#### Sustainable Purchasing Best Practices



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Responsible Purchasing Network

National Academies Workshop • December 7, 2011 Washington, DC





#### **RPN**

#### Nonprofit network

- States
- Local governments
- Federal agencies
- Colleges & universities
- School districts
- Businesses
- Non-profit partners



#### **RPN Mission**

"Promote and practice responsible purchasing by identifying best practices, developing effective purchasing tools, educating the market, and using our collective purchasing power to maximize environmental stewardship, protect human health, and support local and global sustainability."





## Why is Public Procurement Important?

Public agencies have massive buying power

**√20%** GNP -- ~\$1.5 Trillion annually for goods & services

Federal specifications often replicated by municipalities, school districts, universities, colleges, etc.)



✓ Manufacturers design products to meet government "specs" (e.g., recycled paper, cars with airbags)





# Sustainable Procurement Policy Goals

"...minimize negative impacts on human health and environment while supporting a diverse, equitable, and vibrant community and economy..."



City of Tacoma, WA Resolution No. 38248





#### **Unsustainable Products**



- Hazardous ingredients
- Poor energy, fuel or water efficiency



 Wasteful (rapidly disposable, little or no recycled content, difficult to recycle)



Unsustainable production, use, transportation, and disposal impacts



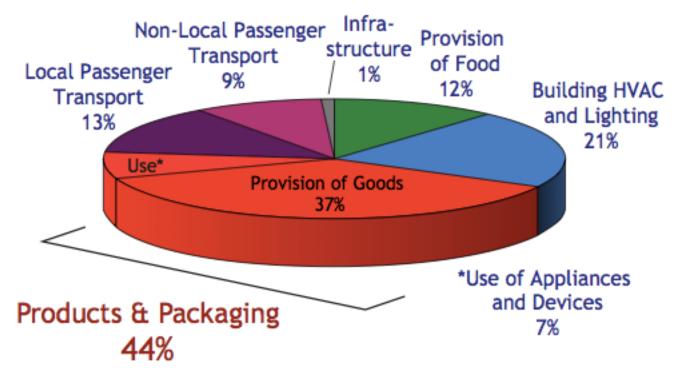








## Products & Packaging Cause Significant Climate Impacts



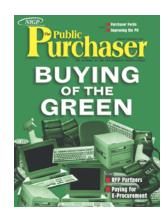
US Greenhouse Gas Emissions (a systems-based view)
Product Policy Institute (2009)





# Why Sustainable Procurement is an Important Strategy

- "Leading by Example"
- •"Proving Ground" for sustainable products
- Strengthening markets
- Rewards product redesign
- → market transformation
- Cleans up the supply chain







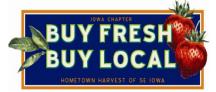
# Sustainable Purchasing Benefits



#### **Progress towards:**

- Climate action commitments
- Solid waste reduction goals
- Reduction of water and air pollution
- Minimization of toxic chemical releases and exposures
- Creation of "green" jobs
- Earning green building credits
- Life-cycle cost savings

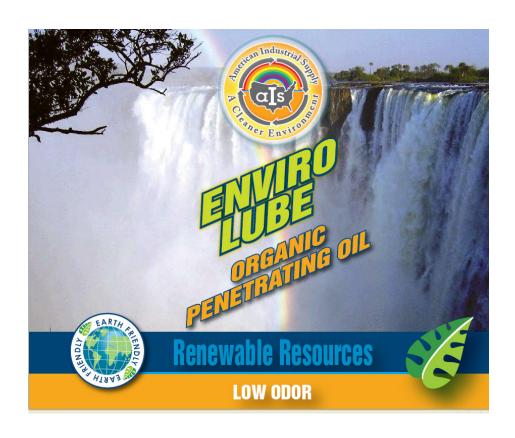








#### Manufacturer-created Eco-Labels











## Retailer-created Ecolabels











# Best Practice Require Claims to be Verified

"Suppliers citing environmentally preferred product claims shall provide proper certification or detailed information on environmental benefits, durability and recyclable properties."

