



Responsible Purchasing

Current Practices and Future Trends

NASPO Conference, March 6, 2007

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The Premise

Every purchase has human
health, environmental, and
social impacts.

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Responsible Purchasing



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Link Between Purchasing and the Environment

It's all connected to purchasing



Environmental Concerns

- Mass extinctions
- Deforestation & soil erosion
- Air & water pollution
- "Super" bacteria, viruses, and insects
- Dwindling natural resources
- Cancer rates increasing
- Reproductive disorders increasing
- Fisheries collapsing
- Water tables falling
- Climate Change



Endangered Life Support Systems

- **Air pollution:** 20% of world's population breathes unsafe air
- **Soil depletion:** 66% of world's agricultural land diminished
- **Forest losses:** 40% of world's original forest cover destroyed
- **Water scarcity:** one billion people are without safe drinking water
- **Climate change:** 30% increase in atmospheric carbon (global warming)
- **Bio-diversity:** 25% of mammals and 12% of birds face extinction. 90% of large fish stocks destroyed in past 50 years

Growing Awareness

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Global Warming

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The Greenhouse Effect

Necessary for Life

Most of the Sun's energy is absorbed by the Earth, but some is reflected back into space.

Like a blanket, a natural layer of atmospheric gases absorbs a portion of this reflected solar energy, trapping it on Earth. This natural **greenhouse effect** makes life possible by warming the Earth's climate to a point where it can sustain life.

Too Much of a Good Thing

When this blanket of heat-trapping **greenhouse gases** becomes too thick, however, much reflected heat is forced back to Earth, where it warms the Earth's surface. This can cause unpredictable, and potentially disastrous, effects.

Source: http://www.ucusa.org/global_warming/science/global-warming-faq.html
graphic source: Pew Center on Climate Change

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Consuming the Environment

"The major cause of the continued deterioration of the global environment is the unsustainable pattern of production and consumption, particularly in industrialized countries."

- United Nations Agenda 21 Report

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2002 World Summit

Emphasized the need for authorities to "[p]romote public procurement policies that encourage development and diffusion of environmentally sound goods and services."

- 2002 World Summit on Sustainable Development in Johannesburg

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Big Business Responds

"We are looking at innovative ways to reduce our greenhouse gas emissions. This used to be controversial, but the science is in and it is overwhelming.... We believe every company has a responsibility to reduce greenhouse gases as quickly as it can."

—Lee Scott, CEO of Wal-Mart
October 24, 2005

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Energy Consumption

- Every gallon of gas burned emits 19 pounds of carbon dioxide.
- Every day, the worldwide economy burns an amount of energy the planet required 10,000 days to create.

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Resource Consumption

- One ton of virgin paper requires 98 tons of resources to produce.
- A single 1/10 ounce, 14-carat gold ring requires 2.8 tons of ore

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Typical Desktop Computer

- 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.

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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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Two Cups of Coffee a Day

- 34 gallons of coffee a year.
- 18 pounds of coffee beans
- 12 pounds of fertilizer
- A few ounces of highly toxic pesticides
- 43 pounds of coffee pulp
- Clear cutting of forests to grow even more coffee
- Bird species disappearing
- More erosion
- More pesticides

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The "Real" Definition

Environmentally preferable purchasing means:

**Buying less polluting products
from less polluting companies.**

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Important Caveats

- A product must work well and be affordable to be considered environmentally preferable.
- "Affordable" does not necessarily mean "less expensive."
- "Affordable" can sometimes mean a higher initial cost.

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Government Purchasing History

- Clothing sizes during the Civil War
- Small Business Administration
- Automobile airbags
- Energy-efficient computers
- Recycled-content paper

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Responsible Purchasing Strategies

- Written Policies
- Cooperative Efforts
- Price Preferences
- Lifecycle Costing
- Best Value Purchasing
- Green Teams
- Vendor Outreach
- Approved Product Lists
- Eco-Labels
- Incentive Programs
- Employee Training
- Plagiarize
- Pilot Projects

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Using Eco-Labels Effectively

Can Someone Else Tell Me What's Green?



Beware of Misleading Claims

- Eco-safe
- Environmentally friendly
- Earth friendly
- Earth smart
- Environmentally safe
- Environmentally preferable
- Essentially non-toxic
- Practically non-toxic
- Made with non-toxic ingredients
- Degradable
- Biodegradable
- Compostable
- Environmentally safe
- CFC-free
- Ozone friendly
- Recyclable



FTC Green Marketing Guidelines

FTC FACTS for Consumers
Sorting Out 'Green' Advertising Claims

Facts about green claims, such as "eco-friendly," "biodegradable," "recyclable," "ozone friendly," "non-toxic," "earth friendly," "earth smart," "environmentally safe," "environmentally preferable," "essentially non-toxic," and "practically non-toxic." The FTC provides guidance on how to interpret these claims and what to look for when making purchasing decisions.

