

King County Environmental Purchasing 2008 Annual Report



King County

Department of Executive Services
Finance and Business Operations Division
Procurement and Contract Services Section
Environmental Purchasing Program

King County Executive

Ron Sims

King County Council

- Bob Ferguson District 1
- Larry Gossett District 2
- Kathy Lambert District 3
- Larry Phillips District 4
- Julia Patterson District 5
- Jane Hague District 6
- Pete von Reichbauer District 7
- Dow Constantine District 8
- Reagan Dunn..... District 9

Environmental Purchasing Program

Eric Nelson, Program Manager
206-263-9300

Karen Hamilton, Program Manager
206-263-9294

epp@kingcounty.gov

Procurement and Contract Services Section

David Leach, Manager

Finance and Business Operations Division

Ken Guy, Director

Department of Executive Services

Jim Buck, Director

King County Environmental Purchasing Program 2008 Annual Report

King County's Environmental Purchasing Policy reflects a long-term commitment to the purchase of environmentally preferable products. In 1989, King County adopted its original recycled product procurement policy in response to overburdened landfills and the need to create markets for newly collected recyclables. The policy was expanded in 1995 to include other environmentally preferable products

The King County Environmental Purchasing Program provides county personnel with information and technical assistance to help them identify, evaluate, and purchase economical and effective environmentally preferable products and services. Environmentally preferable procurement considers multiple product attributes, such as toxicity, durability, emissions, recycled content and conservation of resources, in addition to price, performance and availability.

The program reports annually on the status of policy implementation and the environmental purchasing accomplishments of agencies. In the past year, King County agencies purchased 54 million dollars worth of these products, saving \$837,000 compared to the cost of conventional products. Recycled paper is used for all major government functions, including bus schedules, tax statements, court forms, pet license notifications, business cards, and reports. Other purchases include: remanufactured toner cartridges; re-refined antifreeze and motor-oil; ultra-low sulfur diesel; biodiesel; hybrid vehicles; bio-based oils; plastic lumber, compost, shredded wood-waste and tire-retreading services. In addition to their environmental benefits, many of these products are more economical than those they replace and perform well.

Program success depends on identifying the critical decision-makers in the county and supporting them with information that can help them make good decisions. The program provides educational seminars on specific opportunities, maintains a website, produces an annual progress report and issues email "Environmental Purchasing Bulletin" to make information available to agencies, suburban cities, and the community at-large. By using these devices and others, we are gradually bringing about greater identification with the environmental objectives of policy, as employees learn that every purchase has an impact and that every employee has opportunities to improve the environmental impacts of their purchases.

The program continues to provide a central resource for internal agencies and for jurisdictions and other organizations across the nation. Program staff also continues its integral role in the national membership-based non-profit organization called the "Responsible Purchasing Network," serving on the steering committee. King County lends support to the network by sharing its experiences with others who are working to develop policies and programs to support the purchase of environmentally preferable products.



King County

Department of Executive Services
 Finance and Business Operations Division
Procurement and Contract Services Section
Environmental Purchasing Program

2008 Annual Report

Environmental Purchasing Program..... 1

Policy 1

Program 1

Implementation 2

Challenges 2

Opportunities..... 3

Purchases and Savings..... 4

2008 Purchase Summary 4

Office Products 6

Operations and Maintenance Products..... 7

Resource Recovery Services..... 13

Savings Summary 14

Supporting Program Elements 15

Agency Liaison Network 15

Website 15

Environmental Purchasing Bulletin 16

Internet Discussion Groups..... 16

Public Involvement..... 16

Publicity..... 18

Model Procurement Policy 18

Allied King County Programs 18

Environmental Initiatives of County Agencies..... 19

Climate Change/Air Quality..... 19

Resource Conservation 19

Environmental Purchasing Program

This report summarizes the achievements of King County agencies in their implementation of the King County Environmental Purchasing Policy during 2008.

In the past year, King County agencies continued to increase their awareness and purchase of environmentally preferable products. The King County Environmental Purchasing Program, housed in the Procurement and Contract Services Section, continues to provide a central resource for internal agencies and for jurisdictions and other organizations. King County maintains its leadership position through the efforts and accomplishments of the employees who are actively developing ways to use economical, environmentally preferable materials, in new applications and sharing their experiences.

Policy

The King County Environmental Purchasing Policy (KCC 10.16, CON 7-1-2–AEP) reflects a long-term commitment to the purchase of environmentally preferable¹ products. In 1989, the county adopted its original recycled product procurement policy in response to overburdened landfills and the need to create markets for newly collected recyclables. The policy was updated in 1995, and again in 2003, to require all agencies of county government to revise their purchasing practices to reduce their impact on human health and the environment “whenever practicable.” Environmentally preferable procurement considers multiple attributes, such as toxicity, durability, recyclability and conservation of resources, while still fulfilling the basic requirements of price, performance and availability.

¹ King County defines “environmentally preferable” as having a lesser or reduced effect on human health and the environment when compared with competing products that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product.

Program

The Environmental Purchasing Program aims to bring about a greater incorporation of environmental considerations in the purchasing decisions of King County agencies. The program provides County personnel with information and technical assistance to help them identify economical and effective environmentally preferable products and maintain contracts for their purchase. The program helps agencies understand policy requirements and communicates specifications, contracts, and other practical information between county agencies, vendors, users, and other jurisdictions. Full participation of the people who make purchasing decisions is the key to success.

The program’s collaborative approach relies on the expertise of county employees to evaluate procurement opportunities and revise procedures. County agencies have responded by developing new ways to use environmentally preferable products, especially where these will reduce costs while still meeting performance standards.

Implementation

The Procurement and Contract Services Section of the King County Finance and Business Operations Division administers the Environmental Purchasing Program to help county agencies increase their purchase of environmentally preferable products. The program:

- ▶ communicates environmental purchasing policy requirements to county agencies;
- ▶ researches and communicates information about price, performance, availability and potential benefits of environmentally preferable products;
- ▶ provides technical assistance to facilitate evaluation and adoption of environmentally preferable products and applications by county agencies;
- ▶ assists buyers and user agencies in the development of specifications and contracts;
- ▶ documents policy implementation, including purchases and product evaluation results;
- ▶ publishes this annual report as required by policy;
- ▶ produces e-mail environmental purchasing bulletins and maintains program website; and
- ▶ provides technical assistance, including policy development and implementation strategies, to other jurisdictions, businesses and nonprofit agencies.

