EPA's Environmentally Preferable Purchasing Program and EPEAT

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EPA's Environmentally Preferable Purchasing Program

- Directed by EO 12873 in 1993 to help federal agencies identify and procure environmentally preferable products and services
- This task has been included in all subsequent EOs, including the current EO 13514
- Intent of EO:
  - Reduce Federal environmental footprint
  - Use federal purchasing power to offer market advantage to manufacturers who build greener products and/or services
- Accomplish this by:
  - Participating in development of voluntary product or service environmental performance standards in public/private partnerships
  - Assisting federal agencies in meeting their purchasing requirements by using these standards to identify environmentally preferable products
  - Engage in government wide effort to create system to use more voluntary standards

Federal Green Purchasing Requirements for Electronics

- Federal Acquisition Regulation (FAR) Part 23
  - Requires acquisition of “environmentally preferable” products and services (e.g. EPEAT), ENERGY STAR, and FEMP
- Executive Order 13514
  - Requires “sustainable acquisition” including EPEAT, ENERGY STAR and FEMP
- Executive Order 13221
  - Requires acquisition of electronics with low standby power
- EPAct 2005, EISA 2007
  - Requires acquisition of ENERGY STAR and FEMP

National Strategy on Electronics Stewardship

- Issued July 20, 2011
- Directs EPA to:
  - Establish multi-stakeholder groups to address key research questions and design challenges, and accelerate development of and investment in green electronics design standards.
  - Promote consumer purchasing of green electronics that are certified as meeting stringent environmental performance criteria that address environmental impacts across the entire lifecycle of the products.
  - Ensure expansion of quality green electronics certification programs, including EPEAT to consider environmental impacts across entire product lifecycles and to cover additional types of electronics.

What is EPEAT®?

- The Electronic Product Environmental Assessment Tool (EPEAT)
- A system that:
  - Helps purchasers evaluate, compare and select electronic products based on their environmental attributes
  - Gives manufacturers market recognition for taking innovative steps to make greener products
- NOT an EPA Program

What is EPEAT?

- Set of voluntary standards that define required and optional environmental attributes for electronic products
  - Specified (so far) in the IEEE 1680 family of standards
- System for listing products that meet the standards
  - EPEAT Registry
- Method for verifying that listed products are in conformance with the standards
  - Product verification

How are Standards EPEAT Uses Created?

- So far developed through IEEE, a 140 year old ANSI accredited Standard Development Organization
- Open, consensus based process used
- Active participation from manufacturers, suppliers, recyclers, academics, government representatives, purchasers, and environmental advocacy organizations
- Over 400 individuals participating in development of the IEEE 1680.2 and 1680.3 standards

IEEE 1680 Family of Standards

- IEEE 1680: how the product registration and verification systems work
- IEEE 1680.1: criteria for computer desktops, laptops and monitors
- IEEE 1680.2: criteria for imaging equipment
- IEEE 1680.3: criteria for televisions
- More information at http://grouper.ieee.org/groups/1680/

EPEAT Environmental Criteria (1680.1)

- 23 required criteria and 28 optional criteria in eight categories
  - Reduction/elimination of environmentally sensitive materials
  - Materials selection
  - Design for end-of-life
  - Product longevity/lifecycle extension
  - Energy conservation
  - End-of-life management
  - Corporate performance
  - Packaging
- Products must meet required criteria in all categories
- Summary of criteria at http://www.epeat.net/learn-more/criteria-discussion/criteria/

EPEAT Verification

- Manufacturers self-declare registered products
  - Must be prepared to provide verification documentation for any declared criteria at any time after product registration
- EPEAT performs registry surveillance and ongoing verification investigations
- More information at http://www.epeat.net/learn-more/verification/

What is EPA's Engagement in EPEAT?

- Provided seed funding for launch of EPEAT – which is now self sustaining and managed by EPEAT Inc.
- Participate in IEEE and ULE related standards development activities
- Participate on the EPEAT Advisory Council
- Maintain the Electronics Environmental Benefits Calculator
- Provide funding for facilitation of some standards development activities

EPEAT Environmental Benefits – Worldwide, 2010

Metric	Reduction	Equivalents
Electricity	9 million megawatt hours	Annual electricity use of 757,416 average US households
Primary Materials	16 million metric tons	The weight of 48 Empire State Buildings
Air Emissions (incl. GHG)	36 billion kg	36,263,127 Metric Tons
Greenhouse Gas Emissions	1.6 million MTCE*	1,127,114 average US passenger cars off the road for a year
Water Emissions	77 million kg	77,054 metric tons
Toxic Materials (incl Hg)	1,156 metric tons	Weight of 192 elephants, including Hg to fill 437,048 fever thermometers
Solid Waste	31,992 metric tons	16,052 US households' annual solid waste
Hazardous Waste	59,525 metric tons	The weight of 4 Eiffel Towers

