

BUYING SMART
Experiences of Municipal Green Purchasing Pioneers



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EXECUTIVE SUMMARY

BUYING SMART: Experiences of Municipal Green Purchasing Pioneers, highlights the experiences of cities and counties across the United States that have implemented environmentally preferable purchasing (EPP) policies and practices for their operations. It concludes that investments in an EPP program often yield both economic and environmental rewards. Recycled and remanufactured products, energy- and water-conserving equipment, and low-toxicity cleaning and maintenance supplies often pay for themselves – either initially or over a reasonably short time – and therefore can offer localities the “best value”. The report also describes how initiatives designed to reduce the ecological footprint of municipalities have simultaneously yielded other benefits such as improvements in indoor air quality and the creation of local jobs.

In addition, *BUYING SMART* details the facets of an effective municipal green purchasing program, including a strong policy, involvement of staff at all levels, adequate personnel and technical support, clear outreach materials, and the establishment of mechanisms to track the program’s successes and failures. Finally, the report discusses typical barriers faced by municipalities trying to establish environmental purchasing programs and offers recommendations and resources that can make their implementation by local governments easier in the future.

Local governments in the United States hold tremendous power to spur manufacturers to offer goods and services that protect public health and the environment. The spending of cities, counties and other municipalities, combined, represents about 7% of the US Gross Domestic Product (GDP), with government purchasing overall claiming about one in every five dollars. Some of the most often “procured” products are common consumer items including personal computers, light bulbs, copy paper, cleaning supplies, cars and building materials. Consequently, local government programs that give preference to environmentally preferable goods and services are making these items more readily available and affordable for consumers at large.

Starting in the late 1980s, hundreds of localities adopted purchasing policies directing their employees to favor products made with recycled content. Local governments were quick to see the need to create markets for recyclables – and close the loop – because they are responsible for handling the materials collected in municipal recycling programs. The proliferation of “Buy Recycled” programs at the local level in the early 1990s inspired states – and ultimately the federal government – to follow suit.

Also in the early 1990s, building on this success, a smaller number of local governments began expanding their environmental purchasing programs to address broader sustainability goals. Recognizing that the products consumed by local governments can often cause more than one problem, a growing number of jurisdictions adopted policies that give purchasing agents broad authority to consider a multitude of environmental and human health issues that apply to each product type when writing bid specifications or awarding contracts. These EPP (or Sustainable Purchasing) programs typically include preferences – or procurement mandates – for goods and services that can:

- Eliminate or minimize exposure to toxic chemicals
- Prevent waste
- Reduce consumption of electricity, fuel, water or paper
- Conserve finite natural resources such as petroleum or endangered wood
- Support sustainable manufacturing, fair trade, and local economic development

Over the past decade, a handful of cities and counties have implemented innovative, far-reaching, and effective EPP policies and programs.¹ These municipal green purchasing pioneers include, but are not limited to:

- *King County, WA* has implemented the nation’s most comprehensive municipal environmental purchasing program. It has two full-time employees working on EPP issues in its procurement office. They are responsible for writing specifications, evaluating products, and maintaining a website and training program to educate County employees about the availability of new “green” products offered on its contracts. In 2006, King County spent over \$36 million on environmentally preferable products. In addition to typical recycled-content items acquired by many local governments, it has developed contracts for innovative products such as vegetable oil-based lubricants, lead-free vehicular wheel weights, fuel-cell buses and low-toxicity road patching material.
- *Seattle, WA* has adopted a series of environmental purchasing policies that promotes Chemical Use Reduction (1995), Green Building (2000), Pesticide Reduction (2001), Reduction of Persistent and Bioaccumulative Toxins (PBTs) (2002), and Sustainable Purchasing (2003) in city operations. Each policy sets specific goals and directs staff to implement strategies to achieve those goals. As a result of these policies and dedication of staff, Seattle has significantly cut its paper and energy consumption and made substantial progress eliminating from its facilities high-toxicity pesticides as well products that contain mercury, PVC (vinyl), and other persistent toxic chemicals. Its green cleaning specifications were the first in the nation and have served as a model for other localities and states as well as for a national standard on institutional cleaning products.
- *Portland, OR* operates a cooperative EPP program with neighboring Multnomah County that is implementing a far-reaching Sustainable Purchasing Policy and Strategy. (These entities also approved a Toxics Reduction Strategy in 2006 to spur further progress in purchasing less-toxic products.) Together, they have prioritized 3-5 contracts per year and to date have:
 - procured “green” computer equipment and required computer manufactures to “take-back” their equipment at the end of their useful life;
 - tested fuels with a high bio-based content in their vehicles and equipment;
 - set strict guidelines on pesticide and disinfectant use in their facilities;
 - purchased nearly half of the County jail’s produce from local sources, and
 - helped local disadvantaged businesses offer green building products and services so they can better compete for municipal construction contracts.
- *San Francisco, CA* has adopted several cutting-edge policies that guide decisions about what its departments can buy. Under its Precautionary Purchasing Ordinance (PPO), it is developing a list of approved products that “prevent harm” to people and the environment and requiring vendors to fully disclose the toxic chemicals in products offered in bids for goods and services. For example, in 2005, San Francisco became the first locality to require its vendors to report the amount of mercury in each type of fluorescent lamp sold on City contracts and limited the amount of this potent neurotoxin in certain lamp types. San

¹ Many other local governments have implemented EPP programs that address environmental and human health issues beyond the need for products with recycled content. These multi-attribute efforts may address some but not all of the issues listed above such as energy-efficiency, toxics reduction, or waste prevention.

Francisco also passed ordinances requiring vendors to submit information needed to determine whether their products are made in sweatshops, directing City agencies to add product “takeback” requirements to contracts, prohibiting the sale of arsenic-treated wood to City departments and directing departments to use rechargeable batteries whenever practical.

- *New York, NY*, the nation’s largest municipal consumer, enacted five EPP laws in 2005, which has jump-started this City’s EPP program into becoming one of the nation’s most aggressive. Among other things, these laws establish a director of environmental purchasing, require the City to establish energy- and water efficiency standards for products purchased or leased by the City, and restrict purchases goods containing hazardous materials.

In addition to helping local governments meet their environmental commitments – such as reductions in energy use or greenhouse gas emissions – “sustainable” purchasing policies have yielded other economic and public health benefits. Many municipalities have reported that environmentally preferable goods and services often represent the best overall value because they save money initially, reduce operational and disposal costs, or offer other benefits while being competitively priced. For example:

- In 2006, King County, WA saved \$640,000 by buying recycled and remanufactured products, compared to the cost of conventional products.
- Minneapolis reported that its “green” cleaning program resulted in cost savings, improved indoor air quality, fewer sick days for custodial staff, and less hazardous and solid waste.
- San Diego recently adopted a comprehensive green procurement policy noting that it has saved millions of dollars using remanufactured, energy-efficient equipment and other environmentally preferable products in the past.

Despite progress made by a few municipalities, these and other local governments cite serious challenges to expanding their EPP programs. The most common obstacle reported is a lack of staff and technical expertise to perform all of the tasks needed to effectively add new high-performance “green” products and services to the wide variety of contracts municipalities issue every year. The most effective programs – such as King County’s – have dedicated substantial staff time and technical expertise to research the environmental attributes of products, draft specifications, evaluate goods offered in bids, conduct performance tests, educate end-users about the availability of new green goods added to contracts, address any issues that arise, and track the program’s impacts. The ability to undertake these tasks is particularly difficult for small municipalities, many of which have little or no purchasing staff and whose employees typically buy products through decentralized methods such as credit card charges and individual purchase orders.

The municipal green purchasing pioneers profiled in this report have been largely able to overcome these obstacles by:

- Utilizing or building on standards that have already been adopted by other local governments, states, businesses or universities;

- Specifying products that are certified by independent nonprofit organizations – such as cleaners and paint meeting standards issued by Green Seal or computers approved using the Electronic Products Environmental Assessment Tool (EPEAT)²;
- Dedicating existing pollution prevention, recycling or energy staff to work on EPP projects;
- Hiring technical consultants;
- Focusing EPP efforts on a few high-priority product categories per year;
- Buying EPPs through already established state contracts or cooperatively with other municipalities; and
- Requiring vendors to assist with recycling, training and reporting functions.

According to the survey conducted by the Green Purchasing Institute while researching this report, the elements of an effective EPP program include the following:

- A policy that addresses a broad range of sustainability goals, details roles and responsibilities, and allows the purchasing department to make decisions based on “best value” rather than low “first price”;
- Support of upper level management and agency involvement in EPP decision-making;
- Dedicated staff that is preferably housed in the purchasing department;
- An active outreach program, including a website or EPP manual informing municipal staff about the availability and benefits of various “green” products offered on local contracts; and
- Tracking and recognition programs.

Local governments would benefit from additional resources to help them start or expand their environmental purchasing programs, including:

- A model sustainable purchasing policy that addresses a broad range of environmental and human health issues;
- A one-stop website where they can find product specifications, case studies, and links to organizations and resources that can provide technical support;
- A team of technical experts that can provide hands-on assistance, particularly to develop new, cutting edge bid specifications and contract requirements; and
- Networking mechanisms to help municipalities avoid duplication of efforts.

² Some local governments use standards such as Green Seal and EPEAT as baseline criteria for their specifications and then apply additional criteria such as manufacturer take-back requirements or prohibitions on other toxic chemical ingredients such as asthma-triggering agents.

BANG FOR THE BUCK
Benefits of Municipal EPP Programs

Many cities and counties that have delved into environmental purchasing programs initially as a way to protect public health or conserve natural resources are finding that these “green” purchasing efforts are saving more than the environment – they are saving money. This is not because all environmentally preferable products are less expensive; but because they often end up being a better value in the long run since they are inherently more energy-efficient or less-wasteful than the products they are replacing. Moreover, some local governments have found that their “Buy Recycled” programs yielded another major benefit: local job creation, especially through the purchase of remanufactured items such as toner cartridges or furniture, which do not often rely on sophisticated equipment or a highly-trained workforce. Similarly, broader green procurement efforts involving service sectors such as “green” cleaning, integrated pest management, or installation of energy-efficient equipment can have positive impacts on both jobs and environmental quality.

The City of San Diego, California noted in its announcement to embark on an expanded environmental purchasing program in April 2007 that the City “already purchases many environmentally preferable products, resulting in savings of million of dollars annually.”³ Similarly, King County, Washington reported that in 2006, its agencies purchased 36 million dollars worth of these [environmentally preferable] products, saving \$640,000 compared to the cost of conventional products.”⁴ Below is a table detailing the savings King County realized by product type:

Commodity	\$ Savings
Remanufactured toner cartridges	300,000
Tire retreading	230,000
Shredded wood (used for mulch)	85,000
Recycled antifreeze	13,500
Recycled plastic lumber	10,000
TOTAL	\$638,500

The cost savings associated with the procurement and use of environmentally preferable products typically fall into two categories: upfront and “life-cycle” cost savings. In addition, some environmental products offer tangible benefits while being cost competitive. Often the cost-savings associated with “sustainable” products can be attributed their ability to reduce energy and water consumption, lower labor or replacement costs, or avoid waste disposal fees. Sometimes the costs savings are less obvious and can only be determined through the use of life-cycle or “best value” analysis. Therefore, it is important for municipal procurement policies to allow for this in order to enable local governments to reap the savings.

Environmentally preferable products that have been shown to save municipalities money include, but are not limited to, the following:

³ City of San Diego, Office of the Mayor, www.sandiego.gov/mayor/pdf/ep3_factsheet_4_4.pdf

⁴ King County Department of Executive Services, Finance and Business Operations Division, Procurement and Contract Services Section, Environmental Purchasing Program, King County *Environmental Purchasing 2006 Annual Report*, www.metrokc.gov/procure/green/2006annrep.pdf.

