 7 pounds of hazardous waste.

Why Computers?

Computers and other office electronics consume 74 billion kWh of electricity per year, equivalent to the annual electricity consumption of 7 million households.

Why Computers?

- Today, 3.2 million tons of electronics become obsolete annually
 - Only about 11 percent of discarded electronics is recycled
 - RCRA implications for improper management
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Why Computers?

- Most of the 315 million computers that became obsolete from 1997 to 2004 ended up in landfills
 - 1.2 billion pounds of lead
 - 2 million pounds of cadmium
 - 400,000 pounds of mercury
 - 1.2 million pounds of hexavalent chromium

Why Computers?



Computer Attributes

- Energy efficiency
- Toxic constituents
- Recycled/reused content
- Packaging
- Reduced emissions during use
- Upgradability
- Design for recycling
- Take back and end-of-life management
- Worker health and safety
- Environmental management systems
- Third-party certification

A small logo consisting of a white circle with the text "EPEAT" inside, set against a dark green square background.

EPEAT

A large logo consisting of a white circle with the text "EPEAT" inside, set against a dark green square background.

EPEAT

Electronic Product Environmental Assessment Tool

Why EPEAT™?

- Promote product design changes that reduce environmental and health impact of electronics throughout the life cycle
 - Growing demand by institutional purchasers for easy to use tool to compare and select "green" products
 - Manufacturers' need for clear, consistent procurement criteria
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EPEAT Development

- **Cooperative Agreement between EPA and Zero Waste Alliance**
 - **Development Team:**
 - **Manufacturers - Dell, HP, IBM, Apple, Panasonic, Sharp, EIA, Intel**
 - **Purchasers - EPA, DOI, GATX, Pitney Bowes, State of MA, State of OR, State of CA, City of Seattle, Federal Electronics Challenge**
 - **NGOs - SVTC, Center for a New American Dream, Inform, H2E, NERC**
 - **Governments - Federal, State and Local**
 - **Recyclers - United Recycling, Waste Management, IAER**
 - **Academia - Tufts, NJIT**
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EPEAT Components

- 1) Set of voluntary 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 this criteria (www.epeat.net)
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EPEAT 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
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EPEAT Process

- **Manufacturer**
 - Signs Agreement with EPEAT Host Organization
 - Completes annual report on corporate performance and end-of-life management criteria
 - Evaluates and self-declares products against criteria
 - Submits data on web-based system, which calculates award level
 - **EPEAT Host Organization**
 - Conduct random after market spot checks
 - Request documentation to verify claims
 - Conduct periodic review and update criteria
 - Convene stakeholder group to determine next electronic products to develop environmental standards for
 - **Purchaser**
 - Specify EPEAT
 - Buy from Resellers who promote EPEAT
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DHS IT Contract Language

- Excerpt from FirstSource:
 - C.4.1.4 System Requirements
 - “...The Contractor is advised that DHS is an active participant in the Federal Electronics Challenge program. During the term of this contract, the Government reserves the right to purchase exclusively or otherwise provide preference for specific models of desktop computers, notebooks and monitors qualified through the Electronics Products Environmental Assessment Tool (EPEAT) or its successor.”



Recommended Language

All desktops, laptops, and computer monitors provided under this contract shall meet or exceed the minimum requirements for designation under the Electronics Products Environmental Assessment Tool (EPEAT)... The designation requirements and a list of all equipment meeting the requirements are provided at www.epeat.net.



Current Federal EPEAT Users

Dept. of Defense, Army	5.0B
Dept. of Homeland Security	6.0B
Dept. of Energy	0.4B
Veterans Administration	4.2B
EPA	0.2B
Dept. of Interior	0.2B
NASA SEWP IV	5.6B
<u>GSA Advantage</u>	<u>up to 200.0B</u>
Total	\$221.68B+



Where Can I See A List of EPEAT Registered Products?

- www.epeat.net
- An estimated 212 products as of October 11, 2006.
- Most major manufacturers:
 - Dell, HP, Apple, Sony, CTL, etc..