Challenges

A number of factors challenge efforts to increase environmental purchasing:

- ▶ users are often not familiar with the use of many environmentally preferable products and are uncertain of the ways in which they might be effectively specified and applied in place of familiar products;
- ▶ developers of environmentally preferable products are often in the early stages of identifying the needs of potential customers and establishing the production, marketing, and distribution capacity to meet them;
- ▶ the use of environmentally preferable products must be effective and fiscally responsible;
- ▶ the lack of consensus-based standards for many product categories requires specifiers to define their own criteria for environmental preferability and specifications must balance many attributes, such as consumption of water, energy and other natural resources, toxicity, recyclability, and recycled content;
- ▶ “greenwashing,” or false claims of environmental preferability, complicates consensus on terminology; and
- ▶ collecting data on environmentally preferable purchases through existing accounting information systems can be time consuming and expensive.

Opportunities

The Program and county agencies are addressing these challenges by:

- ▶ participating in efforts by government agencies, non-profit groups, trade associations, and others, to develop consensus-based standards that will enable users to specify materials that are environmentally preferable as well as available, economical and effective;
- ▶ maintaining liaisons between agencies and the Environmental Purchasing Program to facilitate policy implementation, contracting, and data collection;
- ▶ evaluating environmentally preferable product performance in new applications through testing and pilot programs and sharing the results with agencies, jurisdictions, and other users through our website, the Environmental Purchasing Bulletin, and by other means;
- ▶ helping agencies develop specifications and contracts for environmentally preferable products whenever evaluations establish that product performance and cost are acceptable;
- ▶ assembling application information and performance data from product users and manufacturers and disseminating this to potential users in the county;
- ▶ helping potential suppliers understand King County procurement processes and obtain feedback from users to assist them in product development; and
- ▶ networking with other jurisdictions and organizations to share information about techniques, materials, and strategies allow us to take advantage of each other's successes and minimize duplication of effort.

Purchases and Savings

In 2008, King County purchased 54 million dollars worth of environmentally preferable products, saving \$837,000 by doing so. King County strives to buy products that are cost effective, meet performance requirements and are environmentally preferable. These products provide various environmental benefits, including resource efficiency, reduced toxicity, durability, and recycled content.

The tables below summarize environmentally preferable product purchases for 2008. This data is obtained primarily from “term” supply contracts, which are centrally administered goods and service contracts that enable county agencies to purchase materials at low and consistent prices. The tables also include data from one-time purchases. Details of purchases and product performance follow in the “Purchase Detail” section of this report.

2008 Purchase Summary

Office Products	Per	Units	\$
Copy and Bond Paper	Case	20,601	777,557
Printing Paper	N/A	N/A	1,989,713
Paper Products	N/A	N/A	946,639
Toner Cartridges	Each	3,386	164,395
Computers	Each	3,209	3,436,420
Can Liners	Case	9,258	230,427
Sub-Total:			7,545,151

Operations and Maintenance	Per	Units	\$
Compost	Yard	5,000	150,000
Plastic Lumber	Each	N/A	N/A
Shredded Wood	Yard	40,504	114,200
Cleaners	Case	1384	85,520
Cleaners	Gallon	1333	17,887
LED Solar Units	Each	38	N/A
Natural Vegetation Management	Sites	4	17,838
Carpet	Sq. Yd	8,331	280,317
Porous Concrete Sidewalk	Sq. Yd	1,225	N/A
Sub-Total:			665,762

Vehicular	Per	Units	\$
Motor Oil	Gallon	106,299	544,476
Antifreeze	Gallon	26,675	96,953
Bio-Based Lubricants	Gallon	1,925	23,921
Ultra-Low Sulfur Diesel (ULSD)	Gallon	12,260,137	38,887,491
Biodiesel (B100)	Gallon	912,868	2,815,293
Flexible Fuel Vehicles	Each	149	2,709,103
Hybrid Vehicles	Each	21	474,434
PHEV Vehicles	Each	4	48,000
Hybrid Trucks	Each	1	N/A
Tire Retreading	N/A	N/A	248,081
Sub-Total:			45,847,752
Resource Recovery Services	Per	Units	\$
Electronics Recycling	N/A	N/A	70,516
Fluorescent Lamp Recycling	N/A	N/A	8,603
Antifreeze Recycling	Gallon	20,110	11,705
Carpet Recycling	Yard	2,068	N/A
Office Material Recycling	Pounds	1,167,941	N/A
Sub-Total:			90,824
Purchase Totals			\$54,149,489

Office Products

Copy and Bond Paper

County agencies purchase recycled processed chlorine-free (PCF) copy paper with 30% post-consumer content. The post-consumer content level meets the Federal Environmental Protection Agency's (EPA) Comprehensive Procurement Guidelines (CPG). County purchases of recycled white and colored copy paper totaled 20,500 cases at a cost of \$778,000 in the last year.

Since 2006, the county has also had 100% post-consumer paper on contract, but most users have found the 15% cost-premium prohibitive. In 2008, the Recycling and Environmental Services Section of the Solid Waste Division committed to purchasing this paper exclusively, in line with their mission, and purchased a total of 212 cases.

Using recycled content paper saves resources. According to the Paper Calculator, created by Environmental Defense, a national nonprofit organization, buying one million pounds (King County's estimated purchase) of 30% recycled copy paper, instead of virgin, saves the equivalent of 3,600 trees and approximately 315,000 pounds of CO₂, which equates to the greenhouse gases produced by 29 cars in an average year. For more statistics from this analysis, please visit www.papercalculator.org.

Printing Paper

Printing performed by the county Printshop and through contracts administered by Procurement and Contract Services Section for various King County agencies is required to use recycled paper whenever practicable. This includes all printing, from business cards to tax and court forms, reports and bus timetables. The recycled content of this paper varies from 20% to 100% depending on the type of paper and the application. During 2008, estimated recycled paper expenditures, exclusive of printing costs, totaled 2 million dollars.

Some agencies are choosing higher recycled content percentages and evaluating other environmental attributes of paper. For example, the Local Hazardous Waste Management Program, purchased a 100 lb, 100% recycled, FSC certified paper, manufactured with wind power. They were willing to pay more for the added environmental benefits of this paper because it is in line with their mission.

Paper Products

In addition to recycled copy and printing papers, the county also maintains several contracts that allow agencies to purchase various recycled paper products. These include office supplies, such as envelopes, boxes, folders and notepads, and janitorial products, such as paper towels and tissues. The recycled content of this paper varies from 10% to 100% depending on the manufacturer and product type. Several unbleached and non-chlorine bleached products are available on contract. Recycled content purchases totaled \$950,000 in 2008.