Available at:
www.ftc.gov

Facts for Business
Environmental Marketing Claims

Guidelines for businesses regarding environmental marketing claims, including definitions and best practices for transparency and accuracy.



Classifying Eco-Labels

- Warning labels
- Seal of approval - ISO Type I
- Single attribute - ISO Type II
- Report card - ISO Type III
- Multi-tier

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Warning Labels



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Seal of Approval (Type I)



AUSTRIA



CANADA



CHINA



CROATIA



EU



FRANCE



GERMANY



JAPAN



INDIA



NORDIC COUNTRIES



SINGAPORE



THAILAND



THE CZECH REPUBLIC



THE NETHERLANDS



USA

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More Seals of Approval



Hong Kong



Korea



New Zealand





Philippines



And more...
And more...
And more...

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Single Attribute (Type II)

- Statements
 - Compostable, biodegradable, recyclable
- Symbols









Printed on 100% Tree-Free Media

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Report Card (Type III)




CERTIFIED Environmental Savings

By using this product, you reduce:

- ✓ Energy consumption by 4 times
- ✓ Carbon dioxide emissions by 5 times
- ✓ Acid rain gases by 3 times
- ✓ Toxic water pollutants by 10 times
- ✓ Solid waste by 10 times

SCIENTIFIC CERTIFICATION SYSTEMS

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Multi-Tier Label



LEED™

LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN

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LEED Overview*

<p>Sustainable Sites</p> <p>Prerequisite 1: Erosion & Sedimentation Control</p> <p>Credit 1: Site Selection</p> <p>Credit 2: Development Density</p> <p>Credit 3: Disturbed Soil Reclamation</p> <p>Credit 4: Alternative Transportation</p> <p>Credit 5: Reduced Site Disturbance</p> <p>Credit 6: Stormwater Management</p> <p>Credit 7: Landscape & Exterior Design to Reduce Heat Islands</p> <p>Credit 8: High Performance Siting</p> <p>Water Efficiency</p> <p>Credit 1: Water Efficient Landscaping</p> <p>Credit 2: Innovative Water-use Technologies</p> <p>Credit 3: Water Use Reduction</p> <p>Energy & Atmosphere</p> <p>Prerequisite 1: Fundamental Building System Commissioning</p> <p>Prerequisite 2: Minimum Energy Performance</p> <p>Prerequisite 3: HVAC Reduction in HVAC Equipment</p> <p>Credit 1: Optimize Energy Performance</p> <p>Credit 2: Renewable Energy</p> <p>Credit 3: Address and Commissioning</p> <p>Credit 4: Green Design</p> <p>Credit 5: Measurement & Verification</p> <p>Credit 6: Green Power</p>	<p>Materials & Resources</p> <p>Prerequisite 1: Storage & Collection of Recyclables</p> <p>Credit 1: Building Reuse</p> <p>Credit 2: Construction Waste Management</p> <p>Credit 3: Recycled Content</p> <p>Credit 4: Recycled Content</p> <p>Credit 5: Local Regional Materials</p> <p>Credit 6: Regionally Sourced Materials</p> <p>Credit 7: Certified Wood</p> <p>Indoor Environmental Quality</p> <p>Prerequisite 1: Minimum IEQ Performance</p> <p>Prerequisite 2: Environmental Tobacco Smoke (ETS) Control</p> <p>Credit 1: Carbon-Neutral (CO₂) Monitoring</p> <p>Credit 2: Ventilation Effectiveness</p> <p>Credit 3: Construction IAQ Management Plan</p> <p>Credit 4: Low-Volatile Materials</p> <p>Credit 5: Indoor Chemical & Pollutant Source Control</p> <p>Credit 6: Compatibility of Systems</p> <p>Credit 7: Thermal Comfort</p> <p>Credit 8: Daylight & Views</p> <p>Innovation & Design Process</p> <p>Credit 1: Innovation in Design</p> <p>Credit 2: LEED Accredited Professional</p>
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*Information based on LEED v2.1 as revised 3/14/03.