- *Antifreeze (Recycled)*: King County has been purchasing re-refined ethylene glycol antifreeze for use in its buses since 1999. In 2006, it paid \$60,000 for 17,150 gallons of this recycled product, which is \$13,500 or (nearly 25 percent) less than it would have paid for virgin antifreeze.⁵
- *Appliances (Energy-Efficient)*: The Chicago, Illinois public housing authority lowered its annual electricity bill by more than \$500,000 by purchasing 10,000 ENERGY STAR-compliant refrigerators.
- *Cleaners (Less-toxic)*: Santa Monica saved 5% on its overall cleaning program costs when it switched from conventional cleaners to less-toxic brands. Part of this savings was accrued by eliminating duplicative and expensive cleaning products – many of which were in aerosol containers. Similarly, Minneapolis, MN reported cost-savings in its three-year pilot test of “green” cleaning products, some of which were a result of moving to a metered dilution system and away from “hand” mixing of janitorial chemicals.⁶
- *Energy-Efficient and Renewable Energy Technologies*: The City of San Diego has reportedly reduced its energy costs by \$3.5 million annually through efficiency retrofits and installation of solar panels at City facilities.⁷ Through its participation in ENERGY STAR and Green Lights partnerships, it upgraded to high-performance lighting in 95 percent of its 5 million square feet of building space. Fluorescent lights replaced incandescent lights, and more efficient T8 fluorescent lamps took the place of existing T12 lamps. Exit signs were also retrofitted with low-wattage, long-lasting LEDs (light-emitting diodes).⁸
- *Motor oil (Re-refined)*: The City of Santa Monica purchases re-refined motor oil for all the vehicles maintained by its Fleet Maintenance Division and found it costs 25 percent less than virgin motor oil of comparable quality.⁹
- *Office Furniture (Reused, Repaired and Refurbished)*. New York City has contracts with vendors that supply remanufactured furniture, noting that it typically costs 30 to 50 percent less than equivalent new furniture. It has also saved more than \$100,000 annually (after subtracting a yearly program cost of \$15,000) by contracting with a firm to repair furniture from its operations. In a two-year period, the firm recovered over 1,000 pieces of furniture weighing more than 66 tons. This saved the City another \$10,000 per year in avoided waste disposal costs.¹⁰

⁵ King County Environmental Purchasing 2006 Annual Report, page 8; www.metrokc.gov/procure/green/2006annrep.pdf; see also King County Environmental Purchasing fact sheet *Antifreeze, Re-refined*, May 2007; www.metrokc.gov/procure/green/antifrz.htm.

⁶ Minnesota Pollution Control Agency, “Featured Leader: Minneapolis Passes a Green Cleaners Resolution,” *Buying Green: Minnesota’s Environmentally Preferable Purchasing Newsletter for Government and Institutional Purchasers*, February 2007, www.pca.state.mn.us/oea/epp/newsletter/200702.pdf.

⁷ City of San Diego, Office of the Mayor, Fact Sheet: *Mayor Sanders Announces City of San Diego Officially “Goes Green” in Purchasing*, April 4, 2007, page 2; www.sandiego.gov/mayor/pdf/ep3_factsheet_4_4.pdf.

⁸ New York City WasteLe\$\$ Program, “Energy Efficiency Case Studies; San Diego: Energy-efficient Lighting and a Mechanical Upgrade,” undated website reviewed May 20, 2007, http://www.nyc.gov/html/nycwasteless/html/at_agencies/govt_case_studies_energy.shtml.

⁹ Local Government Environmental Assistance Network, “Purchasing Practices that Encourage Regulatory Compliance and Pollution Prevention,” webpage reviewed on May 20, 2007; www.lgean.org/html/p2-6.cfm.

¹⁰ Science Applications International Corporation (SAIC) for the New York City Department of Sanitation, Bureau of Waste Prevention, Reuse and Recycling, *Environmentally Preferable Purchasing*, April 2001, page 34, www.nyc.gov/html/nycwasteless/downloads/pdf/eppmanual.pdf.

- *Paint (Recycled)*: San Bernadino County, CA, established a closed-loop system in which it collects, processes and redistributes latex paint to County agencies as well as nonprofit organizations and churches. The Household Hazardous Waste Latex Paint Project, created in November 2002, has broken even financially by avoiding \$11,000 in off-site recycling fees the County would have had to pay to handle the paint collected from residents. County agencies also save money by using the recycled paint instead of buying “virgin” latex paint. Over 2,300 gallons of paint have been distributed at a cost of \$4,000 plus a one-time equipment cost of \$6,200.¹¹

Portland, Oregon, which requires its facilities to use low-VOC paint and, as feasible, recycled latex paint, reports that the recycled paint performs as well and is over 50% less expensive than conventional paint for routine architectural applications. The low-VOC paint is competitively priced and reduces incidents of eye, skin and respiratory irritation, indoor air pollution and smog.¹²

- *Pesticides*: The City of Santa Monica, which has implemented an effective integrated pest management (IPM) program for all of its municipal facilities, has reported a 30 percent decrease in its pest management costs as a result of this initiative.¹³
- *Tires (Retread)*: King County, WA noted that it saved approximately \$230,000 in 2006 by buying retread tires, which cost only about half as much as new tires. Tire retreading, which is routinely performed on its trucks and heavy equipment has also enabled King County to avoid the landfill costs associated with disposing of used tires.¹⁴ Similarly, the City of San Diego reported that it saves \$126,000 annually by using “recapped” tires on some of its City vehicles.¹⁵
- *Toner Cartridges (Remanufactured)*. Remanufactured toner cartridges are widely available for laser and ink jet printers, copiers and fax machines. They typically cost about 60% less per page than virgin toner cartridges. King County saved \$300,000 in upfront costs in 2006 by purchasing 5,680 remanufactured cartridges for about \$235,000. Because the empty cartridges are also returned to the vendor – a local company – to be remanufactured, this contract yields additional savings by avoiding landfill tipping fees (and contributes to the regional economy). King County’s EPP staff worked hard to develop model specifications that ensure that these products meet strict performance requirements. “Cartridges supplied under this contract must meet original equipment (OEM) standards and provide full performance guarantees.”¹⁶

¹¹ National Association of Counties, www.naco.org.

¹² City of Portland, Sustainable Procurement Strategy website, Undated, www.portlandonline.com/osd/index.cfm?c=42401&a=117682.

¹³ Local Government Environmental Assistance Network, “Purchasing Practices that Encourage Regulatory Compliance and Pollution Prevention,” webpage reviewed on May 20, 2007; www.lgean.org/html/p2-6.cfm.

¹⁴ *King County Environmental Purchasing 2006 Annual Report*, page 9; www.metrokc.gov/procure/green/2006annrep.pdf; see also *King County Environmental Purchasing Fact Sheet: Tire Retreading and Retreads*, October 2006; www.metrokc.gov/procure/green/retreads.htm.

¹⁵ City of San Diego, Office of the Mayor, Fact Sheet: *Mayor Sanders Announces City of San Diego Officially “Goes Green” in Purchasing*, April 4, 2007, page 2; www.sandiego.gov/mayor/pdf/ep3_factsheet_4_4.pdf.

¹⁶ *King County Environmental Purchasing 2006 Annual Report*, pages 5-6. See also King County Environmental Purchasing Program fact sheet: *Remanufactured Toner Cartridges*, September 2006, <http://www.metrokc.gov/procure/green/toncart.htm>.

San Diego also reported saving \$40,000 annually by using “recycled toner cartridges.”¹⁷ In addition, Minneapolis purchased more than \$76,000 worth of remanufactured toner cartridges in 2005. It similarly found that they cost 30-70 percent less and have “no greater failure rate” than new ones.¹⁸ In 2001, New York City Department of Sanitation reported saving an average of \$50 on each remanufactured toner cartridge it bought compared to a comparable virgin cartridge.¹⁹

- *Traffic Lights (Energy-efficient LEDs)*: Traditionally, traffic lights have been lit using relatively inexpensive incandescent light bulbs that are short-lived and inefficient compared to light-emitting diode (LED) replacements. Each conventional traffic light uses incandescent lamps that consume approximately 150 watts of energy, while LEDs replacements use only about 10 watts.²⁰ Faced with high electricity costs, the City of New York undertook a citywide initiative to convert its traffic lights from incandescent bulbs to LEDs. On an annual basis, this project reduces the Big Apple’s utility bill by \$7 million and its carbon “footprint” by over 25,000 tons.²¹

Similarly, Portland, OR cut its energy bill about 85% – saving about \$350,000 annually – by replacing its incandescent traffic light lamps with LEDs. This retrofit project conserves 475 million kilowatt-hours of electricity each year, enough to power 350 homes. LED traffic lights have the added benefit of dramatically reducing maintenance costs because they last up to 100,000 hours – or 7 years – compared to 8,000 hours for incandescent bulbs. Consequently, LEDs improve traffic safety by reducing the chance for signal lights to unexpectedly burn out and by avoiding scheduled downtime while the lamps are being replaced. They also are safer because they are more visible to motorists. Portland avoided the \$2.2 million upfront cost associated with this project by financing it through a leasing company.²²

Adding environmental and human health specifications for goods and services can yield clear and substantial health benefits to the people who make them, handle them during the course of their work, or spend time in a facility where these products are being used or recycled at the end of their useful life. For example, the City of Minneapolis has cited the following benefits from its “green” cleaning program: fewer sick days for building workers and custodial staff, increased cost savings, reduced liabilities, waste reduction, reduced pollution, and increased indoor air quality.

¹⁷ City of San Diego, Office of the Mayor, Fact sheet: *Mayor Sanders Announces City of San Diego Officially “Goes Green” in Purchasing*, April 4, 2007, page 2, www.sandiego.gov/mayor/pdf/ep3_factsheet_4_4.pdf.

¹⁸ Nancy K. Pryzmus, Buyer, Environmental Coordinating Team Member, City of Minneapolis, “Save \$\$ -- and the Environment: Use Remanufactured Toner Cartridges,” in Minnesota Pollution Control Agency, *Buying Green: Minnesota’s Environmentally Preferable Purchasing Newsletter for Government and Institutional Purchasers*, August 2006, <http://www.pca.state.mn.us/oea/epp/newsletter/200608.pdf>.

¹⁹ Science Applications International Corporation (SAIC) for the New York City Department of Sanitation, Bureau of Waste Prevention, Reuse and Recycling, *Environmentally Preferable Purchasing*, April 2001, <http://www.nyc.gov/html/nycwasteless/downloads/pdf/eppmanual.pdf>.

²⁰ Rensselaer Polytechnic Institute Light Research Center, “Transportation Lighting: Energy,” undated website, <http://www.lrc.rpi.edu/programs/transportation/LED/issuesOptions04.asp?section=2.1>.

²¹ Design Trust for Public Space and the New York City Office of Environmental Coordination, *Sustainable New York City*, January 2006, page 33, http://www.nyc.gov/html/oc/downloads/pdf/sustainable_nyc_final.pdf.

²² New York City Climate Summit, “Portland Replaces 1000 Traffic Intersection Signals with LED Lights, Saving Millions of Kilowatt-Hours Per Year,” Undated website, www.nycclimatesummit.com/casestudies/lighting/lighting_portland.html.

GOING FOR THE GREEN
Best Municipal EPP Policies, Programs and Practices

Municipal environmentally preferable purchasing (EPP) policies and programs vary widely in their scope. While some local EPP policies focus on a single product category – such as paper, cleaning products, or computers – most apply to a broader range of products procured by the jurisdiction.

Some of these programs have been established by laws that were approved by city councils, county boards of supervisors or other legislative bodies. Others have been created by executive orders designed to demonstrate the commitment of Mayors or County Supervisors to “green the government” during their tenure – with uncertain impact when administrations change. Some local government staff have voluntarily developed internal guidelines for their agencies to follow, with some these policies formally codified into law and others not. Still other local governments report that they purchase environmentally preferable products even though their jurisdictions have never adopted formal policies directing them – or even allowing them – to do so.

Below is a description of the most well-developed, innovative and effective EPP policies and programs that have been implemented by local governments in the United States including:

- Seattle and surrounding King County, WA
- Portland, OR and neighboring Multnomah County
- City and County of San Francisco
- New York City
- San Diego, CA
- Minneapolis, and surrounding Hennepin County, MN

Each profile includes a description of the types of policies that have been adopted; the program elements that have been implemented, and the progress these programs have made to date.