Toner Cartridges

King County has purchased remanufactured toner cartridges for laser printers, fax machines and ink-jets since 1991. Cartridges supplied under this contract must meet original equipment manufacturer's (OEM) standards and provide full performance guarantees. A new contract was awarded in 2008 which contained additional requirements for the remanufacturing process, beyond OEM and brought good prices. In 2008, the county purchased 3,400 cartridges, at a cost of approximately \$165,000. These purchases saved an estimated \$250,000, as the cost of new cartridges is, on average, 2.5 times more expensive than remanufactured cartridges on contract. King County's specifications require spent cartridges to be remanufactured and all components to be recycled when their useful life is over, reducing the landfill disposal of hazardous material.

Computers

King County purchases most desktop computer equipment through centralized contracts. The county uses the Electronic Products Environmental Assessment Tool, or EPEAT, an environmental procurement tool sponsored by the Environmental Protection Agency (EPA) and managed by the Green Electronics Council to evaluate, compare and select desktop computer, laptops and monitors based on their environmental attributes. The county has a policy to encourage agencies to buy EPEAT compliant products.

In 2008, the primary vendor for purchases of desktop computers, laptop computers and monitors supplied the county with 3,200 EPEAT compliant products. 80% of the desktops and laptops met the EPEAT gold rating, which means they met the 23 required criteria plus at least 75% of the optional criteria.

The Electronics Environmental Benefits Calculator developed for the EPA, estimates the environmental and economic benefits of purchasing EPEAT-registered products. According to its calculations, King County saved energy equivalent to powering 108 US households per year and achieved greenhouse gas reductions equivalent to 73 passenger cars. To find out more about the calculator, visit www.epeat.net/FastBenefits.aspx.

In 2008, the Office of Information Resource Management (OIRM) installed energy savings software on networked computers that powers them down when not in use. Although too early for statistics, the software seems to be performing as intended.

Can-Liners

In 2008, King County purchased over 9,250 cases of can-liners at a cost of approximately \$230,000. These were made with 25%-30% high-density polyethylene (HDPE) or 25% low-density polyethylene (LDPE) recycled post-consumer plastic. County agencies have used recycled plastic bags from various vendors with good results since 1991.

Operations and Maintenance Products

Asphalt Cold Patch

The King County Roads Maintenance Section has been purchasing asphalt cold patch that reduces the amount of volatile organic compounds (VOCs) released to the environment, since 2001. This product is a dry, odorless, ready-to-use asphalt-based compound used to repair potholes, cracks, and other defects in paved surfaces. It contains 75% post-consumer asphalt and hardens by compaction. Traditional cold patch hardens through a combination of compaction and evaporation of a petroleum-based carrier, such as kerosene. This evaporation releases large amounts of VOCs, which are not present in this product. Unfortunately, there were no purchases to report in 2008, as Roads has been evaluating other low VOC products as they become available.

Compost

Compost-amended topsoil is specified for use in maintenance and construction projects. Although several agencies require their contractors to use compost in their construction projects, they do not ordinarily require compilation and reporting of data on compost usage for all projects. One agency, the Roads Environmental Unit, reported that in the past year, their contractors used 1,100 cubic yards of topsoil containing yard-waste compost.

Plastic Lumber

The Renton Maintenance Facility of the Fleet Administration Division requires new dump trucks to be outfitted with recycled plastic sideboards before delivery. High-quality old growth Douglas-fir had been conventionally used in this application, but it is increasingly scarce and expensive. Since 1996, they have used recycled plastic because it is more impact-resistant and needs to be replaced less frequently, saving money in the long-term despite its higher initial cost. Replacement was immediately reduced from two wooden sideboards per week to less than one plastic sideboard per month which saves \$10,000 per year in materials costs alone.

Shredded Wood

Wood chips made from shredded land-clearing debris can be used as ground cover for erosion-control, horticultural mulch, and other applications. In the last year, the Solid Waste Division (SWD) used 40,500 cubic yards of shredded wood, or “hogfuel,” to stabilize temporary driving surfaces at the Cedar Hills landfill, especially during rainy seasons. They also improved their operating procedures and are able to cover the same acreage with less material, which is timely, as the cost of this material significantly increased over the past year. The hogfuel purchases totaled \$115,000.

Cleaners

King County agencies have tested and used many cleaners that have been marketed as “green” with varying degrees of success. The market has improved dramatically for environmentally preferable cleaners in the past few years, as standards and certification programs have begun to emerge and more products have become certified. The use of environmental standards will help counter the unsubstantiated marketing claims, often called “greenwashing,” that can be confusing to users.

The program continues to participate in various efforts around the country to facilitate the advancement of reliable standards, certifications, and labeling programs that can make it possible for small jurisdictions and consumers to purchase chemistries that are demonstrably better for worker health and the environment than some we have used in the past.

In 2008, based on outcomes of those efforts, the County awarded contracts to four local vendors for cleaning chemicals that are certified by Green Seal. The Facilities Management Division, the Department of Adult and Juvenile Detention and the Department of Public Health are currently evaluating the performance and price of these certified products.

Initial reports are showing good results. The use of ready-to-dilute systems are proving safer for workers, as they are not directly exposed to the chemicals, and this results in the use of less product to do the same job. These agencies purchased 1,400 cases of these products at a cost of \$86,000. Most of these were sold in concentrate form and then diluted with water, as appropriate for the application.

Metro Transit, which operates over 1,200 buses and maintains seven bus bases and a 1.3 mile transit tunnel, has been evaluating environmentally preferable cleaners for several years, with good results. An unexpected benefit of this evaluation has been reduction of the number of different chemicals used in their bases from dozens to two main multi-purpose cleaner products. The agency reports that they used 1,300 gallons at a cost of approximately \$18,000 of certified, concentrated products for cleaning bathrooms, offices, floors and the bus tunnel.

The agency also adopted the use of microfiber cleaning cloths for all cleaning operations, and report that this change saves water and performs well. The use of microfiber mops has eliminated the use of the mop-buckets full of muddy water, as they are easily laundered where laundry facilities are available.



Transit custodian using “green” cleaners and microfiber mop.

LED Solar Lighting Systems for Bus Shelters

Since 2004, King County Metro Transit Division has been installing energy efficient solar light-emitting diode (LED) bus shelter lighting systems to enhance passenger safety. Solar-powered lighting allows Metro to install lighted bus stops without the expense and construction of connecting the facility to the regional power grid and LED technology consumes far less power than typical lighting systems. Metro Transit installed 38 solar-powered lighting systems in 2008 bringing the total number of solar-lit shelters to 140.