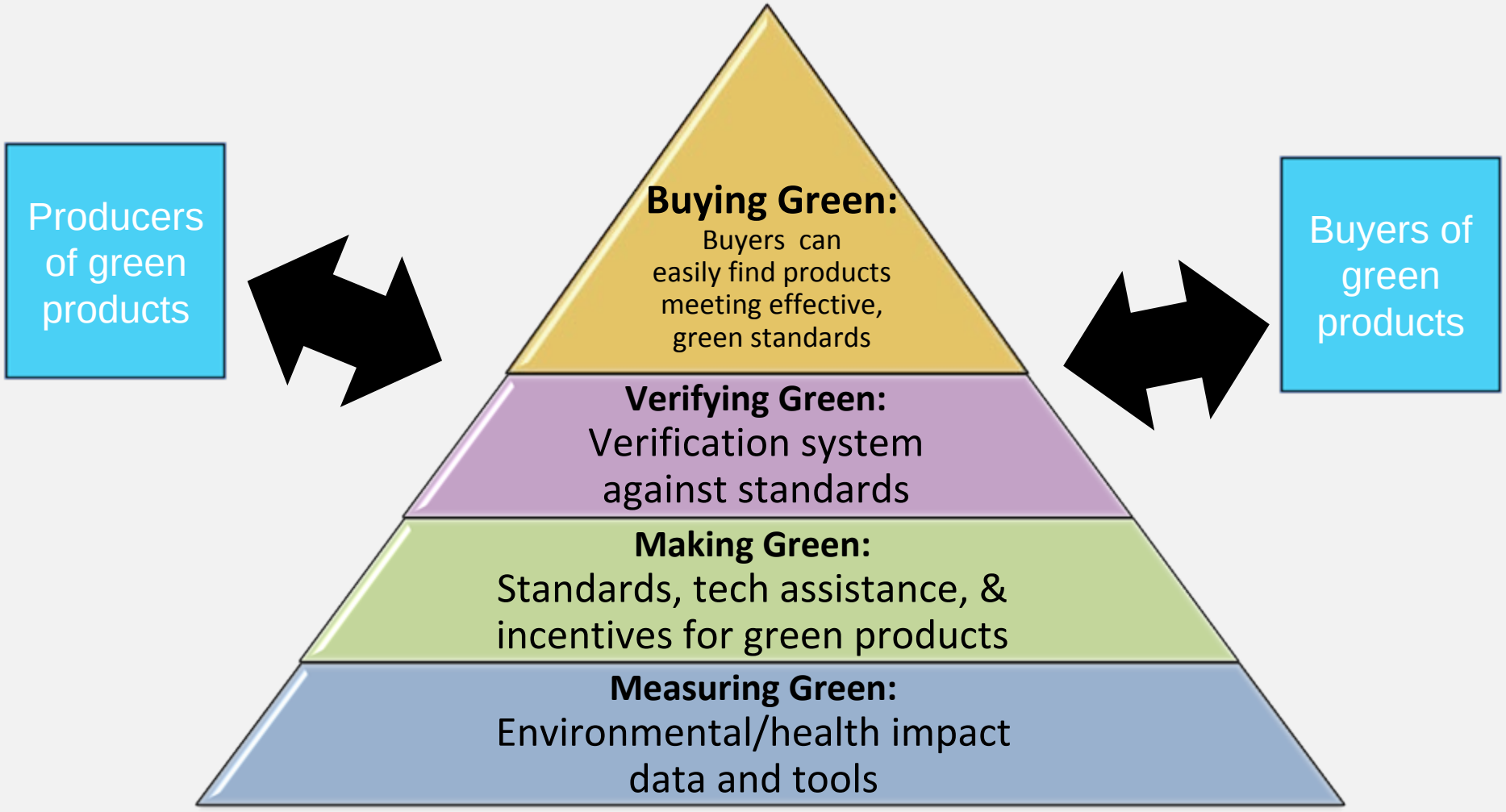
EPEAT Cumulative Environmental Benefits Jul 2006 – Dec 2010

Metric	Reduction	Equivalents
Electricity	78.6 million megawatt hours	Annual electricity use of 6,570,250 avge. US households
Primary Materials	139.0 million metric tons	The weight of 421 Empire State Buildings
Air Emissions (including greenhouse gases)	320 million kg	320,966,305 million metric tons
Greenhouse Gas Emissions	14.8 million MTCE	9,934,527 million avge. US cars off the road for a year
Water Emissions	673 million kg	673,143 metric tons
Toxic Materials (incl Hg)	8,357 metric tons	Weight of 1,438 elephants, incl. enough Hg to fill 1,331,120 fever thermometers
Solid Waste	116 thousand metric tons	Annual solid waste generation of 58,531 US households
Hazardous Waste	320 thousand metric tons	The weight of 36 Eiffel Towers

So Why is EPEAT a Big Deal?

- Harnesses federal purchasing power to make huge environmental improvements
- Leverages purchasing power far beyond federal community
- Has documented big environmental results of green purchasing
- Is jointly created and owned by stakeholders – shared win for all

Functioning Market Infrastructure for Product Sustainability



What are the Challenges to Green Purchasing?

- Need more product environmental performance standards
- Developing standards is time consuming and slow
- Key stakeholders don’t have resources to commit
- Lack of research needed at times to define best criteria
- Lack of international harmonization of efforts
- Not everyone comes to the table wanting success
- Need clearer direction to purchasers on what is green for all product and service categories

Questions to Panel and Audience

- How can we find solutions to these challenges together?
- What role would you like to see government play to further advance green purchasing?

Web Resources

- EPA's website on the EPEAT program
  - http://www.epa.gov/epeat
- EPEAT website
  - http://www.epeat.net/
- OMB Circular A119
  - http://www.whitehouse.gov/omb/circulars_a119
- My contact info: elwood.holly@epa.gov