King County, Washington: Steady Progress in EPP Over a Decade

King County, WA, which has employees and facilities in Seattle and several surrounding communities, has implemented the nation's most comprehensive municipal environmental purchasing program. In 1989, it became one of the first jurisdictions to buy recycled products and in 1995 adopted a comprehensive – albeit relatively simple – environmental purchasing policy. It states, for example, that: “All Departments, Offices, and Agencies shall use, and require their contractors and consultants to use, environmentally preferable products whenever cost effective and to the extent practicable.”²³ It also details EPP procedures and responsibilities to various County entities, including the following:

The Purchasing Agency and the Solid Waste Division shall:

- *Provide departments with information to facilitate their evaluation and purchase of designated products and inform them of their responsibilities under this policy;*
- *Revise minimum content standards as necessary to ensure that designated products contain the maximum practicable amount of recovered material and are consistent with Guidelines and regulations promulgated by the United States Environmental Protection Agency, the State of Washington, and other Federal and State agencies;*
- *Ensure that environmentally preferable products are designated whenever practicable;*
- *Transmit minimum content standards to departments; and*
- *Assemble an annual report to the County Council on the status of policy implementation. This report shall include data on purchases of recycled/non-recycled and environmentally preferable products by each Department, Office, or Agency and results of designated product evaluations.*

County Departments, Offices, and Agencies shall assign staff to:

- *Ensure that contracting procedures do not discriminate against recycled products without justification;*
- *Assign appropriate personnel to evaluate each designated product to determine the extent to which it may practicably be used by the agency and its contractors.*
- *Revise contracting procedures to maximize the specification of designated products whenever practicable and facilitate compilation of data on the purchase of designated products by the agency and its contractors; and*
- *Transmit evaluation results and procurement data to the Purchasing Agency by July 30 each year for inclusion in the annual report to the County Council on the status of policy implementation.*²⁴

²³ King County Environmental Purchasing Policy (Executive Policy), www.metrokc.gov/procure/green/policy.htm.

²⁴ *Ibid.*

King County has a goal of buying 100% green products and has steadily increased its use of environmentally preferable products as their availability and price have improved over time. It tracks its EPP progress in annual reports and has seen its purchases increase from \$3.8 million in 2001 to \$5 million in 2003, then skyrocket to \$36 million in 2006.²⁵

As mentioned earlier in this report, King County reported saving nearly \$640,000 in 2006 compared to the cost of conventional products.²⁶ Cost-saving products included remanufactured toner cartridges, retread tires, shredded wood mulch, and recycled antifreeze and plastic lumber.

King County's environmental purchasing website states the following: "Because every purchase has an impact on human health and the environment, the goal of policy is to mitigate these impacts whenever practicable. Environmentally preferable procurement considers multiple product attributes, such as toxicity, durability, recycled content and conservation of resources, in addition to price, performance and availability."²⁷ As a result, in addition to typical recycled-content items acquired by many local governments, it has developed contracts for innovative "green" products such as:

- *Green Computer Equipment:* In 2006, most of the desktop computers and monitors and about half of the laptop computers purchased by the County were certified as environmentally preferable using the Electronic Products Environmental Assessment Tool (www.epeat.net).²⁸ EPEAT-certified computer equipment is energy efficient, contains recycled and low-toxicity components and packaging, and is manufactured by companies that offer electronics recycling services.
- *Vegetable Oil-based Lubricants:* Since 2001, King County has been using hydraulic oils and now requires some of its equipment to come shipped with them when first purchased. Vegetable oil-based lubricants were first tested in ecologically sensitive areas and used to ensure compliance with the Endangered Species Act. The County's 2006 environmental purchasing report noted: "Bio-based lubricants were tested and found to perform as well or better than petroleum oils, are readily biodegradable, low in toxicity, and offer worker safety advantages."²⁹
- *Lead-Free Vehicular Wheel Weights:* King County began testing steel and plastic wheel weights when they became more readily available after the European Union banned lead-containing wheel weights in July 2005. The County now routinely replaces lead wheel weights during scheduled maintenance of its cars and trucks.³⁰
- *Low-Toxicity Road Patching Material:* This product is odorless, devoid of kerosene drying agents, and made with 75% post-consumer recycled asphalt.

²⁵ King County Environmental Purchasing 2006 Annual Report, page 9; www.metrokc.gov/procure/green/2006annrep.pdf.

²⁶ King County Department of Executive Services, Finance and Business Operations Division, Procurement and Contract Services Section, Environmental Purchasing Program, King County Environmental Purchasing 2006 Annual Report, www.metrokc.gov/procure/green/2006annrep.pdf.

²⁷ King County website, "About the Environmental Purchasing Program, www.metrokc.gov/procure/green/about.htm.

²⁸ For more information about the EPEAT program, see description on page 41 of this report.

²⁹ King County Environmental Purchasing 2006 Annual Report, page 9, <http://www.metrokc.gov/procure/green/2006annrep.pdf>.

³⁰ For more information on this EPP initiative, see *Environmental Purchasing Bulletin #92: Lead-free Wheel Weights*, November 16, 2005, www.metrokc.gov/procure/green/bul92.htm.

The ongoing and growing success of King County’s environmental purchasing program can be largely attributed the presence of two full-time employees who work on EPP issues within its procurement office. These staff people are responsible for writing specifications, evaluating products, maintaining a website that offers periodic EPP bulletins and fact sheets, and conducting a training program to educate County employees about the availability of new “green” products offered on its contracts. Its approach is focused on facilitating participation among the County’s 17,000 employees rather than mandating compliance – although it does set strong environmental standards in its bid specifications. An October 2005 article in *Government Procurement* magazine, which profiled King County’s award-winning EPP program, explained that its staff plays three important roles: inspiring interest, conducting research, and providing assistance:

*The role of the King County environmental purchasing managers is not to police the purchasing process or enforce the green purchasing policy requirements. Instead, they see themselves as facilitators who help agencies achieve the policy’s environmental purchasing objectives, which include ensuring that products meet price and performance requirements.*³¹

For more information about King County’s Environmental Purchasing Program, contact:

- Karen Hamilton, Environmental Purchasing Program, King County Procurement and Contract Services; 401 5th Avenue, 3rd Floor, Seattle, WA 98104; Phone: 206-263-9294; Email: karen.hamilton@kingcounty.gov; Website: www.metrokc.gov/procure/green
- Eric Nelson, Environmental Purchasing Program, King County Procurement and Contract Services; 401 5th Avenue, 3rd Floor, Seattle, WA 98104; Phone: 206-263-9300; Email: eric.nelson@kingcounty.gov; Website: www.metrokc.gov/procure/green

³¹ Scot Case, “Green Purchasing – Leading By Example,” *Government Procurement*, October 2005, www.govpro.com.

Seattle, Washington: Sustainable Purchasing and Chemical Use Reduction

Recycled Content Above EPA Guidelines and “Paper Cuts”

The City of Seattle (population 3.1 million) was an early adopter of environmental purchasing, having passed several resolutions and laws promoting the procurement of products with recycled content in the late 1980s and early- to mid-1990s. It has offered a 10% price preference for products meeting U.S. Environmental Protection Agency (EPA) Comprehensive Procurement Guidelines (CPG) for minimum post-consumer recycled content (or 25% recycled-content when no guidelines have been established). Seattle has also made a concerted effort to buy some products with a higher level of recycled content than the EPA minimums – as a way to drive the market further. For example, it specifies only copy paper with 100% post-consumer recycled content, even though the EPA guideline for this product is only 30%. While this paper is more expensive than minimally EPA-compliant recycled copy paper, Seattle expects to offset much of this expense by cutting its paper consumption dramatically through participation in an aggressive “Paper Cuts” program. To support this initiative, the Mayor of Seattle issued an Executive Order 01-05 (Paper Waste Prevention) which orders City departments to “take steps to use all reasonable means to reduce paper waste and improve recycling rates, purchase 100% recycled paper as the City standard for printing and copying, and make duplex (two-sided) printing and copying the default machine setting and standard procedure for all jobs.”³²

Chemical Use Reduction

In July 2002, Seattle became the first city in the United States to target its environmental purchasing efforts toward minimizing its use of products containing mercury, lead, dioxin and other chemicals that are persistent in the environment, bioaccumulative (PBT). These substances do not easily break down in air, water and soil, can easily concentrate in the food chain to dangerous levels, and are highly toxic. The City Council passed a resolution directing City staff to “consider PBTs and the potential for their release in making purchasing decisions”. This resolution (#30487) also directed City staff to develop an implementation plan with PBT reduction targets that considers these criteria along with other factors when making purchasing decisions in order to reduce pollution from PBTs. The policy also establishes a 10% price preference for PBT-free alternatives.³³

In February 2003, the Seattle Office of Sustainability and Environment (OSE) presented its *PBT Reduction Strategy and Progress Report* to the Seattle City Council. It detailed how it was focusing resources on products with the greatest potential for PBT reductions based on an inventory of the quantities used, an estimate of the amount of PBTs that can be reduced, and an evaluation of the availability of cost-effective alternatives. Some of the products procured under Seattle’s PBT Reduction Plan include:

- Low-mercury fluorescent tubes and street lamps
- PBT-free fungicides primarily for use on golf courses
- Chlorine-free paper
- PVC-free office supplies
- Utility poles devoid of pentachlorophenol wood preservative

³² City of Seattle, Office of the Mayor, Executive Order: 01-05 (Paper Waste Prevention), www.seattle.gov/papercuts/docs/EO01_05_PaperWastePrevention.pdf.

³³ City of Seattle, *Resolution 30487 Relating to Persistent, Bioaccumulative, Toxic Chemicals (PBTs), Stating the City of Seattle’s Intent to Reduce its Use of PBTs, and Setting Forth a Work Program*; July 1, 2002, www.seattle.gov/environment/documents/PBT%20RESOLUTION%20ADOPTED.doc.

- Biodiesel for use in the City's vehicle fleet
- Flat-panel computer monitors in lieu of CRTs with lead shields
- Rechargeable batteries that do not contain cadmium³⁴

In line with its *PBT Reduction Policy*, Seattle requires its copy paper to be processed chlorine-free (PCF) as way to reduce the toxic, chlorinated pollution that is commonly discharged from paper mills, many of which are located in the Pacific northwest.

In November 2003, Seattle adopted a broad *Sustainable Purchasing Policy*³⁵ that directs City staff to promote the use of environmentally preferable products in its acquisition of goods and services. Seattle's definition of an environmentally preferable product is similar to that used by many other jurisdictions: "A product that has a reduced negative effect of increased positive effect on human health and the environment when compared with competing products that serve the same purpose." Like many other municipal EPP programs, this policy gives the City discretion to make purchasing decisions that prevent human health and ecological impacts and to consider the following environmental factors in selecting products:

- Pollutant releases
- Waste generation
- Recycled content
- Energy consumption
- Depletion of natural resources
- Potential impact on human health and the environment

What is different about Seattle's sustainable purchasing policy is that it directs City departments to choose goods and services that meet broader sustainability goals, including those that "are fiscally responsible, reduce resource consumption and waste, promote opportunities to lesser-advantaged segments of our community, perform adequately, and promote human health and well being." The policy defines a "sustainable product" as one that "achieves performance objectives while respecting the City's values and balancing: environmental stewardship, social equity, fiscal responsibility, and community enhancement."

The policy identified social equity factors to be considered including, but not limited to:

- Use of local businesses
- Use of small, minority and women-owned businesses
- Ergonomic and human health impacts

It also lists some social factors to be considered such as:

- Lowest total cost of ownership (which includes initial costs, energy and operational costs, longevity and efficacy of services, and disposal costs)
- Impact on staff time and labor
- Potential to leverage the City's purchasing power

³⁴ City of Seattle, Office of Sustainability and Environment, *PBT Reduction Strategy Progress Report to City Council*, February 6, 2003, <http://www.seattle.gov/environment/Documents/PBTStrategy3-07-03.pdf>.

³⁵ City of Seattle, *Sustainable Purchasing Policy*, November 6, 2003, <http://www.seattle.gov/environment/documents/sustainable-purchasing-policy11-06-03.doc>.