Transit has also installed 81 solar powered “iStops” in 2008. Metro customers push a button on the iStop to light a signal lamp to alert transit operators that a passenger is waiting in the bus zone. The use of this technology will decrease the number of passengers that are passed-by at dark bus stops.

Natural Vegetation Management

For the second year in a row, Metro Transit hired a goat herder and 270 of his goats from Eastern Washington to assist with vegetation management at the Tukwila Park-and-Ride and at Metro’s East Base in Bellevue. In 2008, they added two park-and-ride lots, Houghton and Kingsgate, to the list. These sites have been difficult to maintain due to steep hillsides and uneven ground. The goats are a more efficient way to control the weeds than crews of human workers, present less risk of injury to the human staff, and eliminate the need for chemical maintenance. The county’s use of goats has generated a lot of interest from other jurisdictions and the community.



Goats eatng weeds at Kingsgate Park & Ride.



Carpet

King County agencies buy carpet, cushions, adhesives and installation services for small remodels and renovation work through the State of Washington flooring contract. Many of the products available have various certifications for recycled content and other elements of environmental preferability, including low emissions of VOCs. In 2008, the State of Washington drafted a new flooring bid document with input from King County and other jurisdictions. The contract will be awarded in 2009.

In the past year, King County purchased approximately 8,300 yards of carpet through this contract for installation in nine small projects, at a cost of nearly \$280,000. Approximately 2,800 yards of this carpet was Environmentally Preferable Products (EPP) certified by Scientific Certification Systems (SCS) and the California Gold and Platinum Sustainable Carpet Standard. All carpet and adhesives met the Carpet and Rug Institute (CRI) Green Label Plus certification for Indoor Air Quality (IAQ). Carpet was also recycled under this contract. Please see the “Resource Recovery Services” section for more information.

Porous Concrete

Porous concrete sidewalks use a cement mixture that contains voids when hardened. These voids allow water to drain through the sidewalk surface and infiltrate directly into the soil below. This lowers the cost of stormwater infrastructure by eliminating the need for a retention vault or pond and by reducing overall impervious surface areas.

In 2008, Roads Division built a roundabout at an intersection to ease the flow of increased traffic traveling to and from a new development and school. Low impact development stormwater management techniques included using 1,200 square yards of porous concrete cement for new sidewalks at the intersection, and using native, drought-resistant shrubs and trees in the roundabout's center.

Also, in 2008, Roads Maintenance and Operations used approximately 25 square yards of porous concrete to build a sidewalk. Engineers specifically designed the project to use porous concrete as it is located in a sensitive area above Lake Washington. Roads may use porous concrete on future projects after determining how this sidewalk functions during the rainy season.



Vehicular Products

Motor Oil

Motor oil made with re-refined base-stock has been used in county vehicles operated by the Renton Maintenance Facility, Motorpool and Solid Waste Operations since 1992. Metro Transit became one of the first major metropolitan transit authorities in the nation to adopt the use of re-refined motor oil for its entire fleet of over 1,200 buses in 1999. In 2008, the county purchased 106,000 gallons of re-refined oil, primarily 15w40 and 10w30, at a cost of approximately \$545,000.

Antifreeze

County agencies, including Motor Pool, Solid Waste Operations, Fleet's Renton Maintenance Facility and Metro Transit purchase antifreeze manufactured with re-refined ethylene glycol. Metro Transit uses a concentrated re-refined ethylene glycol antifreeze product for buses and they introduce the necessary "additive packages" in the maintenance shops. In 2008, the county purchased 27,000 gallons of re-refined antifreeze, at a cost of over \$97,000, and saved over \$27,000 by its use. Please see the "Resource Recovery" section of this report for details of the recycling of spent antifreeze.

Bio-Based Lubricants

The Renton Maintenance Facility of the Fleet Administration Division (Fleet) has purchased vegetable-based hydraulic oils for use in their equipment since 2001. Bio-based lubricants were tested by Fleet and found to perform as well or better than petroleum oils. They are readily biodegradable, low in toxicity, and are safer for workers. The agency also requires manufacturers to fill new equipment with vegetable-based hydraulic fluid. In the past year, they required four pieces of equipment, a compact tractor, grader, vibratory soil compactor and vibratory roller to be filled and labeled with "Use only Biodegradable Hydraulic Oil in This Unit." In the past year, they purchased 1,900 gallons at a cost of approximately \$24,000.

Ultra-Low Sulfur Diesel

In 2002, five years ahead of the EPA requirement, known as the "2007 Highway Rule", King County began purchasing ultra-low sulfur diesel (ULSD) fuel. The fuel switch, along with the addition of diesel particulate filters, reduced particulate emissions by 90 percent. ULSD has the same energy and performance characteristics as standard diesel, so its use does not affect engine performance or warranties.

In 2008, Metro Transit, Fleet Administration and Solid Waste Divisions purchased 12.25 million gallons of ULSD fuel at a cost of almost 39 million dollars. This represented a sudden and unbudgeted increase in cost of approximately \$1 per gallon, as costs surged for all petroleum products. In addition, the county purchases 100% biodiesel (B100), blended by the supplier, to create B20 (20% biodiesel, 80% ULSD).

Biodiesel

Biodiesel is a diesel-fuel substitute produced from renewable, non-petroleum, sources, such as vegetable oils, animal fats and recycled cooking oils, and reduces our dependence on petroleum products.

In 2004, King County Metro Transit began testing the use of a 5% biodiesel blend in buses, with good results. After a successful two year trial, all county fleets began using B20 and initial results showed lower greenhouse-gas emissions. In 2007, the county made a commitment to use locally harvested canola oil for the biodiesel feedstock, for a few more cents per gallon. But by 2008, prices skyrocketed and questions arose about the product's overall environmental impacts. Prominent scientists now question whether growing crops for biofuel produces more greenhouse gases than it prevents. Prices of biodiesel have almost doubled and many experts blame biofuel production for driving up food prices worldwide.

In 2008, Metro Transit, Fleet Administration and Solid Waste Divisions purchased 915,000 gallons of B100 at a cost of \$2.8 million. In June, 2008, King County suspended the use of biodiesel, pending results of further study. The County Council put forward a motion calling for a study to examine potentially harmful biofuel impacts and the results of these researches are expected to become available early in 2009.