CERTIFIED

BIODEGRADABLE

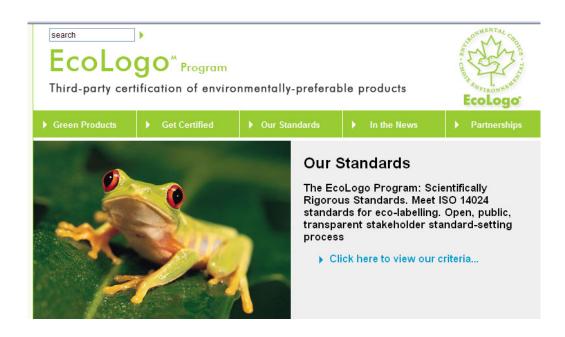
• Breaks down into carbon dioxide,

Source: University of California Policy on Sustainable Practices





#### **Multi-Attribute Certifications**













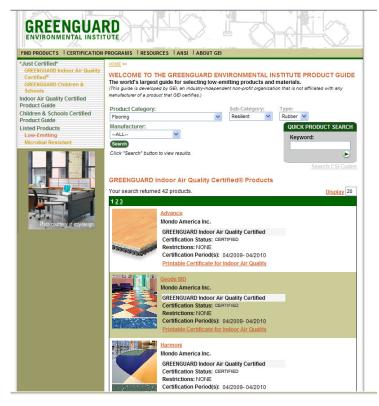






#### **Single Attribute Certifications**

























#### **Product Rating Systems**



• US DOE/EPA ENERGY STAR Program (energy-efficient appliances, office and lighting equipment)



• EPEAT ("green" computer equipment)



US EPA Design for the Environment (DfE) Program (low-toxicity cleaners)





## **Best Practice Institutionalize**

- Get top level support
- Assess your internal resources
- Assemble a "Green Team"
- Create a process for working together
- Adopt EPP policy with goals and reporting requirements
- Establish communication and outreach strategies





### **Best Practice Centralize**

- Lowers prices by aggregating demand
- Easier to control/monitor purchases
- Simplifies education process
- Saves time on ordering, book-keeping

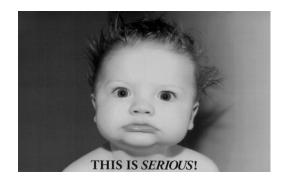






# **Best Practice Prioritize Opportunities**

- Largest potential impact
- Ability to meet environmental/health goals
- Opportunities for change (contracts re-bid)
- Ease of implementation (use existing specs)
- Potential to save money







## **Best Practice Focus on Products that Save Money**





- Lower upfront costs
- Conserve energy or water
- Reduce paper or fuel use
- Lower maintenance costs
- Reduce replacement costs
- Avoid disposal/cleanup costs
- Support the local/regional economy
- Offset environmental and health program costs





#### **Toner and Ink Cartridges**

- Evaluate toner/ink costs BEFORE purchasing imaging equipment
- Remanufactured toner and ink cartridges cost 30-60% less per copy than "virgin" cartridges
  - **✓** Need strict performance standards
  - ✓ Can support local jobs
- Require vendors to take-back empties to reduce disposal costs (ask for rebates)
- XL toner and ink cartridges reduce replacement costs









### "Best Value" Procurement Favors Efficient Products

Considers overall (life-cycle) costs of ownership:

- Initial price
- Utility costs (energy, water)
- Maintenance costs (labor and replacement)
- End-of-life costs (disposal and recycling)











# ENERGY STAR-rated LED Lamps

- Energy-efficient (75% more efficient than incandescents)
- Long life (15X longer than incandescents;
   ≥25,000 hours rated life)
- Mercury-free (unlike CFLs)

Qualified list: www.energystar.gov

US DOE: LEDs can save enough electricity to replace ~24 large power plants by 2030







# **Best Practice Race to the Top**

#### Products Recognized as ENERGY STAR Most Efficient in 2011



#### **ENERGY STAR Most Efficient Designation Graphic**

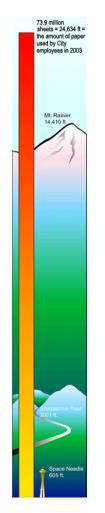








### **Best Practice Aim for the Bottom**



Seattle's Paper Cuts Program

•Set 30% paper reduction goal (vs. 2004)



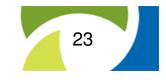


•Copy paper spec = 100% post-consumer recycled content/processed chlorine-free

•2009 => 28% reduction; cost savings = <\$80,000













### **Best Practice Performance Test**

- Engage end-users early
- Set performance criteria
  - ✓ Should be no trade-off
- Request product samples
- Conduct pilot tests
  - **✓ Try innovative products**
- Approve only what works







### Best Practice Green Your Market Basket List

• Add "green" products to your core/market basket lists so they become eligible for vendor's deepest discounts (or spec green only)



• Remove non-green products from core/market basket list (or contract) to get better price breaks on green products





# **Best Practice Direct Suppliers to...**

- Clearly label products that meet YOUR EPP criteria (using data from eco-labeling organizations)
- Require "greenest" products to be listed first via online searches
- Substitute (or suggest) EPPs when conventional items ordered



 Periodically report \$ amount of compliant/ non-compliant purchases sold on your contract