One of the strengths of Seattle's *Sustainable Purchasing Policy* is that it details the procedures to be followed and the responsibilities of various agencies to carry them out. Specifically mentioned are:

- The Director of the Department of Executive Administration (DEA), the City's purchasing agency, which is charged with adopting environmental preferability standards, encouraging pilot testing, and "consulting with appropriate departments regarding technical and performance specifications of products in those situations where a department has specific expertise in the use of a product or the establishment of a products performance specifications." DEA is also responsible for working revising commodity teams and other user groups to revise procurement policies and specifications, evaluate bid responses, test the performance of products, and assess total costs.
- The Directors of DEA, OSE and Seattle Public Utilities (SPU) are directed to develop tools for disseminating information to City staff about sustainable products, vendors and city contracts for such products, and opportunities to discuss and test new products. OSE and DEA are also charged with collecting data for performance tracking and producing an annual report of the City's sustainable procurement actions and impacts.
- Directors of every City department are required to encourage their agency staff to use EPPs when they are added to the contract, and participate in EPP user groups, pilot tests, and other citywide efforts to implement this policy.

Seattle has adopted several other innovative policies to guide its procurement practices such as its *Chemical Use Reduction Policy*, which has a stated purpose to phase out chemical products that pose human health or environmental risks, promote use of non-hazardous alternatives, and ensure consistent evaluation of hazardous materials used by City employees. Highlights of this policy include the following:

- When a hazardous material is needed, the amount purchased and used shall be the smallest quantity practical.
- City departments are directed to assist the Office of Environmental Management (OEM) in developing a citywide inventory of all hazardous materials used and a phase-out list on an annual basis.
- Any product containing hazardous materials that is not listed on the inventory may not be purchased without prior review to determine whether it meets the City's health and environmental criteria.
- When selecting replacements to hazardous materials that are targeted for phase out and in approving new products for use, departments should prioritize protecting worker health and safety, public health and the environment with product cost and effectiveness considered, but secondary.
- As with the Sustainable Purchasing Policy, procedures and responsibilities are assigned for key tasks such as reviewing requests for new products, educating end-users, and tracking the program's progress and impacts.

- When appropriate, excess hazardous materials should be offered to other City departments or returned to the supplier, if that is an option.³⁶

Since 2002, an interdepartmental team of city staff, including custodial supervisors, facility managers, and consultants have been incorporating environmental and health criteria into its solicitations for janitorial cleaning products and evaluating the resulting bids. Seattle's standards have served as one of the models for the now nationally-utilized Green Seal standard for institutional cleaners (GS-37).

Taking a precautionary approach, Seattle's screening protocol includes some criteria that have not yet made it into GS-37, which is a "consensus-based" standard that was developed with substantial input from industry stakeholders. For example, Seattle does not allow products containing endocrine system (hormone) modifiers or chemicals that have a high potential to absorb through the skin and poison the blood, liver, kidney or other organs. A 2002 INFORM report, *Cleaning for Health: Products and Practices for a Safer Indoor Environment*, lists all of Seattle's screening criteria for its "green cleaners".³⁷

Seattle Public Utilities (SPU), an agency that operates the City's water treatment facilities, is currently conducting pilot tests of "bio-based" lubricants for their power tools and other machinery. These environmentally preferable lubricants, which are made largely from vegetable oils, replace conventional petroleum-based products, some of which contain cancer-causing solvents such as methylene chloride or perchloroethylene that are dispersed from aerosol cans. SPU is receiving technical support from the Janitorial Products Pollution Prevention Project and the Green Purchasing Institute to evaluate products currently being used that contain chemicals of concern (e.g., carcinogens, reproductive toxins, asthmagens, etc.) as well as the environmental impacts, health risks and performance of potential replacements.

Pesticide Use Reduction Strategy

The two goals of this strategy, which is targeted at pesticides used in City operations, have been to eliminate use of the most hazardous (Tier I) pesticides and to reduce pesticide use overall by at least 30%.³⁸ According to a *City of Seattle 2006-2007 Environmental Action Agenda* brochure, a recent Green Seattle Initiative accomplishment is that pesticide use has been reduced 80% from baseline in the Parks department's general operations.³⁹

Clean and Green Fleet Program

Seattle maintains a fleet of approximately 3250 cars, trucks and other vehicles that consume about 2.4 million gallons of gasoline and diesel fuel annually. On Earth Day 2003, the Mayor of Seattle set a goal of having a 100% clean and green fleet. The City has commissioned its Sustainability Office (OSE) to determine the best way for the City to reach that goal. To date, Seattle has made the following procurement changes to improve the environmental preferability of its vehicles and fuels:

³⁶ City of Seattle, *Chemical Use Policy*, Undated, <http://www.seattle.gov/environment/documents/ChemicalUsePolicy.doc>.

³⁷ Alicia Culver et al., INFORM, *Cleaning for Health: Products and Practices for a Safer Indoor Environment*, 2002, page 35, <http://www.informinc.org/reportpdfs/chp/CleaningForHealth.pdf>.

³⁸ City of Seattle Pesticide Use Reduction Strategy, Undated, <http://www.seattle.gov/environment/documents/pesticide%20reduction%20strategy.doc>.

³⁹ City of Seattle *2006-2007 Environmental Action Agenda: A Global City Acting Locally*, http://seattle.gov/environment/Documents/ea/2006_Brochure_color.pdf.

- The City is using a blend of 20% biodiesel and 80% ultra-low-sulfur diesel in all of its diesel engines. This has cut particulate and other toxic chemical emissions by 50%.
- The City has cut the size of its fleet by 200 vehicles, reduced its purchases of SUVs and increased its purchases of hybrids and other alternative fuel light-duty vehicles.⁴⁰

Green Building Policy

Seattle has adopted a policy requiring all new major municipal construction and renovation projects over 5,000 square feet to receive the US Green Building Council's LEED (Leadership in Energy and Environmental Design) Silver rating. To become LEED certified, a construction project must meet all of the prerequisites and earn additional credits within five "green" building categories:

- Sustainable site development
- Water conservation
- Energy efficiency
- Materials selection and indoor air quality
- Innovation and process

"The purpose of a Citywide policy on sustainable building is to demonstrate the City's commitment to environmental, economic, and social stewardship, to yield cost savings to the City taxpayers through reduced operating costs, to provide healthy work environments for staff and visitors, and to contribute to the City's goals of protecting, conserving, and enhancing the region's environmental resources. Additionally, the City helps to set a community standard of sustainable building." The City has invested over \$500 million in 10 LEED-certified buildings; 28 more projects are in the development or planning phase. The City is also integrating sustainability principles into its design review process.⁴¹

An innovative aspect of Seattle's green building program is that it is working to implement green building practices in city-funded affordable housing projects.⁴² Over 750 affordable housing units in the city have been built using green building techniques.

It also has prioritizes the use of locally-sourced materials, which have smaller "ecological footprint" because of their reduced transportation impacts. For example, at least 20% of its materials used to construct Seattle's new Central Library were manufactured within 500 miles of Seattle.

Program Staff

Seattle's Office of Sustainability and Environment (OSE) oversees Seattle's environmental purchasing, green government initiatives and other citywide sustainability initiatives. This agency has 4.5 full-time staff and reports to the Mayor. For more information on Seattle's Sustainable Purchasing initiatives, contact:

- Jason L. Edens, Purchasing and Contracting Services, Dept. of Executive Administration, City of Seattle; Phone: 206-684-0445, Fax: 206-233-5155; Email: jason.edens@seattle.gov
- Shirli Axelrod, Senior Environmental Analyst, Seattle Public Utilities, Seattle WA 98124-4018; Phone 206-684-7804; E-mail shirli.axelrod@seattle.gov.

⁴⁰ City of Seattle Office of Sustainability and Environment, *Seattle's Clean and Green Fleet*, Clean Air website, www.cityofseattle.net/environment/clean_air.htm.

⁴¹ Large Cities Climate Summit, Seattle Sets the Standard for Green Building, website reviewed on May 21, 2007; www.nycclimatesummit.com/casestudies/building/bldg_seattle.html.

⁴² City of Seattle, *Sustainable Building Policy*, Undated, www.cityofseattle.net/environment/documents/sustainablebuildingpolicy.doc.

Portland and Multnomah County, Oregon: Joint Sustainable Procurement Strategy

The City of Portland has been a leader in implementing sustainable city practices – and green procurement – for more than two decades. In the early 1990s, Portland adopted a policy to purchase products that are durable, reusable, made of recycled materials and non-toxic. In 1994, it published “Sustainable City Principles” with a broad goal: “to promote a sustainable future that meets today’s needs without compromising the ability of future generations to meet their needs.” To achieve that goal, it incorporated specific environmentally preferable procurement language into City Purchasing Code, which states as its general policy:

*In developing plans, drawings, work statements, specifications, or other product descriptions, the City shall insure, to the maximum extent economically feasible, the purchase of environmentally preferable products or services that comply with the City’s Sustainable City Principles. This includes, but is not limited to, products that are durable, recyclable, reusable, readily biodegradable, energy efficient, made from recycled materials, and nontoxic. Furthermore, the City shall purchase products and services based on long-term environmental and operating costs, and find ways to include environmental and social costs in short-term prices.*⁴³

Portland was also one of the first cities to set up “green teams” (1995), hold a “Green Buying Fair”⁴⁴ adopt a climate action plan (2001), and commit to building its facilities using guidelines developed by the US Green Building Council.

In 2002, Portland teamed up with surrounding Multnomah County to cooperatively develop a strategy for incorporating sustainability criteria into their purchasing decisions. Both agencies approved a joint Multnomah County and City of Portland *Sustainable Procurement Strategy* to “balance environmental issues with economic and equity issues in the expenditure of public funds promoting the long term interests of the community.” A central tenant of this policy is support for purchasing decisions based on “life-cycle cost” analysis. The resolution states: “Wherever possible, more than the initial purchase price should be considered in the evaluation of goods and services such as evaluating the full life cycle cost of the purchase including maintenance, disposal, or other costs.”⁴⁵ The strategy has the following stated mission:

The procurement system of the City of Portland and Multnomah County is fair, efficient, effective and accountable to all, while ensuring citizens have the best quality products and services at the lowest total cost. The procurement system achieves the greatest common good, protects the environment, and assures that future generations have the resources needed to sustainably maintain healthy and productive societies.

⁴³ City of Portland, City Code, Environmentally Preferable Procurement (5.33.080), www.portlandonline.com/Auditor/index.cfm?a=bciage&c=dhgg.

⁴⁴ US Environmental Protection Agency, Environmentally Preferable Purchasing Program, *State and Local Government Pioneers: How State and Local Governments are Implementing Environmentally Preferable Purchasing Practices*, EPA-742-R-00-004, November 2000, www.epa.gov/oppt/epp/pubs/statenlocal.pdf.

⁴⁵ Multnomah County, Oregon, Board of Commissioners, Resolution 02-058, Authorizing Development of a Joint City-County *Sustainable Procurement Strategy*, http://www2.co.multnomah.or.us/Departments/County_Management/Sustainability/sustainability/procurement/Resolution%20Approving%20Sustainable%20Procurement%20Strategy%20April%202002.doc.

The creation and implementation of the *Sustainable Procurement Strategy* has been coordinated by a steering committee with workgroups focused on several commodities that have been identified as high priority. The steering committee determined that the following strategy goals were achievable:

- Update specifications, contract guidelines or other policies for at least 3 to 5 major commodity areas annually, resulting in improvements in 15 to 25 commodity areas over the next five years.
- Monitor the availability of sustainable products within the targeted commodity areas and “rigorously” pursue potential opportunities for use by Portland and Multnomah County.
- Design and implement a Sustainable Purchasing Employee Education Program in conjunction with the Portland Office Sustainable Development and the Multnomah County Department of Business and Community Services.⁴⁶

The steering committee also identified the need for both *broad-based learning* about the concepts of sustainable procurement and specific training for employees who will be required to implement new sustainable procurement policies or utilize new goods or services. Over the past five years education efforts have involved developing a sustainable procurement website, specific EPP training for City and County procurement staff, sustainability training for product/service end-users, and other commodity or end-user specific EPP training.