Metro Transit, the region's largest consumer of biodiesel, is "taking an indefinite pause" in buying the renewable fuel, according to general manager Kevin Desmond. "We're taking a hard look at it in terms of both its price and the science," he said. Read more at www.kingcounty.gov/council/news/2008/May/RD_biofuel.aspx

Hybrid and Alternative Fuel Vehicles

King County has been purchasing alternative fuel vehicles since the 1990's. The county also began purchasing gasoline-electric hybrid passenger vehicles in 2001, hybrid buses in 2004, and heavy-duty hybrid trucks in 2007. King County Executive Ron Sims drives a Toyota Highlander hybrid for county business.

Flexible Fuel Vehicles

King County Fleet Administration Division purchased 149 flexible-fuel vehicles (FFV), including 110 Chevy Uplanders for vanpools, 5 Chevrolet Impalas, 4 Chevrolet Express and 30 Ford Crown Victoria for a total of \$2.7 million in the past year. These vehicles are equipped to use ethanol, gasoline, or "E85," the term for fuel blends of 85 percent ethanol and 15 percent gasoline. Using E85 reduces carbon dioxide (CO2), hydrocarbon and benzene emissions when compared to vehicles running on gasoline. The Division acknowledges that regional supply infrastructure may limit the availability of ethanol and E85. These vehicles were purchased through the State of Washington vehicle contract.

Hybrid Vehicles

King County has purchased hybrid electric vehicles (HEVs) to replace older model vehicles as they are retired, since 2001. Hybrids are fuel-efficient and contribute less to greenhouse gas emissions. The Fleet Administration Division of the King County Department of Transportation purchased 17 Toyota Prius hybrid cars for \$380,500 and 4 Ford Escape hybrid SUVs for \$94,000 in the past year. The county now maintains over 200 hybrid vehicles and uses State of Washington contracts for new purchases.

Plug-in Hybrid-Electric Vehicles

Fleet Administration Division joined with other local and regional governments to create a PHEV demonstration project, funded by a grant from the Idaho National Laboratory of the United States Department of Energy. King County purchased four battery conversion kits in 2008 to convert conventional hybrids already in its fleet into PHEVs, which brings the total to five in the fleet.



One of five county plug-in hybrids.

Hybrid Trucks

The King County Department of Transportation's Fleet Administration Division purchased its second hybrid utility work truck. It is a medium-duty vehicle designed to transport damaged or broken-down vehicles to and from Fleet maintenance shops. All the tow functions can be operated in the electric-only mode, so the engine does not have to be idling. This technology has achieved a 25 percent reduction in fuel consumption compared to conventional diesel trucks.



Hybrid Utility Truck

Hybrid Buses

King County Metro Transit received delivery of 22 articulated hybrid buses in 2008, with 30 more to be delivered in the spring of 2009. This brings the total number of hybrid buses in the Metro system to 236 – one of the largest articulated hybrid fleets in North America. These buses have demonstrated a reduction in greenhouse gas emissions, saved fuel, and shown increased reliability. They achieve better fuel economy than regular buses and deliver a smoother and quieter ride for passengers. According to Metro Transit, in the first 10 months of 2008, their use of hybrid buses reduced diesel fuel consumption by about 36 percent, saving more than 200,000 gallons of fuel.

At a cost of approximately \$719,000 per bus, the buses are funded through a combination of local, state and federal sources. The U.S. Department of Transportation Federal Transit Administration (FTA) will provide approximately 80 percent of these funds.

Tire Retreading

The county spent \$250,000 to retread tires for trucks and other heavy equipment at the Renton Maintenance Facility, Fleet Administration Division and Solid Waste Operations. This not only avoided landfill disposal of tires, but also saved the county approximately \$250,000 in new-tire expense in 2008, as retreading a tire is half the cost of buying a new tire.

Lead-Free Wheel Weights

Lead weights have typically been used to balance wheels on vehicles. Because these frequently fall onto the roadway and are pulverized by traffic, they are increasingly understood to represent a public-health hazard and are receiving increasing attention from regulators.

In 2005, Fleet tested an alternative product consisting of adhesive flexible plastic cartridges filled with steel media in various weights and concluded that the environmental benefits justify their slightly higher cost.

King County's experience has led to the adoption of lead-free weights by other jurisdictions. To share these efforts and to learn about others, the county also participates in bi-monthly national conference calls with the Lead Free Wheels campaign, led by the Ecology Center in Michigan, with other jurisdictions and organizations.

Resource Recovery Services

Electronics Recycling

King County agencies have been recycling obsolete computers, television sets and other electronic equipment with a local recycling firm since 2002. There is growing concern about the ultimate effects of landfill, disassembly, or incineration of computers and electronics, which contain a variety of heavy metals and other toxins. Of special concern are cathode ray tubes (CRTs), which are no longer accepted at the King County landfill, because they contain large amounts of lead.

King County Code requires working equipment to be surplus for redistribution within the county, donated or auctioned. Non-working equipment is recycled through a local recycler, through the Washington State contract for electronics recycling services that include strict requirements for recycling electronic components domestically.

During the past year, agencies recycled over 5,000 computer monitors, 1,000 televisions, 50,000 pounds of other electronic equipment and 1,100 pounds of batteries of various types associated with this equipment.

Fluorescent Lamp Recycling

King County businesses and residents are now required to recycle products containing mercury, including fluorescent lamps, as they are no longer allowed in the garbage or accepted at transfer stations. King County established a contract for recycling waste lamps, including fluorescent tubes and high-intensity discharge (HID) lamps from its own facilities in 2000. Using fluorescent lamps makes sense, as they are three to four times more energy efficient than incandescent lamps, and they last up to ten times longer. In the long run, fluorescent lamps cost less to use and reduce greenhouse gas emissions. In the past year, the Department of Natural Resources and Parks, Environmental Laboratory; Facilities Management; Metro Transit, Sheriffs Office and the Solid Waste Division used the State of Washington contract to recycle various lamps, including 15,000 straight fluorescent tubes, almost 1,100 compact fluorescent lamps, 1,400 HID lamps and 1750 ballasts.

Antifreeze Recycling

King County agencies, including Metro Transit, Fleet Equipment Shop and Solid Waste Division, recycled over 20,000 gallons of ethylene glycol antifreeze back into new antifreeze, through the same contract used for the purchase of re-refined antifreeze, and paid \$11,700 for this service last year.

Carpet Recycling

In the past year, King County agencies recycled over 2,000 yards of used carpet through the State of Washington flooring contract. Agencies use this service when they are replacing existing carpet with new flooring materials. The reclaimed carpet is collected at a local warehouse and then shipped to a carpet manufacturer to be turned into carpet pad, car parts etc.

