

*Buying Smart:
Environmental Products
That Save Money*

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Sustainable Products are...

- **Made with recycled content**
- **Highly energy efficient**
- **Designed to be long lasting**
- **Recyclable or compostable**
- **Made from renewable resources**
- **Less toxic than conventional goods**
- **Manufactured locally and responsibly**
- **Fairly traded**
- **Safely managed at the end of their life**



EPP Simplified

EPP =
Environment +
Price +
Performance





EPP Compatible with Procurement Procedures

“Nothing contained in this policy shall be construed as requiring a department or contractor to procure products that do not perform adequately for their intended use, exclude adequate competition, or are not available at a reasonable price in a reasonable period of time.”

City of San Mateo Environmental Purchasing Policy



EPP is "Best Value" Procurement

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)**



Low Bidder Vs Best Value



How "Green" Products Can Save Money



- **Lower upfront costs**
- **Conserve energy or water**
- **Reduce paper or fuel use**
- **Lower maintenance costs**
- **Reduce replacement costs**
- **Avoid disposal/cleanup costs**
- **Create local "green collar" jobs**
- **Offset environmental & health program costs**





Green Purchasing Programs Save \$



In 2007, San Diego expanded its EPP program noting “*the City is already purchasing many environmentally preferable products, resulting in savings of millions of dollars annually.*”

www.sandiego.gov/mayor/pdf/ep3_factsheet_4_4.pdf In

2006, King County, WA purchased \$36 million in EPPs and saved \$640,000 compared to conventional products.

www.metrokc.gov/procure/green/2006annn/rep.pdf



King County

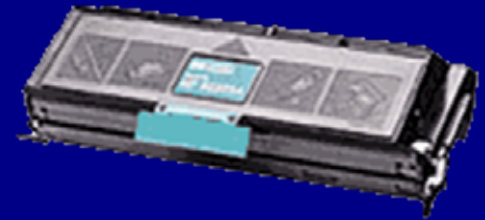
2006 EPP Cost Savings

Commodity	\$ Savings
Remanufactured toner cartridges	300,000
Tire Retreading	230,000
Shredded wood	85,000
Recycled antifreeze	13,500
Recycled plastic lumber	10,000
TOTAL	\$638,500



Remanufactured Toner and Ink Cartridges

- **Cost 30-60% less per copy than “virgin” cartridges**
- **NYC saved ~\$50 per cartridge**
- **King County, WA saved \$300,000 in 2006 buying 5,680 remanufactured toner cartridges for \$235,000 (and returned empties to vendor)**



Need strict performance specifications



Recycled Paint

CASE STUDY



- **Portland, OR found recycled paint performs well and costs 50% less than virgin latex paint**
- **Portland requires use of recycled paint whenever it meets need**



Re-refined Motor Oil



CASE STUDY

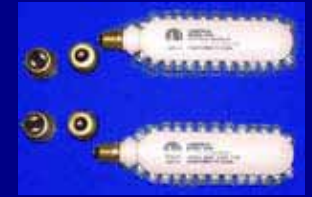
Santa Monica purchases re-refined motor oil for all vehicles maintained by its Fleet Maintenance Division; costs 25% less than comparable virgin motor oil

**Fact sheet, specs from King County
www.metrokc.gov/procure/green/oil.htm**





Energy-efficient Lights



NYC's 2005 energy-efficiency law prohibits purchase of incandescent light bulbs for use in City facilities *“whenever a more-efficient lamp is available that provides sufficient lumens and is of an appropriate size for the intended application.”*



NYC Local Law 119, www.nyccouncil.info/pdf_files/bills/law05119.pdf



Energy-efficient Lights



CASE STUDY

Alameda County, CA upgraded its generic T8s and electronic ballasts to extra-efficient models

- ◆ **Cut energy usage 30-40%**
- ◆ **Reduced mercury content ~60%**
- ◆ **Planning countywide lighting retrofit**
- ◆ **Specs for all replacement lamps address efficiency, lamp life, mercury**





LED Traffic Signals & Lights



CASE STUDY

Ann Arbor, MI saved \$49,000/year replacing incandescent traffic signal lights with LEDs

- ◆ **Much lower maintenance costs**
(35,000-100,000 vs. 8000 hours)
- ◆ **Safety improvements** (fewer burned out lamps, less replacement time, improved visibility)
- ◆ **Mercury-free**

Testing LED street lamps with 50-80% energy savings (\$100/yr/lamp; 4.7-year payback);



Energy-Efficient Equipment

Appliances

- ◆ **Stoves and refrigerators**
- ◆ **Washers and dryers**

Office Equipment

- ◆ **Copiers, printers**
- ◆ **Lighting fixtures, exit signs**



CASE STUDY: Chicago, IL public housing authority cut its annual electric bill \$500,000 by purchasing 10,000 ENERGY STAR refrigerators



Fuel-efficient Vehicles

Hybrids cost more initially but save \$ by:

- ◆ **Cutting fuel use by up to 50%**
- ◆ **Having lower maintenance costs**
- ◆ **Yielding a higher resale value**

For more info on hybrids, see

www.newdream.org/procure/hev.pdf



Washington State set minimum fuel-efficiency standards (30 MPG) and restricts purchases and use of SUVs by state agencies



Duplexing Printers & Copiers

Save money on paper, postage and document storage

**CASE STUDY: Columbia University
saved \$105,000 in one year by defaulting
to 2-sided printing in its
computer center**

**Requires vendors to ship with
duplex default on and train
employees to use duplexing equipment**



Rechargeable Batteries

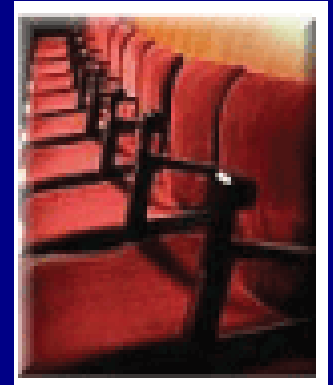
- **Can be “re-charged” up to 1000 times**
- **Reduces replacement and disposal costs associated with single-use batteries**



San Francisco’s Battery Ordinance requires city departments to use rechargeables and asks vendors to offer battery recycling services.



Furniture Repair Services



CASE STUDY

NYC saved over \$100,000 by contracting with a local firm (for \$15,000) to repair its furniture

- ◆ **1000 pieces, 66 tons recovered in 2 years**
- ◆ **\$10,000/year in disposal costs avoided**
- ◆ **Local jobs created**



Green Cleaning

CASE STUDY

Minneapolis, MN conducted 3-year “green” cleaning pilot test and reported:

- ◆ **Cost savings moving to metered dilution system away from hand mixing**
- ◆ **Fewer sick days for custodial staff**
- ◆ **Reduced waste and other liabilities**
- ◆ **Improved indoor air quality (IAQ)**



Hawaii Green Cleaning

Cost Savings: Disinfectants



Product	Size	Cost	Cost/Gal
Conventional (NABC)	55 gal drum	~\$380	\$6.90
Conventional (NABC)	55 1- gallon bottles	~\$660	\$12.00
Green Alpha HP (1:64)	2 1/5 1.5L bottles	~\$54 (Waxie)	\$0.96





Microfiber Mops

- **Cost-effective (life-cycle basis)**
- **Reduce chemical use (~1/2)**
- **Minimize water use (up to 95%)**
- **Prevent injuries (chemical exposure, back strain, accidents)**
- **Improve performance (reduce dirt, avoid cross-contamination)**



www.sustainablehospitals.org/PDF/tenreasonsmop.pdf

www.epa.gov/region09/waste/p2/projects/hospital/mops.pdf



Purchase for Zero Waste



- Avoid single-use items (e.g., disposable cutlery, paper towels, food service ware)
- Invest in water filters instead of bottled water
- Specify recyclable/compostable
- Choose reusable items (e.g., rechargeable batteries)
- Buy recycled-content products



Encourage "Take-Back" in Purchasing Contracts

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



- Stimulates infrastructure for efficient recycling



- Encourages manufacturers to redesign their products to be more durable, more easily recyclable, and less toxic



Computer "Take-Back"

CASE STUDY

Portland, OR saved \$9,000 using Dell's recycling service in its computer contract

- ◆ **800 units recycled**
- ◆ **Recyclers must sign "Pledge of True Stewardship"**
- ◆ **Addressing polystyrene packaging**



Local Food Purchasing



CASE STUDY:

Portland, OR bought 45% local produce for county jail at no extra cost

- **Sustainable food procurement policies target commodity and service contracts, caterers, concessions, vending machines**
- **Give preference to food that is locally grown; (as well as organic/sustainable fairly traded)**
- **Food industry in top 3 for overall environmental impacts**



Portland's Sustainable Procurement Strategy

Insures to maximum extent feasible goods and services comply with *Sustainable City Principles*

- ◆ **Balances environmental, economic and equity issues**
- ◆ **Encourages decisions based on long-term costs**
- ◆ **Helps minority- and woman-owned businesses to source EPPs and learn green building techniques.**



Ways to Save Money Through Environmental Purchasing

- **Negotiate prices for EPPs (Centralize)**
- **Find EPPs on State Contract**
 - ◆ **Low-mercury fluorescent lamps**
 - ◆ **Green cleaners**
 - ◆ **Recycled-content carpeting**

www.green.ca.gov/EPP/Introduction/default.l



- **Purchase Cooperatively**



Independent EPP Certifications



- **Green Seal** (low-toxicity cleaners, paints)
- **Environmental Choice** (Canada EcoLogo)



- **Green Guard for Children and Schools** (low-emitting materials)



- **EPEAT** (green computers)
- **Green-e** (renewable energy)



- **USDA Organic/Fair Trade**



- **Energy Star** (energy-efficient office equipment, CFLs and appliances)



Questions? Comments?



Info (at) greenpurchasing.org