Below is a summary of products City of Portland and Multnomah County have chosen to focus on since the adoption of their *Sustainable Procurement Strategy* and their accomplishments to date.

Building Materials/Green Building

In an effort to support economic development and its City’s Green Building Policy, Portland has undertaken an innovative outreach initiative that offers green building workshops and training opportunities to minority/women/ emerging small businesses (MWESBs). The City has found that its socio-economic programs for MWESBs do not always produce contractors that are knowledgeable in green building products and practices. Through these training opportunities the City aims to foster green building competency among a diverse supplier base. This win-win initiative may be the only one like it in the nation and promises to serve as a model for other municipalities interested in using its procurement program to facilitate local economic development.

Cleaning Products

Over the past few years, the two jurisdictions have evaluated their usage of custodial cleaning products to identify the products they use the most – general purpose cleaners and disinfectants. They discovered: “Several products, even general purpose cleaners, contained toxic disinfecting ingredients that are linked to illnesses such as cancer, endocrine disruption, nervous system toxicity, respiratory ailments, and respiratory sensitization. Many products also contribute to environmental harm, including smog, fish toxicity, hazardous air pollution, and are not readily biodegradable.”

In September 2005, Multnomah County approved a *Green Cleaning Policy* that reduces custodial personnel and building occupants’ exposure to potentially hazardous cleaning chemicals by:

⁴⁶ The Sustainable Procurement Steering Committee of the City of Portland and Multnomah County, *Sustainable Procurement Strategy: A Joint City of Portland and Multnomah County Effort*, March 20, 2002, www.portlandonline.com/shared/cfm/image.cfm?id=5520.

- Phasing in sustainable general purpose cleaners and disinfectants by the end of 2006;
- Phasing in sustainable floor care and laundry cleaning products by the end of 2007, using Green Seal standards as a guide; and
- Allowing the use of potentially hazardous disinfectants only by trained workers and “only where the use of general purpose cleaners has not been shown to be effective in controlling the contamination.”⁴⁷

The City and County also recently reviewed the environmental and health impacts of detergents used by laundry services as well as alternatives to traditional (perchloroethylene-based) dry-cleaning methods.

Computers/Electronics

The Sustainable Procurement Steering Committee targeted electronics under the *Sustainable Procurement Strategy* because of the presence of hazardous materials, the need for better recycling procedures, and the problems and costs associated with trying to handle the packaging waste associated with these products. Solutions that have been implemented to address these concerns include the County’s procurement of flat panel screens instead of cathode ray tubes, which avoided about 4,800 pounds of lead (a hazardous material); the development of new bid specifications that specify “green” computers that are certified using the nationally-recognized Electronic Products Environmental Assessment Tool (EPEAT); and the inclusion of manufacturer take-back requirements in its computer equipment solicitations. For example, the City of Portland’s request for proposal (RFP) for personal computers, notebooks and servers required vendors to offer end-of-life recycling services for electronics at no cost to the City (i.e., it must be included in the upfront cost of the product). The RFP evaluative criteria included a variety of environmental factors, including requesting information on whether companies have signed the Electronics Recycler’s Pledge of True Stewardship to demonstrate that they recycle the equipment in a manner that is environmentally and socially responsible.⁴⁸

Multnomah County, likewise, exercised their option to utilize the manufacturer’s electronics recycling services. According to the *2004-2005 Procurement Strategy Report*, “County participation in Dell’s take-back program reduced disposal costs by over \$9,000 last year for the return of 800 PCs at the end of their useful life.”⁴⁹ A current City initiative on electronics involves working with vendors to offer reusable shipping containers in order to eliminate bulky and difficult-to-recycle polystyrene waste.

Food

Sustainable procurement activities have also progressed in relation to the procurement of food. A City-County Food Policy Council (FPC) was established in June 2002 to address, among other things, “food practices in medical and government institutions that promote unhealthy diets and poor environmental

⁴⁷ Multnomah County Board of Commissioners, *Resolution No. 05-154 Adopting a Green Cleaning Policy for Multnomah County Facilities*, September 8, 2005, http://www2.co.multnomah.or.us/Departments/County_Management/Sustainability/sustainability/procurement/2005%20Green%20Cleaning%20Resolution.doc.

⁴⁸ See Product Policy Institute, *Purchasing Best Practices: Contracting for Producer Responsibility*, January 2007, www.productpolicy.org/assets/resources/PPI_EPR_for_Purchasing.pdf.

⁴⁹ Portland and Multnomah County, *Sustainable Procurement Strategy FY’04-05 Progress Report*, August 2005, page 5, www.portlandonline.com/shared/cfm/image.cfm?id=92972.

stewardship.”⁵⁰ In 2004, the FPC worked with Multnomah County to under take a pilot project to purchase and track local produce purchases by the County’s correctional facilities. During this initiative, approximately \$57,000 (or about 45% of the total amount spent on produce) was sourced from local farms in Oregon and SW Washington at no additional cost. The FPC reported in its 2005 highlights that: “As a result this pilot, the Multnomah County Sheriff’s Office included sustainability criteria to the food specifications of their 2005 Request for Proposals and the subsequent five-year contract for food services. The contractor, Aramark, plans to track local purchases of fresh produce, frozen produce, and dairy and eggs. An electronic reporting system is in development for clean, consistent reporting of local produce purchased.”⁵¹

Sustainable Procurement staff are also working with the Institutional Food Purchasing Committee on the development of a purchasing policy and sample procurement language that can be applied to contracts for food commodities and services purchased by the two jurisdictions.⁵²

Furniture

A Sustainable Procurement employee workgroup recommended new practices for handling surplus furniture that increase the amount that is reused, recycled and salvaged from City and County operations in order to reduce the amount that is landfilled and save money. It worked with the County’s procurement staff to issue a solicitation for bids from companies to oversee disposition of surplus office furniture and established a surplus website. Similarly, Portland updated its surplus property donation and disposal code and created a similar website to facilitate reuse among City departments.⁵³

Paint

Multnomah County adopted a policy in June 2003 requiring “the use of rebled latex paint when latex paint is specified and appropriate for the application.”⁵⁴ Meanwhile, the EPP portion of the City’s purchasing code (5.33.080 H) requires paint to be “low-VOC” (complying with the California South Coast Air Quality Management District Rule 1113 for Architectural Coatings or Green Seal’s GS-11 standard). It also offers a 5% price preference for recycled or rebled latex paint.⁵⁵ Sustainable Procurement staff recently researched best practices and products for industrial paints that are commonly used in municipal operations on bridges, roads, and signs.

⁵⁰ Multnomah County, *Resolution No. 02-093 Establishing a Portland/Multnomah County Food Policy Council*, June 20, 2002, <http://www2.co.multnomah.or.us/Public/EntryPoint?ct=db896b39297bc010VgnVCM1000003bc614acRCRD>.

⁵¹ *Portland Multnomah County Food Policy Council 2005 Highlights*, “Multnomah County Corrections Local Purchasing,” <http://www.portlandonline.com/shared/cfm/image.cfm?id=133874>.

⁵² *Portland Multnomah County Food Policy Council 2005 Highlights*, “Multnomah County Corrections Local Purchasing,” <http://www.portlandonline.com/shared/cfm/image.cfm?id=133874>.

⁵³ Multnomah County and City of Portland, *Sustainable Procurement Strategy FY-05 Progress Report*, August 2, 2005, www2.co.multnomah.or.us/County_Management/Sustainability/sustainability_reports/Sustainable%20Procurement%20Strategy%20progress%202005.pdf.

⁵⁴ Multnomah County Board of Commissioners, *Resolution No. 03-092 Adopting a Policy for Paper and Paint Purchasing and Setting Goals for Paper Use*, www2.co.multnomah.or.us/Departments/County_Management/Sustainability/sustainability/procurement/Resolution%20Paper%20and%20Paint%20Jun%202003.doc.

⁵⁵ City of Portland, *Environmentally Preferable Procurement Law (5.33.080)*, www.portlandonline.com/Auditor/index.cfm?a=bciage&c=dhgg.

Paper

Sustainable Procurement staff have been developing and implementing strategies to decrease paper consumption by the two municipalities (City goal: 15% by 2008 from FY 2003-04 levels) and to ensure that all paper used meets at least minimum environmental criteria. In June 2003, the City of Portland adopted a Sustainable Paper Use Policy that directs it to procure printers, copiers and fax machines with duplex capability and to set the duplex mode as the default mode. It also requires city agencies to make sure that at least 10% of paper purchases have either a higher percentage of post-consumer material than the EPA minimum of 30%, or contain virgin fiber that is independently certified as sustainably harvested or free of fiber originating from endangered forests.⁵⁶

Office Supplies

Multnomah County has convinced its office supplies vendors to better label the environmentally preferable products it offers through Multnomah's Central Stores online catalog and to increase its offering of recycled-content, energy-efficient and less-toxic products.⁵⁷

Vehicles and Fuel

Both localities pilot tested biodiesel in various applications and since 2004 have used a minimum of 20% biodiesel (blended with ultra-low-sulfur diesel since Autumn 2006) in all their vehicles – as well as in their diesel-powered generators and heavy equipment (e.g., backhoes, graders and excavators).⁵⁸ Some City bureaus are using higher blends – with up to 99% biodiesel. According to the *FY 2005 Sustainable Procurement Strategy Progress Report*, there are substantial public health and environmental benefits associated with this initiative:

*Biodiesel offers the benefit of using a renewable fuel that is produced domestically and significantly reduces net greenhouse gas emissions. A B20 biodiesel blend also reduces particulate emission matter air pollution (PM) by 10%. Particulate matter – a major component of diesel exhaust has been linked to a wide variety of serious health impacts from respiratory problems such as asthma to heart attacks and premature death.*⁵⁹

Diesel emissions have a disproportionate impact on low-income communities that tend to live near major transportation corridors and have less access to medical care. Portland used this initiative to lead by example when it cited its success as the basis passing for a Citywide Renewable Fuels policy that required all diesel sold at fueling stations throughout the city to contain a minimum amount (5%) of biodiesel by August 15, 2007.

The two jurisdictions have also purchased hybrid sedans under this strategy, and recommended the development of fuel efficiency standards to guide future fleet vehicle purchases. The City also utilizes

⁵⁶ City of Portland, *Oregon Sustainable Paper Use Policy*, July 11, 2003, www.portlandonline.com/omf/index.cfm?c=37755&.

⁵⁷ Multnomah County Sustainability Program, "ECO Mark on Central Stores Catalog Products," *Sustainability Surroundings* newsletter, Late Fall 2006; www2.co.multnomah.or.us/County_Management/Sustainability/documents/Fall%20Sustainability%20Newsletter%202006.pdf.

⁵⁸ City of Portland Office of Sustainable Development, "City Uses Biodiesel," Undated website, www.portlandonline.com/osd/index.cfm?c=42843&a=125803.

⁵⁹ Multnomah County and the City of Portland, *Sustainable Procurement Strategy FY-05 Progress Report*, page 5, http://www2.co.multnomah.or.us/County_Management/Sustainability/sustainability_reports/Sustainable%20Procurement%20Strategy%20progress%202005.pdf.

a car-sharing service provider (FlexCar) to supplement its standard fleet and provide more options to City employees without the additional costs of vehicle ownership.

Program Staff

The City has one full-time employee dedicated to sustainable procurement projects, while the County has one staff person who works on sustainable procurement in addition to other pollution prevention projects. The City-County Sustainable Procurement Program also draws on other existing City and County resources, such as the City's Office of Sustainable Development.

