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Purchasing for Climate Protection



Alicia Culver Responsible Purchasing Network

US EPA SMM Webinar July 19, 2012



Who is RPN?

International Network

- State and local governments
- Federal agencies
- Colleges and universities
- School districts
- Businesses
- Non-profit organizations
- Faith-based organizations









How do products impact climate change?

Energy needed and GHGs released when product is:

- Made
 - ✓ Raw material extraction and processing
 - Product manufacturing
- Transported
- Used
- Managed at end-of life

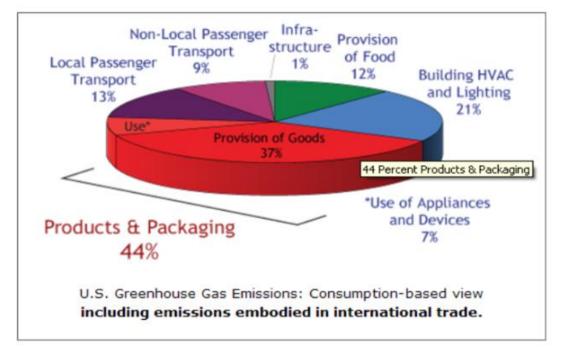


ource: The Inquirer/UK)



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44% of GHGs Linked to Products



Source: Products, Packaging and US Greenhouse Gas Emissions, Product Policy Institute, 2009; <u>www.productpolicy.org</u>





Purchasing for Climate Protection







Identify Climate





- **Energy-inefficient equipment**
- "Rapidly disposable" products
- Products that emit potent GHGs
- Products that travel far
 - Especially if heavy or bulky
 - **Especially if traveling by plane**







Collect Baseline Information

Quantify impacts of high-priority products

- Types and quantities of products used
- Electricity, fuel, water consumption
- Paper, bottled water, battery usage
- Greenhouse gas (GHG) emissions
 Identify opportunities for improvement





Adopt Energy-efficient Procurement Policy

Example: Minnesota issued a series of Executive Orders creating a comprehensive energy savings plan to reduce state facilities' energy use by 20%.

EO 11-13 directed building operators to purchase ENERGY STAR-qualified equipment and appliances for State buildings.







Race to the Top

Products Recognized as ENERGY STAR Most Efficient in 2011



ENERGY STAR Most Efficient Designation Graphic









Green IT Equipment

CASE STUDY

Kaiser Permanente was one of the first organizations to require its desk top computers, monitors and laptops to be **EPEAT-registered.**



Since July 2006, Kaiser purchased >135,000 units, saving nearly \$5 million





Kaiser's Environmental Benefits from EPEAT

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	
Money saved	\$4,784,598	

Green Electronics Made Easy: www.epeat.net

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Specify MFDs (ASAP)

A single ENERGY STAR multi-function device will prevent ~320 pounds of CO2 over 6 years



ENERGY STAR models use ~1/2 energy of standard models

- EPEAT imaging equipment standard in development
- Order with duplex function and network capable
- Eliminate individual desktop printers



Adopt a Green Lighting Policy

NYC Case Study

Set minimum efficiency levels for all lamps purchased by City departments

- "Super T8s"
- "NEMA Premium" electronic ballasts

"No lamp purchased or leased by any agency shall be an incandescent lamp if a more energy efficient lamp is available that provides sufficient lumens and is of an appropriate size for the intended application." www.nyccouncil.info/pdf_files/bills/law05119.pdf





CEE 🕥



LED Street Lights



- 3-5 year payback
- 2-4X longer life (lower replacement/maintenance costs)
- Improved light quality
- Can power with solar/wind
- Mercury-free
- Growing # of "LED cities"







Cool Your Roof

- Coverings
- Coatings
- Vegetation





Any roof replaced on a City-owned facility will have an "ecoroof" covering at least 70% of the roof and high-reflectance ENERGY STAR-rated roof material on remaining roof areas, where practical. *City of Portland, OR*





Consider Renewable Energy

Colorado Procurement

State of Colorado, EPP Policy (2009) Energy buyers shall consider renewable energy resources wherever practicable and economically feasible through lifecycle analysis and allowable purchasing preference.









Green Your Fleet

- Conduct Fleet Efficiency Audit
- Set petroleum reduction goal/report reductions
- Submit Fleet Management Plan (Large Fleets)
- Specify/Purchase/Rent Fuel-efficient/ Low-emission Vehicles (including Bikes)
- Limit 4WD, SUVs Without Permission
- Replace Standard Diesel with B20 Biodiesel





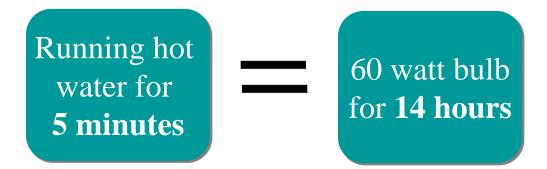


Conserve Water



"The nation's water and energy use are inextricably entwined. Energy is needed to pump, treat, transport, heat, cool, and recycle water."