# **Best Practice Reduce Transportation Costs**

 Avoid overnight shipping, whenever possible



 Ask vendors to offer incentives for reducing the frequency of deliveries



Factor in transportation costs, impacts





# **Best Practice Reduce Packaging Costs**

•Encourage vendors to offer reusable and recyclable packaging

•Purchase "concentrated" products







#### Best Practice Require Vendors to Recycle

• Saves time/money by shifting responsibility for recycling to manufacturers and distributors



 Creates infrastructure for efficient recycling





 Encourages manufacturers to redesign their products to be safer, more durable and more easily recyclable

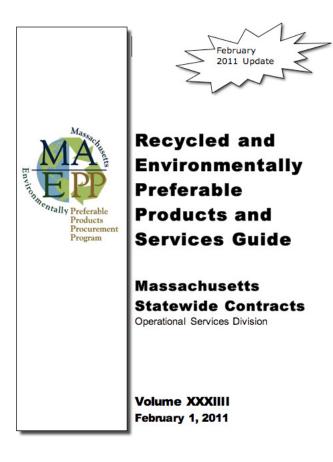


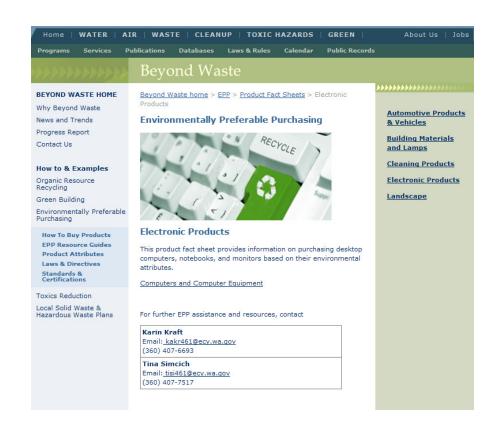




#### **Best Practice**

#### **Publicize Sustainable Products on Contracts**



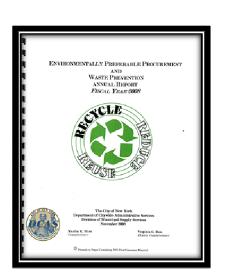






# **Best Practice Track and Report**

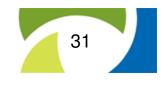




#### Meet reporting requirements Measure success!

- Determine quantity of "sustainable" goods & services used by your facilities
  - **✓** Document progress for LEED, policy goals
  - **✓ Identify challenges and opportunities**
  - **✓ Plan for future efforts**
- Identify cost impacts
  - **✓** Measure cost savings and increases
  - ✓ Demonstrate the financial case for a Responsible Purchasing Program





# **Best Practice Use Existing Calculators**

#### Lifecycle Environmental Impact

The following is a break down of the environmental impact of your choices for different grades of paper.

Rec	alculate	Baseline Paper	100% Recycled Paper
	Paper	Uncoated Freesheet (e.g. c	Uncoated Freesheet (e.g. cı
Quai	ntity per year	1000 Pounds	1000 Pounds
% P	ostconsumer	0	100
	Wood Use	2 tons	<b>0 tons</b> 2 tons less
	Net Energy	15 million BTU's	11 million BTU's 4 million BTU's less
Green	ihouse Gases	2,941 lbs CO2 equiv.	1,711 lbs CO <sub>2</sub> equiv. 1,230 lbs CO <sub>2</sub> equiv. less
	Wastewater	11,109 gallons	<b>5,186 gallons</b> 5,924 gallons less
	Solid Waste	954 pounds	<b>595 pounds</b> 360 pounds less

Measure:	How much?	Equivalent to:
Energy use reduced	55,185,675 kWh	The electricity needed to power 4,866 households per year
Greenhouse gases avoided	4,332 MTCE	removing 3,438 cars from the road /year
Hazardous waste reduced	169.4 metric tons	
Toxic material use avoided	10,398 pounds	EREAT
Money saved	\$4,784,598	

Green Electronics Made Easy: www.epeat.net







#### **Best Practice Collaborate**

Don't try to do it on your own!

Use specifications developed by other public agencies

**✓ EPPNet List-serve** 

#### "Recycle" outreach materials

- ✓ State-level EPP websites
- **✓** Case studies from other sectors (e.g. higher education, health care, etc.)

Purchase cooperatively, if practical









#### **RPN Resources**



- Responsible Purchasing Guides for 15 product categories
- Webinars on "green" procurement issues
- Quarterly newsletter highlighting "green" purchasing activities and resources



- Sustainable purchasing policies and specifications
- Model Responsible Purchasing Report
- Calculators and other tools





# RPN-EPA Green Building Webinars



- Water Efficiency (posted)
- "Green" Lighting
- Collaborative Solar Procurement
- "Green" Cleaning
- Purchasing for LEED

http://www.responsiblepurchasing.org/buildings/





#### Thank You!

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