For more information on the Joint City of Portland, Multnomah County, OR Sustainable Procurement Program, contact:

- Stacey Foreman, Sustainable Procurement Program Specialist, City of Portland, Oregon, Bureau of Purchases, Phone: 503-823-3508; Email: Stacey.Foreman@ci.portland.or.us. Website: www.portlandonline.com/buygreen
- Molly Chidsey, Pollution & Waste Prevention Specialist, Multnomah County Sustainability Program, Department of County Management, 501 SE Hawthorne Blvd., 4th floor, Portland, OR 97214; Phone: 503-988-4094; Email: molly.l.chidsey@co.multnomah.or.us; Website: www.co.multnomah.or.us/dbcs/sustainability

Precautionary Purchasing in San Francisco

San Francisco (estimated population 750,000) is one of the original “green” purchasing pioneers. Like many other local governments, the City and County of San Francisco (CCSF) passed comprehensive “Buy Recycled” requirements in the early 1990s. But its environmentally preferable purchasing (EPP) efforts continued to grow dramatically from there. Its first municipal toxics reduction initiative was the establishment of an integrated pest management (IPM) program, which then culminated into an ordinance guiding the use of pesticides on City property in 1996. Its IPM Ordinance declared “it shall be the policy of the City and County of San Francisco for City departments and City contractors who apply pesticides to City property to eliminate or reduce pesticide applications on City property to the maximum extent feasible.”⁶⁰ By passing this ordinance, the Board of Supervisors also articulated San Francisco’s wish “to exercise its power to make economic decisions involving its own funds as a participant in the marketplace and to conduct its own business as a municipal corporation to ensure that purchases and expenditures of public monies are made in a manner consistent with integrated pest management policies and practices.”⁶¹

Specifically, San Francisco’s IPM policy phases out use of the most hazardous (Toxicity Category I) pesticides, requires an integrated approach to all pest control operations and establishes posting, recordkeeping, and accountability requirements by CCSF departments and its contractors. To facilitate implementation of the IPM program, San Francisco Department of the Environment established a list of “reduced-risk” pesticides, trained and certified pest management contractors, and recommended effective pest management methods. This program has been highly successful, according to the most recent progress report available. “Total pounds and gallons of pesticides used have dropped by 55% and 72% respectively, since the program’s inception in 1996, use of the most common herbicide has dropped by 87%, and use of herbicides in general dropped 66% and 88% (pounds and gallons, respectively) in the same period.”⁶²

Following up on this success, in 1999, the San Francisco Board of Supervisors passed a broader EPP ordinance authorizing an *Environmentally Preferable Purchasing Pilot (EP3) Project* aimed at reducing the health and environmental impacts of janitorial cleaning and maintenance chemicals used in CCSF facilities. The EP3 ordinance established a three-year pilot program during which time CCSF departments surveyed their use of chemical products (such as solvents used to degrease vehicular engine parts or building equipment as well as general purpose cleaners, glass cleaners and disinfectants) and tested the performance of safer replacements. San Francisco Department of the Environment’s Toxics Reduction Program, which coordinated the pilot tests (with the help of a team of technical consultants), developed standards for evaluating potential replacement products available to perform each task and assessed whether chemical products could be reduced by substituting products or changing workplace practices.

In 2003, the San Francisco Board of Supervisors adopted another policy that now strongly influences public procurement by encouraging CCSF departments to follow the “Precautionary Principle” in all their decision-making processes. The Precautionary Principle Policy Statement declares San Francisco

⁶⁰ City and County of San Francisco, Board of Supervisors, *Chapter 3: Integrated Pest Management Program Ordinance*, <http://www.sfenvironment.org/downloads/library/ipmannualreport200405.pdf>.

⁶¹ *Ibid.*

⁶² San Francisco Department of the Environment, *San Francisco Integrated Pest Management Program Combined Annual Report 2004 & 2005*, www.sfenvironment.com/aboutus/innovative/ipm/ipm_annual04-05.pdf.

to be “a leader in making choices based on the least environmentally harmful alternatives.” It cites five key elements:

1. *Anticipatory action* to prevent harm;
2. *Right to know* about potential human and environmental impacts associated with the selection of products, services, operations or plans;
3. *Alternatives assessment* that examines the full range of options and chooses the one with the least potential impact on human health and the environment;
4. *Full cost accounting* of costs including health impacts and the price of using and disposing of products; and
5. *Participatory and transparent decision-making*.⁶³

In 2005, the San Francisco Board of Supervisors moved the City’s environmental purchasing program forward again by approving a Precautionary Purchasing Ordinance (PPO) that establishes a citywide precautionary purchasing program for commodities purchased by CCSF departments. Among the goals of this policy include:

- Reducing occupational health hazards to City Staff and visitors to City facilities by purchasing products that do not harm human health or the environment;
- Reducing the City’s contributions to climate change by purchasing products with reduced greenhouse gas emissions;
- Improving air and water quality by purchasing vehicles and other products that minimize emissions of chemical pollutants (particularly those that are persistent in the environment or accumulate in the food chain); and
- Preserving resources by considering life-cycle impacts and selecting products that conserve energy and water, or are renewable, recyclable, compostable or durable.

The Precautionary Purchasing Ordinance is framework legislation that was passed after the Board adopted individual policies prohibiting CCSF departments from purchasing products containing arsenic-treated wood and encouraging them to purchase rechargeable batteries instead of single-use alkaline batteries as a way to cut down toxic battery waste. It highlights the success of San Francisco EP3 project. For example, it states:

The results of the three year pilot study implementing environmentally preferable purchasing for City departments demonstrated the feasibility of developing relevant human health and environmental selection criteria for products used to maintain City buildings and vehicle fleets. The pilot program further demonstrated that products meeting these criteria are available, cost-competitive, and effective at meeting the City’s performance standards. It is the City’s intention that ultimately there will be environmentally preferable alternatives for each commodity regularly purchased by the City. It reiterates the City’s commitment to using precaution in its decision-making:

⁶³ City and County of San Francisco, *Chapter 1: Precautionary Principle Policy Statement*, www.sfenvironment.com/aboutus/innovative/pp/sfpp.htm.

The Precautionary Principle calls for full disclosure by manufacturers and suppliers so the most protective standard can be applied in the comparison of potential alternatives. Only the full disclosure of ingredients and impacts of the products and services will allow the City to make informed and protective decisions.

Applying the Precautionary Principle to San Francisco's Lamps Contract

Several of San Francisco's bid solicitations and contracts have cited the Precautionary Principle Ordinance (PPO) as the basis for requesting information about potentially hazardous ingredients in products that may be sold to City departments. For example, its 2005 contract for lamps and ballasts states:

Contractor agrees to comply fully with the provisions of the San Francisco Environment Code including Chapter 1: Precautionary Principle Policy Statement, which provides that "The community has a right to know complete and accurate information on potential human health and environmental impacts associated with the selection of products, services, operations or plans. The burden to supply this information lies with the proponent, not with the general public."

Pursuant to this policy, the City and County of San Francisco requires all contractors to provide...full disclosure, to the satisfaction of the purchaser, of the amount of mercury or range of mercury in milligrams for each mercury-added product sold.

In addition, the presence of lead in solder or glass shall be disclosed for each item sold containing any amount of lead.

Any information provided in Contractors' quarterly reports, including information on the mercury and lead content of lamps supplied under this contract shall be available to the public upon request.

Failure to provide the above information as indicated may be cause for a determination of default of contract and City may, at its sole discretion cancel, nullify, and/or void the contract.

San Francisco's purchasing department, the Office of Contract Administration (OCA) is now using the information that was disclosed about the mercury content of fluorescent lamps to set numerical caps on the amount of mercury that may be allowed in products sold on the contract the next time it is re-bid. Lamps with a relatively high mercury content compared to other equivalent models available on the market may not be allowed to be sold to CCSF departments. Because the information is publicly available, it has been used by other entities that are developing bid specifications for low-mercury, high-efficiency lighting equipment. For example, the State of California, which sells light bulbs to hundreds of municipal entities through its cooperative purchasing program used this information (and separately asked for mercury-content disclosure) when developing its lamps contract. These new standards have been effective at stimulating at least one manufacturer to reformulate its lamps with less mercury after the company's products were disqualified in the bidding process because some of its lamps were found to exceed the State's mercury caps.

Two important provisions of San Francisco's PPO are the creation of a targeted list of product categories that CCSF plans to address and the development of an Approved List of Products that meet CCSF's environmental criteria. In 2006, the San Francisco Department of the Environment engaged other CCSF staff and the public in a participatory EPP prioritization process that yielded the following list of targeted product categories, which San Francisco plans to focus on over the next three years:

- Office equipment (including computers, copiers and printers)
- Building and maintenance products (such as lighting equipment, furniture, paints and lubricants)
- Food
- Office supplies (such as copy paper and toner cartridges)
- Janitorial cleaners
- Grounds maintenance products (such as asphalt and graffiti removers)
- Vehicular chemicals (including fuel, motor oil, and other fleet maintenance products)

These product categories were chosen because at least some goods in these categories have one or more of the following environmental attributes:

- They can contain chemicals that can cause cancer or birth defects;
- They can contain ingredients that can cause acute health effects such as chemical burns, central nervous system depression or asthma;
- They can contain toxic chemicals that can persist in the environment or concentrate in the food chain;
- They can create non-recyclable waste;
- They can waste energy, water or other resources.
- They can have direct effects on women or children or have disproportionate impacts on minority or disadvantaged populations;
- They can contribute to global environmental problems such as climate change or ozone layer depletion;
- They can have negative effects on fish or wildlife;
- They are sometimes made with or consume non-renewable resources;
- They can use pesticides or genetically modified organisms; and
- They can cause toxic releases to the community manufacturing the product.

San Francisco Department of the Environment staff are now working with the purchasing department to devise new specifications for upcoming contracts for products in these categories and create lists of approved products as a way to make it easier for end-users in each of CCSF's departments to easily determine which items meet San Francisco's strict environmental and public health standards.

Other Environmental Purchasing Initiatives in San Francisco

San Francisco has recently launched three innovative EPP initiatives: Sustainable Food Purchasing, Sweatshop-free Procurement, and Contracting for Producer Responsibility. Below is a brief description of each:

- Sustainable Food Purchasing: In 2005, the San Francisco Board of Supervisors adopted two resolutions encouraging CCSF departments to maximize their purchase of Fair Trade- and organic-certified products when procuring food and other necessary products for City operations. The San Francisco Department of the Environment (and its technical consultant) developed an Action Plan for meeting these goals that involves working with departments to change the food products that are sold on citywide commodity contracts as well as those offered through caterers, concessionaires and vending machines. As part of this effort, CCSF is also looking at the potential to stimulate local jobs by buying food products that are grown or processed locally.
- Sweatshop-free Procurement: In August 2005, the San Francisco Board of Supervisors enacted a cutting-edge Sweatfree Ordinance, “prohibiting contractors and subcontractors who provides goods to the City and County from maintaining sweatshop conditions by violating labor and employment, health and safety, or environmental laws or standards, and requiring compliance with minimum wage and other employment and labor standards.” The ordinance established a Sweatfree Procurement Advisory Group (to which this author is appointed) and requires bidders on CCSF contracts to identify the factories where their products have been manufactured and indicate how much was paid for products sold to the City. The ordinance states:

*In its role as a market participant, the City and County seeks to assure that the integrity of the procurement process is not undermined by contractors or subcontractors who engage in sweatshop practices. Contractors who use Sweatshop Labor are able to underbid responsible contractors who pay fair wages and maintain humane work environments and conditions. Such practices place responsible contractors at a competitive disadvantage, which may dissuade responsible contractors from participating in the City and County’s procurement process. This Chapter will encourage responsible contracting with the City and County and reduce any inadvertent support of contractors who use Sweatshop Labor.*⁶⁴

Another provision of this ordinance is that it tasks the Sweatfree Procurement Advisory Group with determining “how the City and County may maximize its purchase of goods produced in San Francisco.” While the ordinance is focusing on price preferences and other incentives that would be needed to purchase garments made in San Francisco – as a way to stop the trend toward local garment shop closings – the City is now looking at local procurement preferences as a broader economic development strategy.

⁶⁴ City and County of San Francisco, Chapter 12U: Sweatfree Procurement Ordinance, www.sfgov.org/site/uploadedfiles/olse/SweatfreeOrdinance.pdf.

- Contracting for Producer Responsibility: In February 2006, immediately after the State of California’s Universal Waste Rule fully took effect, the San Francisco Board of Supervisors passed a resolution supporting extended producer responsibility (EPR). Among other things, this resolution calls on the San Francisco Department of the Environment to “develop producer responsibility policies such as leasing products rather than purchasing them and requiring the manufacturers of products sold to City departments to offer less-toxic alternatives, and to take responsibility for collecting and recycling their products at the end of their useful life.”⁶⁵

For more information about San Francisco’s Precautionary Purchasing Program, contact Debbie Raphael or Chris Geiger, San Francisco Department of the Environment at 415-355-3700.