Asphalt and Concrete Recycling

The Road Services Division Coordinated Reduction of Waste program (CROW), has been sorting and recycling materials, such as asphalt, concrete, and fill from road operations since 1991. They are often able to recover asphalt and concrete and stockpile these for use as fill-material in road projects. The recycling efforts of the CROW Program save more than \$300,000 every year.

Since 2003, the Division's Street Waste Alternative Program (SWAP) has been processing and reusing street-sweeping waste and catch basin solids to create a berm that serves as a visual and auditory barrier around maintenance operations at the Summit Maintenance Facility. In the past year, they have recycled over 12,000 tons of treated waste from street sweepings, storm drain cleaning, and other road operations. SWAP saved approximately \$500,000 in 2008 by avoiding landfill disposal for this material.

Office Recycling Programs

King County agencies recycle paper, cardboard, newspaper, aluminum cans, and plastic and glass bottles from all offices. These are collected by a local recycler and sold as feedstock for the manufacture of various recycled products. In 2008, agencies recycled almost 1.2 million pounds of material.

Savings Summary

In 2008, the county saved 837,000 dollars by purchasing recycled and other environmentally preferable materials. The Environmental Purchasing Program has helped agencies identify opportunities to purchase environmentally preferable products that not only perform well, but also save money. In some cases, the product simply costs less and in other cases savings are found in avoided purchase costs because the alternative product is more durable. For example: the cost of a remanufactured toner cartridge is less than one-half the cost of a new cartridge, plastic lumber avoids the consumption of virgin timber or old growth lumber, and it costs half as much to retread a worn tire as to buy a new one.

The table below represents estimated cost savings based on purchase price only, or avoided purchase cost, and does not reflect savings in maintenance and installation. Additional examples of savings can be found in Section IV, "Environmental Initiatives of County Agencies," of this report.

Commodity	2008 Savings
Aggregates ²	300,000
Toner Cartridges	250,000
Tire Retreading	250,000
Antifreeze	27,000
Plastic Lumber	10,000
Total Dollars:	837,000

² Aggregates – avoided purchase costs for reuse of asphalt and concrete that are stockpiled, then used as fill-material in road projects by Roads Division

Supporting Program Elements

The Environmental Purchasing Program helps King County agencies develop practical ways to use recycled and other environmentally preferable products and processes through several program elements, detailed in this section.

Agency Liaison Network

The program uses a network of liaisons within agencies to provide users with information on environmentally preferable products and processes. These liaisons allow us to reach the people who do the daily work, and who can help us understand the roles and functions within each unit. This helps us to communicate new evaluation opportunities, institutionalize the routine use of these materials, and share evaluation results and specifications among agencies and other clients.

Website

In 2008, the Environmental Purchasing Program updated its website and now has a new address at www.kingcounty.gov/procurement/green. King County's new kingcounty.gov domain name gave us the opportunity to integrate our website more fully with Procurement and Contract Services Section, where we are located.

The website, which has been in existence since 1995, provides a resource to participants in the King County program as well as others in the community. Clients visiting this website find information on King County's experience with environmentally preferable products, specifications, evaluations, contracts, and contact information.

Municipalities and other organizations throughout the nation and the world take advantage of this site and these contacts bring new information that county agencies and others can use as we all develop new applications for environmentally preferable products.

In the past year, the program has received questions and comments from:

The Nations of:

Canada, British Columbia	Libya
Canada, Ottawa, Ontario	Macedonia
China, Chengdu Sichuan	Malaysia
China, Qingdao Shandon	Mexico
China, Shanghai	New Zealand, AUK
China, Shenzhen	New Zealand, STL
China, Zhejiang	Pakistan
China, ZhongShan	Saudi Arabia
Egypt	Turkey
India	UK, Cheshire

The States of:

Idaho	Minnesota
Illinois	Oregon
Florida	South Dakota
Maine	Washington
Massachusetts	

The Counties of:

Cook County, IL	Pinellas County, FL
Fairfax County, VA	Sonoma County, CA
LA County, CA	Thurston County, WA
Orange County, CA	Whatcom County, WA

The Cities of:

Abbott Park, IL	Kent, WA
Ashland, VA	La Quinta, CA
Bellingham, WA	Lake Forest, IL
Berkeley, CA	Lecanto, FL
Camas, WA	Little Rock, AR
Charlotte, NC	Lockport, NY
Chicago, IL	Los Angeles, CA
Cocoa Beach, FL	Lynnwood, WA
Colorado Springs, CO	Minnnetonka, MN
Dalton, GA	Mobile, AL
Fayetteville, AR	Olympia, WA
Fort Collins, CO	Orlando, FL
Greenlawn, NY	Owensboro, KY
Hightstown, NJ	Placerville, CA
Holbrook, MA	Port Townsend, WA
Renton, WA	Sidney, OH
Richmond, CA	Snellville, GA
Saint Louis, MO	Spokane, WA
San Diego, CA	Stanwood, WA

San Francisco, CA
Santa Cruz, CA
SeaTac, WA
Seattle, WA
Selah, WA

Tampa, FL
Vancouver, WA
Whidbey Island, WA
Woodinville, WA

NIGP Green Knowledge Community

The National Institute for Government Purchasers established this listserv to bring together subject matter experts and practitioners to develop, disseminate and promote information and resources for and about policy development, environmentally preferable products, and social and economic responsibility in public procurement

Waste Prevention Forum

A discussion group managed by King County Solid Waste Division, and part of the National Waste Prevention Coalition

Public Involvement

The King County Environmental Purchasing Program offers its experience in support of the planning, policy-development, and procurement-education activities of local jurisdictions and other organizations. The program consults with cities, counties, state and federal agencies and other users to provide them with technical assistance in policy development and implementation.

In 2008, program personnel participated in the following work-groups and conferences:

Presentations

- ▶ Suburban Cities Green Building Training Series Green Materials and Environmental Purchasing Workshop (February)
- ▶ Washington State Chapter of the National Institute of Government Purchasers - Excellence in Procurement Summit (March)
- ▶ State of Washington Department of Ecology Recycling Coordinators Meeting (May)
- ▶ Port of Seattle Green Team Meeting (September)
- ▶ Washington Association of School Business Officers Meeting (October)

Environmental Purchasing Bulletin

The program produces e-mail "Environmental Purchasing Bulletins" to disseminate and exchange information about environmentally preferable products, events, contracts, and other resources. Recipients include participants in the program's county liaison network, suburban cities of King County, and others across the nation. There are currently over 1,000 direct recipients of this bulletin. Many of these originate their own list-servs and newsletters and forward the bulletin to others.