California Energy Commission



Water conservation saves energy at ~60% of cost of energy conservation



Purchasing for Climate Protection

Purchase Sustainable Forestry Products









Cut Paper Consumption

he amount of nar used by Cit

Seattle's Paper Cuts Program
•Set 30% paper reduction goal (vs. 2004)

Established duplex printing standard

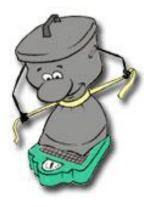
•Copy paper spec = 100% post-consumer recycled content/processed chlorine-free

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





Purchasing for Climate Protection



Purchase Products That Minimize Waste



- Concentrated Cleaning Products
- Rechargeable Batteries



Locally remanufactured Products



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Products with Minimal Packaging





Reduce Transportation Impacts





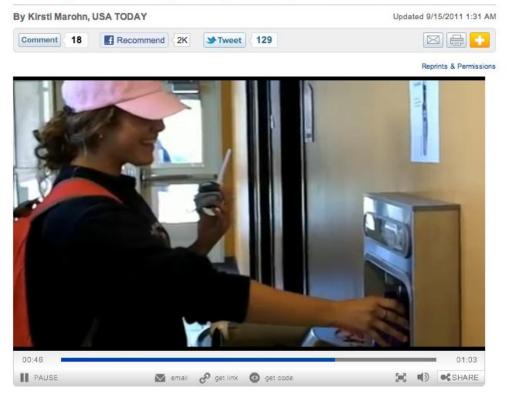


- Avoid overnight shipping
- Ask vendors to offer incentives for reducing delivery
 - frequency
- Prefer EPA SmartWay
 Partners
- Support local companies

Buy long-lasting goods

Can Bottled Water

Colleges moving away from plastic water bottles











Reduce Municipal "Foodprint" of meetings, special events, concessions, vending machines

- Purchase less red meat and dairy; increase chicken, pork, fish, eggs & veggie proteins
- Buy organic and/or sustainably grown food
- Buy local, seasonal, fresh, unprocessed food; avoid frozen, air freighted food
- Reduce packaged food and beverages
- Reduce food waste; compost whenever possible









Green Your Market Basket List

 Add "climate-friendly" products to your core/market basket lists so they become eligible for vendor's deepest discounts

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







Purchase Cooperatively

Collaboration among public agencies can:

•SAVE TIME by not "reinventing the wheel" by sharing research, specifications, bid solicitation documents, and vendor lists to create new "green contracts

•SAVE MONEY by aggregating demand from multiple entities





Consider Green Products on Cooperative Agreements



BASIC CONTACT INFORMATION - LEAD STATE





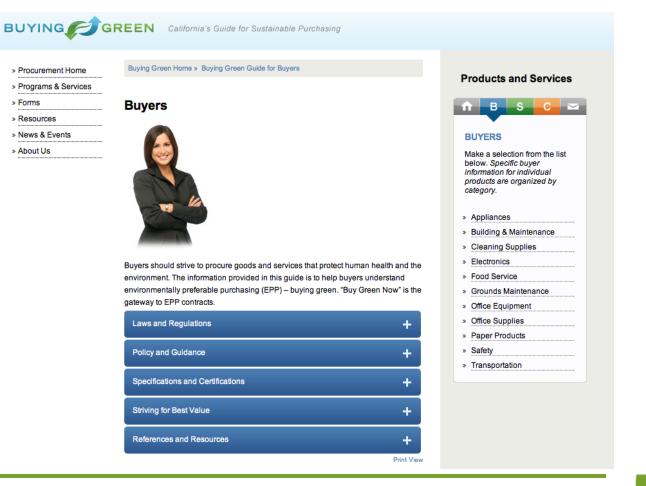
LINK TO LEAD STATE WEBSITE





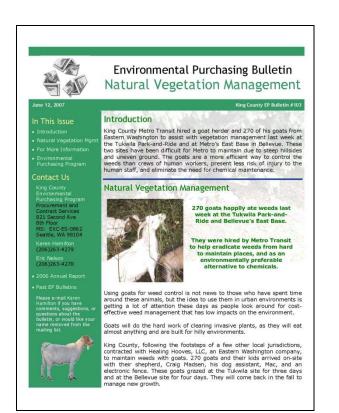
Purchasing for Climate Protection

Look for Green Products on State Contracts





Publicize Green Products Offered on Your Contracts







Calculate Climate Benefits

Lifecycle Environmental Impact

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

Recalculate	Baseline Paper	100% Recycled Paper
Paper	Uncoated Freesheet (e.g. c 💌	Uncoated Freesheet (e.g. ci
Quantity per year	1000 Pounds 💌	1000 Pounds 💌
% Postconsumer	0	100
Wood Use	2 tons	0 tons 2 tons less
Net Energy	15 million BTU's	11 million BTU's 4 million BTU's less
Greenhouse Gases	2,941 lbs CO ₂ equiv.	1,711 lbs CO ₂ equiv. 1,230 lbs CO ₂ equiv. less
Wastewater	11,109 gallons	5,186 gallons 5,924 gallons less
Solid Waste	954 pounds	595 pounds 360 pounds less





The Baseline Paper uses 2 tons , the equivalent of about 13 trees 100% Recycled Paper would use/produce 2 tons less , the equivalent of about 13 fewer trees





RPN's Multi-Regional Green Initiative

PROJECTS MAY INCLUDE

•Creating "green" purchasing policies and bid specifications

- Reviewing bid responses
- •Facilitating cooperative contracting opportunities for green products or services

•Other "green" purchasing initiatives with measurable results 2012-2013 US EPA Grant Covers Projects in EPA Regions 1,4,7 9













RPN Resources

- *Responsible Purchasing Guides* for 15 product categories
- Webinars on green procurement issues
- Monthly newsletter highlighting green purchasing activities and resources
- Sustainable purchasing policies and specifications
- Model Responsible Purchasing Report
- Calculators and other tools





Questions?

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