⁶⁵ San Francisco Board of Supervisors, Extended Producer Responsibility Resolution, February 19, 2006, [www.productpolicy.org/assets/resources/SF_Resolution_PASSED - EPR_universal_waste.pdf](http://www.productpolicy.org/assets/resources/SF_Resolution_PASSED_-_EPR_universal_waste.pdf).

New York City: Local Laws Drive EPP

New York City has had modest success with environmentally preferable purchasing over the past decade. Much of this appears to have been spurred by the passage of local legislation requiring agencies to buy recycled, energy-efficient and waste-reducing products. Because of its size – as the largest municipality in the nation with a commodity contract budget of over \$7 billion – New York City has been able to buy environmentally preferable products in large quantity. In its most recent *Environmentally Preferable Procurement and Waste Prevention Annual Report*⁶⁶, which covers Fiscal Year 2006, the City of New York’s Department of Citywide Administrative Services (DCAS)/Division of municipal Supply Services (DMSS) reported that contracts for a wide range of environmentally preferable products worth over \$163.4 million have been implemented.

This represents a decrease in EPP purchases of over \$175 million in FY2005. This lack of progress may be addressed by new legislation (Local Law 118)⁶⁷ that was enacted in 2005 and established a new citywide director of environmental purchasing who is tasked with:

- Developing new environmental purchasing rules and standards to “conserve energy and water, increase the use of recycled and reused materials, reduce hazardous substances (with an emphasis on persistent, bioaccumulative and toxic (PBT) materials), decrease greenhouse gas emissions, improve indoor air quality, promote end-of-life management, and reduce waste;
- Partnering with other government agencies or jurisdictions to “establish joint environmental purchasing standards”;
- Monitoring agency compliance with the City’s EPP standards; and
- Reporting annually to the City Council and Mayor on the City’s progress in this area.

Local Law 118 also directs each City agency to designate an “environmental purchasing officer” to coordinate with the Director of Environmental Purchasing and submit an annual report to the director detailing its agency’s compliance with the City’s environmental purchasing policies.

FY 2006 purchases of environmentally preferable products by New York City included:

- *Energy-efficient (ENERGY STAR-certified) computers, appliances and other equipment totaling \$66.9 million.* (This compares to over \$89.2 million that was spent on similar products in FY 2005.)

In 2003, Local Law 30 was enacted which requires that “In any solicitation by any agency for the purchase or lease of energy-using products, the agency shall include a specification that such products be ENERGY STAR labeled, provided that there are at least six manufacturers that product such products with the ENERGY STAR label.” In 2005, the New York City Council

⁶⁶ City of New York Department of Citywide Administrative Services, Division of Municipal Supply Services, *Environmentally Preferable Procurement and Waste Prevention Annual Report (Fiscal Year 2006)*, April 2007, http://www.nyc.gov/html/dcas/downloads/pdf/misc/dmss_recycling2006.pdf.

⁶⁷ City of New York, *Local Law 118 (2005) to Amend the Administrative Code of the City of New York, in Relation Environmental Purchasing and the Establishment of a Director of Citywide Environmental Purchasing*, http://www.nyccouncil.info/pdf_files/bills/law05118.pdf.

expanded on this law by passing Local Law 119, which directs the City to also adhere to energy and water efficiency standards of the Federal Energy Management Program (which often recommends products that are in the upper 25% of the market for energy-efficiency).

Local Law 119 has two innovative provisions that should significantly improve the energy efficiency of the City's office equipment and building supplies:

- It requires the City to purchase computers, printers, copiers and fax machines that are equipped with energy-efficient power supplies and power management software and activation of those features.
- It prohibits the City from buying incandescent light bulbs “whenever a more energy-efficient lamp is available that provides sufficient lumens and is of an appropriate size for the intended application.”⁶⁸
- *Contracts for recycled and environmentally preferable (EP) products with an estimated value of \$57.6 million.*⁶⁹ (This compares to \$54.5 million spent on similar products in FY 2005.) DCAS's FY 2006 purchases of EP products include:
 - Almost \$8 million in recycled paper contracts (mostly meeting EPA's 30% post-consumer recycled content guideline);
 - \$2.2 million for various office supplies sold through a contract with Staples (which tracks its sales and reports them to the City);
 - Nearly \$4 million worth of “recycled”, double-yield (long-lasting) toner cartridges;
 - Contracts for recycled-content and remanufactured furniture valued at about \$10 million; and
 - Hot asphalt paving mix contracts worth \$24 million; and
 - Other miscellaneous recycled-content and EP products.⁷⁰

The City of New York's Administrative Code directs DCAS to follow the US Environmental Protection Agency's minimum recycled-content standards – which have been developed for

⁶⁸ City of New York, *Local Law 119 (2005) to Amend the Administrative Code of the City of New York, in Relation to the Purchase of Energy Efficient Products*, http://www.nycouncil.info/pdf_files/bills/law05119.pdf.

⁶⁹ This number represents an estimated dollar amount purchased since the City does not have a system in place to track the actual dollar amount spent under many of its contracts. The City's annual EPP report contains the following disclaimer: “The dollars reported are the estimated amounts anticipated for purchase for that fiscal year. The City's requirement contracts are developed based on agency needs and planned usage. Actual usage is affected by a number of factors, such as available funding at the agency level, competing technologies and changes in service patters....The information presented herein should not be used as the definitive statement of the City's environmental procurement policies.”

⁷⁰ City of New York Department of Citywide Administrative Services, Division of Municipal Supply Services, *Environmentally Preferable Procurement and Waste Prevention Annual Report (Fiscal Year 2006)*, April 2007, http://www.nyc.gov/html/dcas/downloads/pdf/misc/dmss_recycling2006.pdf.

over 60 product categories – when purchasing paper and other products. Nevertheless, the City of New York passed legislation (Local Law 121⁷¹) in 2005 with stronger language. This new law requires:

- The City to purchase paper, file folders, sanitary paper, park benches, traffic cones, trash bags, recycling containers, pallets and other products with recycled content whenever they can be procured “at a reasonably competitive price”. The City can no longer offer agencies a choice between recycled and non-recycled brands in such cases.
- All City agencies to reduce their paper consumption and waste by requiring their high-speed printers and copiers to be able to print double-sided, perform equally well with paper containing postconsumer material as with paper containing no postconsumer material, and have their default parameters set to default mode.
- The City to offer a price premium of 5-7% for paper with high recycled-content levels.
- Contractors to submit their reports and other documents prepared for the City to be submitted double-sided and on recycled paper and indicate that the paper it is printed on meets the City’s minimum recycled content guidelines.

Alternative Fuel Vehicles and Alternative Fuels totaling nearly \$10 million. (This is roughly equivalent to what was spent in this category in FY 2005.) This included 531 “environmentally friendly” vehicles worth \$9.5 million as well as some fuel with ethanol or compressed natural gas. The City also purchased \$29 million worth of ultra-low-sulfur diesel fuel. In 2005, the City Council enacted Local Law 38⁷², which requires “at least eighty percent of the light-duty vehicles in such fiscal year shall be alternative fuel motor vehicles.” This legislation also states that “For Fiscal Year beginning July 1, 2005, and for each year thereafter, at least twenty percent of the buses the City purchases in such fiscal year shall be alternative fuel buses.” In addition, it requires the New York City Department of Sanitation to assess the feasibility of using alternative fuel street sweeping vehicles and garbage trucks.

New Laws on Toxic Chemical and Pesticide Use Reduction and “Green” Cleaning

Absent from the City’s *Environmentally Preferable Procurement and Waste Prevention Annual Report* is any mention of the City’s purchase of less-toxic cleaning products, pesticides, computers, paint, carpeting or other goods that are readily available with less hazardous materials. Recognizing the lack of progress in this area, the New York City Council enacted three laws in 2005 that direct the City to test the performance and ultimately purchase products devoid of hazardous substances. These include:

- Local Law 120⁷³, which, among other things, does the following:
 - It directs the City to follow the lead of the European Union and purchase or lease electronic devices that do not contain lead, mercury, cadmium, hexavalent chromium,

⁷¹ City of New York, *Local Law 121 (2005) to Amend the Administrative Code of the City of New York, in Relation to the Purchase of Products with Recycled Content*, http://www.nycouncil.info/pdf_files/bills/law05121.pdf.

⁷² City of New York, *Local Law 38 (2005) to Amend the Administrative Code of the City of New York, in Relation to the City’s Purchase of Cleaner Vehicles*, http://www.nycouncil.info/pdf_files/bills/law05038.pdf.

⁷³ City of New York, *Local Law 120 (2005) to Amend the Administrative Code of the City of New York, in Relation to the Reduction of Hazardous Substances in Products Purchased by the City*, www.nycouncil.info/pdf_files/bills/law05120.pdf.

polybrominated biphenyls or polybrominated diphenyl ethers. It also requires the City to develop a recycling and reuse plan for electronics purchased or leased by City agencies.

- It requires the Director of Environmental Purchasing to establish standards guiding the City's purchase and leasing of carpet products, paints, adhesives and other construction materials that reduce or eliminate VOCs, formaldehyde or other hazardous substances that can be emitted from these products and negatively impact indoor air quality.
 - It also requires the Director to set energy-efficiency and mercury content standards for fluorescent and high-intensity discharge lamps purchased or lease by any agency.
 - It states that the Director shall “promulgate rules to reduce the city's purchase or lease of materials whose combustion may lead to the formation of dioxin or dioxin-like compounds.” This will likely involve the procurement of products containing polyvinyl chloride (PVC) plastic.
- *Local Law 123 of 2005, the “Greening our Cleaning Act”⁷⁴ directs City agencies to conduct a three-year pilot test and ultimately purchase “green” cleaners for use in City facilities that perform well in the test. The City's Director of Environmental Purchasing is required to develop specifications (based largely on Green Seal standards) and assess general purpose and glass cleaners, floor finish and strippers, carpet cleaners, degreasers, and other cleaning products based on their ability to meet health and safety criteria, effectiveness and cost.*
 - *Local Law 37 of 2005⁷⁵ prohibits City agencies and contractors from applying the most dangerous (Tier I) pesticides as well as pesticide products that are known or suspected to cause cancer or reproductive harm. It also establishes an Interagency Pest Management Committee that “shall develop a plan to further reduce pesticide use by city agencies, including initiatives to implement integrated pest management, giving preference to employing physical, mechanical, cultural, biological and educational tactics to prevent conditions that promote pest infestations, which shall be updated on an annual basis, as necessary.” (Note: Tier I pesticides are the same ones that are prohibited in Seattle and San Francisco.)*

Program Staff

New York City's Director of Environmental Purchasing operates out of the Mayor's Office of Contract Services and reports directly to the Mayor and the City Council. For more information on New York City's EPP Program go to <http://www.nyc.gov/mocs> or contact:

John Katsorhis, Senior Environmental Procurement Analyst, Mayor's Office of Contract Services
jkatsorhis@cityhall.nyc.gov, Tel: (212) 442-6362.

⁷⁴ City of New York, *Local Law 123 (2005) to Amend the Administrative Code of the City of New York, in Relation to the Purchase of Green Cleaning and Other Custodial Products*, www.nycouncil.info/pdf_files/bills/law05123.pdf.

⁷⁵ City of New York, *Local Law 37 (2005) to Amend the Administrative Code of the City of New York, in Relation to the Reduction of Pesticide Use by City Agencies*, www.nycouncil.info/pdf_files/bills/law05037.pdf.

San Diego, CA's EP3 Program

In June 2001, the San Diego, CA City Council adopted that it “will make purchasing decisions that are based on utilizing available energy-efficient products which can reduce energy use by 25 to 75 percent, lowering energy bills and saving money for the City and its citizens.”⁷⁶ Then, in April 2002, the San Diego City Council and Mayor approved a policy requiring LEED “Silver” certification for all new public facilities over 5000 square feet. San Diego has also set a goal to “Pursue Energy Independence” and has developed a centralized energy conservation and management program and strategic plan for all City facilities. Part of the plan is to “increase power generation capacity at City facilities, especially focusing on renewable resources.”