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LEED Overview*

- Includes both mandatory and desirable attributes.
- Regimented certification procedures.
- Projects can earn up to 69 total points.
- Projects rated according to following:
 - Certified (26 - 32 points)
 - Silver (33 - 38 points)
 - Gold (39 - 51 points)
 - Platinum (52 - 69 points)

*Information based on LEED v2.1 as revised 3/14/03.

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Green Computers



Electronic Product
Environmental Assessment Tool

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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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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 Tiers



EPEAT Bronze- Meets the 23 mandatory criteria



EPEAT Silver- Meets 23 mandatory criteria and at least 50% of the optional criteria



EPEAT Gold- Meets 23 mandatory criteria and at least 75% of the optional criteria

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Current EPEAT Users

Organization	Value in Billions of Dollars
• General Services Administration	Up to \$50.0B
• Department of Defense, Army	\$15.0B
• Department of Homeland Security	12.0B
• NASA	5.6B
• Veterans Administration	4.2B
• Kaiser Permanente	4.0B
• Canadian Government Master Standing Offer	0.75B
• Department of Energy	0.4B
• Department of Interior	0.2B
• Massachusetts	0.07B
• Department of Transportation	0.04B
• U.S. Environmental Protection Agency	0.04B
• Executive Office of the President	0.01B
TOTAL	\$92.31B

Information Updated 12/22/06

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Recommended EPEAT 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>.

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Comparing Eco-Labels

- Validity of the standard
- Standard setting process
- Verification process

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Standard Validity

- Clear and consistent meaning
- Very specific requirements
- Information should be meaningful and verifiable
- Must not conflict with Federal Trade Commission *Guides for the Use of Environmental Marketing Claims*.

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Standard Setting Process

- No conflict of interest
- Lifecycle considerations
- Broad stakeholder participation
- Transparent development process
- Comments publicly available

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Verification Process

- Self certification
- Self certification with random audits
- Independent third-party certification
- Independent third-party certification with on-site audits

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Popular Labels

- Chlorine Free Products Association - <www.chlorinefreeproducts.org>
- Energy Star - <www.energystar.gov/purchasing>
- Environmental Choice - <www.environmentalchoice.ca>
- EPEAT - <www.epeat.net>
- Forest Stewardship Council - <www.fsc.org>
- Green-e - <www.green-e.org>
- Green Guard - <www.green-guard.org>
- Green Seal - <www.green-seal.org>
- Green Building Council (LEED) - <www.usgbc.org/leed>
- Scientific Certification Systems - <www.scscertified.com>
- TCO - <www.tcodevelopment.com>

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Private Sector Innovations

Improving Environmental Performance is Good Business

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 **Private Sector Companies**



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 **More Private Sector Companies**



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 **Wal-Mart's Goals**



To be supplied 100% by renewable energy

- Existing stores 20% more efficient in 7 years
- New stores 30% more efficient in 4 years
- Fleet 25% more efficient in 3 years, double in 10 years



To create zero waste

- 25% reduction in solid waste in 3 years
- All private brand packaging improved in 2 years (right sized, reusable materials)



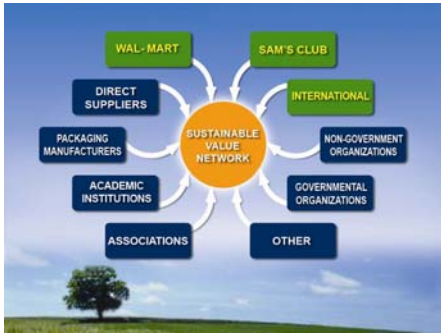
To sell products that sustain our resources & environment

- 20% supply base aligned in 3 years
- Preference given to aligned suppliers in 2 years
- Design and support Green Company in China

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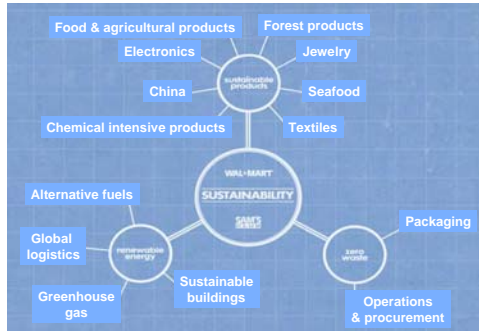
Wal-Mart Reaches Out



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Sustainable Value Networks



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Business & Environmental Benefits



Used 727 less shipping containers.

Saved \$3.5 million on transportation costs.

+

Saved 5,100 trees.

+

Prevented 1,300 barrels of oil from being used.

Just 277 SKU's. Imagine the possibilities...

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