Bulletins for 2008:

- ▶ Green Cleaning at Transit Facilities
- ▶ Remanufactured Toner Cartridges
- ▶ 2007 Environmental Purchasing Annual Report

Internet Discussion Groups

We participate in several Internet discussion groups, where we exchange environmental purchasing information with other jurisdictions, many of which now subscribe to our Environmental Purchasing Bulletin. The participants come from across the nation and bring a wide range of experience, which we share with county agencies.

EcoLogo Procurement Think Tank

Recruited the King County environmental purchasing program managers as members in 2007 and the program then participated in several surveys, including those reported in "EcoMarkets 2008 Summary Report".

EPPNET

Environmentally Preferable Purchasing Network, sponsored by the Northeast Recycling Council (NERC), a discussion group on environmental purchasing issues.

**Responsible
Purchasing Network
Steering Committee**



The King County

Environmental Purchasing Program managers serve on the steering committee for a national membership organization called the Responsible Purchasing Network (RPN). RPN is a program of the Center for a New American Dream, a national non-profit organization, with the mission to promote environmentally preferable purchasing practices and provide assistance to governments and businesses for this purpose. King County staff has participated since the inception of this group in 2005 and has contributed to monthly telephone conferences to shape the mission and further the work of this network. For more information, please visit the website at www.responsiblepurchasing.org.

Lead-free Wheel Weights Discussion Group

The county participates with other jurisdictions and organizations in bi-monthly national conference calls with the Lead Free Wheels campaign, led by the Ecology Center, a nonprofit environmental organization based in Michigan. King County was one of the first jurisdictions to adopt the use of lead-free wheel weights and exchanges information with others to stay abreast of the development of these technologies and learn about other opportunities. For more information, please visit the website at www.leadfreewheels.org.

North American Green Purchasing Institute

Environmental Purchasing Program staff participated in a telephone interview to contribute experience and ideas to this organization's work plan. For more information about the group, please visit the website at www.cec.org/nagpi.

Western States EPP Collaboration

The Washington State Department of Ecology sought the participation of the Environmental Purchasing Program in conference calls to describe and explore opportunities to cooperate in purchasing environmentally preferable products. Other participants included representatives of the City of Seattle, Portland Metro, and the States of California, Nevada and Hawaii.

State of Washington Climate Action Team

Environmental Purchasing Program staff participated in conference calls on environmentally preferable purchasing as part of the proceedings of the "Beyond Waste Implementation Group."

Institutional Outreach

The program consulted with the following organizations that requested program assistance with environmental purchasing policy development and implementation:

- ▶ New York State
- ▶ State of South Carolina
- ▶ State of Washington
- ▶ Pinellas County, FL
- ▶ County of San Diego
- ▶ Washington County, PA
- ▶ Orange County, CA
- ▶ City of Seattle
- ▶ City of Louisville, KY
- ▶ City of Tallahassee, FL
- ▶ City of Ontario, CA
- ▶ City of Vancouver, WA
- ▶ City of Austin, TX
- ▶ City of New York
- ▶ City/County San Francisco
- ▶ City of Santa Clara, CA
- ▶ Port of Seattle
- ▶ Portland Metro (OR)
- ▶ British Columbia, Canada
- ▶ Halifax, Nova Scotia, Canada
- ▶ US National Parks Service
- ▶ Consultants:
 - ▶ Terrachoice Environmental Marketing
ERG (for EPA)
 - ▶ Reeve Consulting (for NAGPI)

Publicity

A key to the success of the King County Environmental Purchasing Program has been the exchange of practical information with other users of environmentally preferable products. Many of these exchanges have come as a consequence of exposure through national magazines, newspapers, and other publications.

Among the publications which featured the King County Environmental Purchasing Program in 2008:

National Association of Counties (NACo)

- ▶ Green government newsletter, June 2008
- ▶ Green purchasing fact sheet, May 2008

Green Purchasing Institute

“Buying Smart: Experiences of Municipal Green Purchasing Pioneers” May 2008

King County Executive Press Release

“Taxpayers and the Earth save ‘green’ with King County’s environmental purchasing policy”
May 15, 2008

Responsible Purchasing Network

Tires and Wheel Weights webinar, March 18, 2008

- ▶ This webinar included an update on the low-rolling resistance (LRR) tire marketplace, an explanation of retread tires, and King County DOT's experience in using lead-free wheel weights.

Environmental Protection Agency (EPA)

“Clean Energy Strategies for Local Governments Energy-Efficient Product Procurement” King County Case Study, February, 2008

International Sanitary Supply Association (ISSA)

“Green Cleaning Product Procurement Policies, Initiatives and Requirements in the U.S.”
November 24, 2008

Model Procurement Policy

The program continues to promote the development of recycled and environmentally preferable procurement policies in suburban cities by providing policy guidance, including a model policy, through the website. The program also provides direct technical assistance to suburban cities for policy implementation by sharing contracts, specifications, and procurement strategies.

Allied King County Programs

Many King County programs offer information and technical assistance to help citizens, businesses and county agencies find ways to improve their environmental performance. The Environmental Purchasing Program has collaborated with the following programs in 2008:

Global Warming Initiative

Executive Office

- ▶ Participated in both the Climate Implementation Team and Energy Task Force

Green Building Program/GreenTools

Recycling and Environmental Services, Solid Waste Division, Department of Natural Resources and Parks

- ▶ Presented to suburban cities on environmental purchasing
- ▶ Participated in Green Building Operations Committee

Integrated Pest Management (IPM)

Local Hazardous Waste Management Program, Department of Natural Resources and Parks

- ▶ Participated as a steering committee member in strategic planning and outreach to reduce the county’s use of pesticides.

Local Hazardous Waste Management Program

Department of Public Health

- ▶ Participated in “green cleaning” committee about contracting approaches and chemicals.

Environmental Initiatives of County Agencies

King County government includes environmental conservation and protection considerations in many environmentally-oriented programs, from green building to resource conservation. This section contains information about several initiatives undertaken by county agencies that are reducing the impact of county operations on the environment.

Climate Change/Air Quality

Climate Plan

The King County Executive's office published the second annual report on implementation of the King County Climate Plan. The report highlights countywide actions to reduce greenhouse gas emissions from county operations and regional activities. Read the report at: - www.kingcounty.gov/exec/globalwarming.aspx.