In April 2007, the City of San Diego, CA established a new *Environmentally Preferable Purchasing (EP3) Program* that “requires City departments to use environmental criteria along with the usual price and performance criteria when purchasing products and services.” According to a fact sheet issued by the Mayor’s Office, “The program, developed by the Environmental Services Department in conjunction with the Purchasing and Contracting Department, means that every City department will be looking for ways to purchase “green”.

⁷⁶ City of San Diego, California, *Council Policy (900-18), Purchase of Energy Efficient Products*, June 19, 2001; http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800850ab.

Minneapolis' Green Cleaning Policy and Program Shines

For three years, the City of Minneapolis (population about 370,000) conducted successful performance tests of “green” cleaning products. These were undertaken in some of the City’s most challenging facilities, including the Minneapolis Convention Center and various public works buildings. To institutionalize this program, the Minneapolis passed a Green Cleaning Resolution” in October 2006⁷⁷ that states:

- The City must update guidelines to encompass green cleaning policies by January 1, 2007.
- The Purchasing Department must supply all departments with the new guidelines, specifications, and sample lists.
- The City must ensure these that guidelines are included in all new building leases and bid specifications.
- Products used must be Green Seal (or equivalent) certified.
- The City must minimize disinfectant use.
- Purchasing and Public Works must report to the Environmental Coordinating Team on costs, benefits, and barriers of implementation.

According to the Minnesota Pollution Control Agency (MN PCA), by February 2007, over 80% of the cleaning products used by the City of Minneapolis had been switched to “green” brands. For the remaining 20%, which are primarily used to remove stains and gum, the City is continuing to test less-toxic alternatives. Minneapolis is also working with the State of Minnesota’s purchasing agency to cooperatively purchase Green Seal-certified cleaners in an effort to secure lower prices for these products.

Hennepin County, Minnesota Helps Agencies Incentives to Lead by Example.

Hennepin County, which surrounds Minneapolis, has developed two creative ways to help its agencies initiate new EPP efforts. First, its *Lead by Example Incentive Fund*, established in 2005, offers \$100,000 annually for innovative environmental purchasing, toxicity reduction, and solid waste prevention projects that are undertaken in County facilities. So far, this fund has helped County agencies test green cleaning products and undertake other hazardous and solid waste reduction efforts.⁷⁸ Second, Hennepin County hosts an Annual Green Purchasing Workshop. It is held each fall to educate and develop partnerships with the purchasing staff of county departments. It is also increasingly attended by staff of surrounding municipalities. “The workshops celebrate successes, teach about new opportunities, and identify priority green purchasing projects.”⁷⁹

⁷⁷ Minneapolis City Council, *A Resolution Adopting Low Environmental Impact Cleaning Policy*, October 6, 2006, <http://www.ci.minneapolis.mn.us/council/2006-meetings/20061020/docs/Low-Environ-Impact-Cleaning-Draft-Resl2b.pdf>.

⁷⁸ Hennepin County Lead by Example Incentive Fund, Undated webpage; <http://www.co.hennepin.mn.us/portal/site/HCInternet/menuitem.3f94db53874f9b6f68ce1e10b1466498/?vgnextoid=cefcb70a699fc010VgnVCM1000000f094689RCRD&vgnnextfmt=default>.

⁷⁹ Minnesota Pollution Control Agency, “Hennepin County’s Green Purchasing Program,” *Buying Green: Minnesota’s Environmentally Preferable Purchasing Newsletter for Government and Institutional Purchasers*, August 2006; <http://www.pca.state.mn.us/oea/epp/newsletter/200608.pdf>.

***SOMETHING VENTURED: SOMETHING GAINED:
Recommendations for Overcoming Obstacles to Green Purchasing
Based on the Experiences of Local Governments***

1. Lack of staff resources and technical expertise to implement green purchasing initiatives.
 - Hire new staff and focus initially on product categories that can save municipality money such as energy efficient computers, remanufactured items, and duplexing printers.
 - Designate existing staff within the purchasing department to undertake EPP coordinating responsibilities and utilize consultants who can quickly point purchasing staff to existing specifications and standards that have been effectively used by other government agencies that you can “recycle” or tailor to fit your needs. Provide technical support on an as-needed basis.
 - Clearly delineate EPP goals to existing staff. Institutionalize environmental purchasing so that it is part of all purchasers’ job responsibility. Integrate EPP into standard procurement training. Form “user groups” in advance of bid specification development to discuss issues to address during the contract re-negotiation.
 - Look for opportunities for cooperative purchasing initiatives, including buying environmentally preferable products off state contracts or “piggy-backing” on contracts developed by other local governments.
 - Start with “low-hanging” fruit such as contracts for products for which reliable standards and certifications have already been developed or that have easily verifiable criteria such as:
 - i. Energy-efficient office equipment, lighting equipment and appliances (ENERGY STAR and Federal Energy Management Program adopted by New York City)
 - ii. “Green” computers and monitors (EPEAT: Electronic Products Environmental Assessment Tool specified by King County)
 - iii. “Green” cleaners including general purpose, glass cleaners, carpet and floor cleaners (Green Seal GS-37 specified by Santa Monica and Portland, Oregon; modified by Seattle and San Francisco)
 - iv. “Green” floor care products, including floor polish and stripper (Green Seal GS-40)
 - v. Recycled-content products (US EPA Comprehensive Procurement Guidelines: specified by New York City and many other jurisdictions as a minimum)
 - vi. Hybrid vehicles (King County, Portland and others)
 - vii. Vehicles with a minimum fuel-efficiency rating
 - viii. Renewable energy (Green-e certified or easily identifiable source such as wind farm or solar specified Santa Monica)
 - ix. Fair Trade-certified food and other imported products (TransFair certification encouraged by San Francisco)

- x. Organic-certified food and other products (USDA-certification encouraged by City of San Francisco)
2. Lack of start-up costs for products that have low life-cycle costs but relatively high start-up costs.
 - Establish a “Lead by Example” fund, which can be either a grant or revolving loan.
 - Allow agencies to shift costs from maintenance to capital budgets when maintenance savings are projected.
 - Look for creative financing mechanisms when internal funding is unavailable.
 - Seek out rebates and grant opportunities, particularly for innovative technologies.
 3. Concern about poor product performance
 - Require green products to meet same performance standards.
 - Include specific performance requirements in bid specifications to make sure less-effective products do not qualify.
 - Performance test products in your facilities prior to purchasing. Develop a list of approved products that meet your environmental specifications and pass your performance tests.
 - Develop a “waiver” system for special circumstances where a less environmentally friendly product is needed.
 - Establish an internal website where end-users can post their experiences with various products they are performance testing
 4. Inadequate data collection and tracking systems, without which it is difficult to monitor which products are being purchased, which need to be replaced, and once changes to contracts have been made, the impacts in terms of costs and benefits.
 - Require vendors to provide quarterly product usage reports to purchasing office
 - Ask agencies to report periodically on their activities, successes and obstacles

GREENING THE GOVERNMENT RESOURCES

Important EPP Certifications to Look For



Electronic Products Environmental Assessment Tool (EPEAT) is an independent program where you can find certified “green” electronic equipment such as computers, monitors and laptops. See www.epeat.net.

Energy Star is a joint program of the US Department of Energy and US Environmental Protection Agency where you can find certified energy-efficient products (such as light fixtures, exit signs, appliances and office equipment). See www.energystar.gov



Environmental Choice is Canada’s environmental product certification program. It has issued standards for over 300 product categories (such as flooring, paint, electricity, cleaners, office equipment, and paper products), many of which are sold in California. See www.environmentalchoice.com/English/ECP%20Home.



Forest Stewardship Council certifies lumber and other building products made with sustainably harvested wood or that reduce wood consumption; go to <http://www.fsc.org>.



Green Seal is a nonprofit organization that set standards for products (such as janitorial cleaners, floor strippers, and paints) and certifies products that meet those standards. Find certified products, standards, and *Choose Green Reports* at www.greenseal.org.

Green-e is a labeling program established by the nonprofit organization, Center for Resource Solutions, which verifies electricity that has been generated using renewable sources such as solar and wind energy; <http://www.green-e.org>.



Greenguard is a nonprofit organization that certifies products that impact indoor air quality. Find products (such as flooring, paints, furniture, and cleaning products) with low VOCs and other emissions. Some are certified for use near children:

www.greenguard.org.

Scientific Certification Systems verifies green claims such as “biodegradable” or “contains recycled content”. SCS also oversees compliance with the California Gold Sustainable Carpet Standard and other environmental certifications; see <http://www.scscertified.com>.



TransFair maintains a Fair Trade label issued to companies that import products such as coffee, tea, chocolate and rice that have been manufactured and sold under fair and safe working conditions. For a list of certified products, go to <http://www.transfairusa.org>.

US Department of Agriculture allows use of its organic label for products meeting federal standards that address pesticide and fertilizer use as well as other approved methods used to grow, harvest and process food and other agricultural products. Information about this organic certification program can be found at <http://www.ams.usda.gov/AMSV1.0/>.



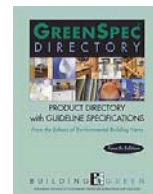
Other EPP Resources

Environmentally Preferable Purchasing Network (EPPNet) is a free electronic list-serv that links public and private officials charged with purchasing environmentally preferable products and services. It provides subscribers with quick access to EPP policies, specifications, vendors, and pricing and performance information. To subscribe, go to: <http://www.nerc.org/eppnet.html>.



Green Purchasing Institute provides hands-on technical support to local governments on EPP issues, including the development of environmental purchasing policies, bid specifications, contract language and outreach materials. Email: info@greenpurchasing.org.

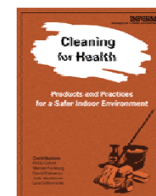
GreenSpec Directory lists over 2,100 environmentally preferable building products based on uniform environmental criteria: www.buildinggreen.com.



Health Care Without Harm assists hospitals and other health care facilities transition to safer products. This nonprofit organization offers fact sheets, case studies and other resources on EPP and related topics such as mercury- and PVC-free medical equipment, green cleaning and disinfection, sustainable food procurement, and responsible electronics purchasing and disposal. In 2006, it published **Risks to Asthma Posed by Indoor Health Care Environments: A Guide to Identifying and Reducing Problematic Exposures**, which documents products commonly used in hospitals and other institutions that contain chemicals known to cause or aggravate asthma as well as safer replacements. These resources can be found at www.noharm.org.



Healthy Building Network helps municipal governments adopt purchasing policies and practices that favor low-toxicity building products. Its website offers detailed information on safer alternatives to PVC plastic, pressure-treated lumber and products containing formaldehyde, a carcinogen found widely in furniture and flooring. See www.healthybuilding.net.



INFORM is a nonprofit environmental research organization based in New York City. It offers free technical resources on several issues relating to toxic chemicals in products and environmentally preferable purchasing, including its *Cleaning for Health* webpage, which links to its 2002 report on this subject as well as a *Green Cleaning Tool Kit*, designed for schools and other institutional facilities: www.informinc.org/project_cleaning_health.php.

Pollution Prevention Resource Center's EPP Rapid Research Service offers government entities up to 5 hours of free research time on EPP-related issues. See <http://pprc.org/research/epp>.



Responsible Purchasing Network (RPN) is a member-based network of procurement stakeholders that maintains an online clearinghouse of information on EPP policies, programs, purchasing guides, reports, upcoming events and other related resources. See www.responsiblepurchasing.org/.

US Environmental Protection Agency (US EPA) has developed Comprehensive Procurement Guidelines that recommend minimum recycled-content levels for dozens of products: www.epa.gov/cpg/products.htm. It has also developed tools to help facilitate EPP, including a database listing contract language, specs, guidance documents, case studies, and policies created by federal, state and local governments as well as vendor lists of product brands that meet federal EPP standards. EPA's EPP resources can be found at www.epa.gov/oppt/epp.