Electric Vehicles

King County is helping the region develop the electric power infrastructure needed to support plug-in hybrid vehicle (PHEV) fleets by buying electric vehicles and supporting a growing network of plug-in stations. In 2008, the county published a new report outlining key initiatives to develop this market, including summarizing the county's own activities to invest in this technology and the development of "green fleet" standards for municipal vehicle fleets. The current project is called the Evergreen Fleets Initiative, formerly known as the Puget Sound Regional Green Fleet Standard, and is sponsored by the Puget Sound Clean Air Agency and the Puget Sound Clean Cities Coalition. A total of 5 county hybrid vehicles have been converted to plug-ins. Find the report at: <http://your.kingcounty.gov/kcdot/green/electric>

Efficient Equipment

Beginning in 2007, the Road Services Division began replacing their outdated chain saws with new, more efficient equipment. In 2008, they replaced 60 additional pieces of equipment, such as brush cutters, weed eaters and chainsaws with less-polluting models.

Hybrid Bus Grant

King County Metro Transit and Sound Transit (regional transit authority) received a \$2.2 million grant from the Federal Transit Authority (FTA) in 2008 for the purchase of 12 new hybrid-electric buses. King County Metro Transit became one of the first municipalities in North America to purchase a large fleet of articulated hybrid buses, in 2004. These buses have demonstrated a reduction in greenhouse gas emissions, saved fuel and shown increased reliability. Transit management estimates that each hybrid bus burns 30 percent less fuel than a conventional coach, which represents much-needed fuel economy in this era of escalating fuel costs. Metro Transit expects to receive its new hybrids in 2010. Read the press release at: <http://your.kingcounty.gov/exec/news/2008/0917hybridgrant.aspx>

Resource Conservation

Landfill Gas Energy Project

In 2008, the King County Solid Waste Division signed a contract with a renewable energy company to convert landfill gas generated at the Cedar Hills Regional Landfill into natural gas for use in the Puget Sound region. This project, under study for many years, will be in full operation by 1st Quarter 2009, and will reduce greenhouse gas emissions from Cedar Hills by more than 60 percent. Read more about the project: <http://your.kingcounty.gov/solidwaste/facilities/landfill-gas.asp>

Roads Re-lamp Project

The Roads Services Division upgraded one of its old buildings by retrofitting the lighting. Thanks to a grant from Puget Sound Energy, they were able to replace more than 700 outdated fluorescent bulbs with new, more energy-efficient T-8's. The entire facility's consumption will be cut by more than half in 2008. Read the story at www.kingcounty.gov/transportation/kcdot/NewsCenter/DOTcast/RoadServices/041608_greenbulbs.aspx

LED Street Lights

The Roads Services Division (RSD) is piloting the use of light-emitting diode (LED) street lights. The advantage of using LED street lights, over high-pressure sodium lamps, is that they may save as much as 70% in energy and have a five to eight year life cycle, instead of one year for the sodium lamps, and will reduce the costs of labor and materials at replacement. In August 2008, the county installed a total of eight LED street lights, four each from two different manufacturers as a pilot project. RSD will monitor the power usage and then make that comparison. The disadvantage of the LED street lamps is that they don't achieve the same light output as traditional lamps. King County maintains about 1,800 street lamps countywide. Read the story at: www.kingcounty.gov/transportation/kcdot/NewsCenter/DOTcast/RoadServices/111308_ledstreetlights.aspx

Anti-icers

The Roads Services Division maintains approximately 2,000 miles of roadway within unincorporated King County. RSD is responsible for sanding and snow removal operations to mitigate hazardous driving conditions during snow and ice events. When there is a threat of snow, the county operates nine anti-icer trucks that spray roads before a storm to prevent snow and ice from getting too much of a foothold. The anti-icer breaks the bond between the road and the fresh snow, making it easier for snowplows to clear. It works best if it is applied when the weather is cold, but still dry. RSD typically uses a low quantity of an anti-icer product consisting of calcium chloride with an organic rust inhibitor. According to a Washington State Department of Transportation study, calcium chloride is an environmentally safe product. Read the story at: www.kingcounty.gov/transportation/kcdot/NewsCenter/DOTcast/RoadServices/111308_antiicing.aspx

Reclaimed Asphalt Shingles Demonstration Project

In 2008, Roads Services Division teamed up with the county's Solid Waste Division's LinkUp program to pilot the use of reclaimed asphalt shingles (RAS) in hot mix asphalt (HMA) in a paving trial. LinkUp has studied asphalt shingles and reports that currently only 1,000 tons, out of 17,000 tons generated are recycled in King County each year. The trial will provide Washington State, King County and other jurisdictions information for the development of tear-off RAS specifications for roadway construction. In 2008, the road was chosen and specifications were being finalized for the project that will take place in 2009. The Washington State Department of Transportation 2008 Standard Specifications for Road, Bridge, and Municipal Construction book allows a 3 percent mix of RAS in HMA. Approximately 60 tons will be used in this trial and Linkup will produce a report of the outcomes in 2010. Read more about the project at: <http://your.kingcounty.gov/solidwaste/linkup/shingles/paving-demo.asp>

Green Building

The King County Shoreline Recycling and Transfer Station, which opened in February, 2008 after a two-year rebuilding project on the site of an old landfill, has earned the Leadership in Energy and Environmental Design (LEED) platinum certification, the highest recognition.

The facility includes a rooftop rainwater harvesting system, solar electricity panels, natural ventilation, low VOC finishes and recycled content components. Read more about the Shoreline Recycling and Transfer Station LEED certification at: www.kingcounty.gov/environment/dnrp/newsroom/newsreleases/2008/september/0912Shoreline-LEED-Platinum.aspx

Cover Page photos:

Upper left - Goats happily eating weeds

Upper right - Transit's custodial "green" team

Lower left - Plug-in hybrid vehicle demonstration

Lower right - Roads Operations installing porous concrete sidewalk

Text:

80# book, 50% recycled, 25% post-consumer waste

Cover:

80# cover, 50% recycled, 25% post-consumer waste

Thanks to Ned Ahrens, Peggy Meyer, Jon Cassidy, Taylor Watson, and Karen Hamilton for contributing pictures to this report.





King County

Department of Executive Services
Finance and Business Operations Division
Procurement and Contract Services Section
Environmental Purchasing Program
401 Fifth Avenue, 3rdrd Floor
Seattle, WA 98104-1818

www.kingcounty/procurement/green