



THE CITY OF SAN DIEGO

FY2008 Annual Report

The City of San Diego

Environmentally Preferable Purchasing Program (EP³)

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Environmental Services Department
Waste Reduction and Disposal Division



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Report produced by the Environmental Services Department (ESD), Waste Reduction and Disposal Division. For a copy online, go to www.sandiego.gov/environmental-services.

I. Introduction

This report documents the achievements of the City of San Diego in implementing the Environmentally Preferable Purchasing Program (EP³) for the period of July 1, 2007 through June 30, 2008, also referred to as Fiscal Year 2008 (FY08).

The City of San Diego is committed to finding ways to reduce workplace hazards and protect environmental resources by reviewing the products purchased by City departments and directing funds toward more environmentally responsible alternatives that are cost effective. This is accomplished through the Environmentally Preferable Purchasing Program (EP³) under the guidance of the Environmental Services Department (ESD) and the Purchasing & Contracting Department (P&C). The success of the program is proportional to the participation by all City employees as they realize the benefit of new opportunities offered by vendors and manufacturers that are increasingly embracing green technologies, products, and practices.

“Environmentally Preferable” (EP) means having a lesser or reduced effect on human health and the environment when compared with competing products that serve the same purpose. EP products or services minimize the consumption of resources, energy and water; prevent or minimize the creation of solid waste, air pollution or water pollution; minimize the use of materials or processes which compromise the environment; and/or promote the use of less or non-toxic substances, and avoid toxic materials or processes.

Due to significant advances in the quantity and quality of EP products and services, as well as increased awareness of the benefits these products and services have on human health and the environment, ESD collaborated with the P&C Department and other City departments to develop an Administrative Regulation (A.R.) that serves as a framework for existing and future purchasing practices within the City organization. Its purpose is to balance multiple environmental attributes with price and performance considerations.

By developing the EP³ A.R. and putting it into practice as illustrated in this report, the City is leading the way for businesses and other organizations to reduce our impact on the environment. In FY08, ESD staff helped to advance the message about green purchasing by participating in local panel discussions and national green procurement outreach efforts coordinated by the United States Environmental Protection Agency (US EPA).

II. Environmentally Preferable Purchasing

Administrative Regulation 35.80

A.R. 35.80, Environmentally Preferable Purchasing, became effective April 4, 2007 with the purpose of establishing guidelines and procedures for purchases of environmentally preferable products and services. The A.R. requires City departments to purchase EP products and services whenever practicable and expands the commitment of the City to purchase products with recycled content, lower toxicity, and greater conservation of energy, water, and other resources.

A.R. 35.80 states that “City departments shall purchase Environmentally Preferable Products or non-professional services whenever possible by taking into consideration appropriate environmental attributes or benefits along with price and performance standards.” The A.R. identifies twelve basic environmentally preferable characteristics, or attributes to be used in evaluating whether a given product or non-professional service is

environmentally preferable. These include:

- 1) Alternative Energy Source
- 2) Bio-based
- 3) Biodegradable
- 4) Compostable
- 5) High Recycled Content
- 6) Low Toxicity
- 7) Low Volatile Organic Compound (VOC)
- 8) Pollution (air, water, solid waste) Reduction
- 9) Recyclable
- 10) Repairable
- 11) Resource Efficient (water conserving and/or energy efficient)
- 12) Reusable

An Environmentally Preferable Purchasing Evaluation Checklist (Attachment 1) is available to City employees to assist with the evaluation of products and non-professional services. If an environmentally preferable product or service is not selected for use, employees must submit a Procurement Justification Form (Attachment 2) along with their purchase request.

All City departments are required to follow the procedures outlined in A.R. 35.80. EP³ is specifically geared toward employees who:

- Identify or specify products or services for purchase by their department or division
- Write bid specifications for products, equipment or services
- Draft contracts for products or services
- Use City Standard Purchase Orders, Citywide Open Blanket Purchase Orders, petty cash, City credit card, or other City purchasing methods

Program Goals

The primary goal of EP³ is to promote the purchase of EP products and services throughout City departments for the purpose of fostering the practice of responsible purchasing choices that are cost effective and reduce the impact of such purchases on public health and the environment.

To accomplish this, the following goals have been established for EP³:

- Increase purchases of EP products and services through expanded access to citywide contracts
- Educate City employees on the benefits and opportunities associated with EP products and services
- Institutionalize EP procurement activities among City personnel
- Improve tracking and reporting of EP purchases
- Provide outreach to vendors and service providers on the City's EP³

Program Implementation

EP³ is designed to implement and document changes in procurement practices of City employees, which can only be successful with the full participation of those employees responsible for purchasing decisions. With a \$3.1 billion budget in FY09, it is evident the City has a unique opportunity to impact sustainable purchasing practices in the region. ESD and P&C have identified the following EP³ program roles and guidelines:

ESD's role includes:

- Administer the EP³ program to help City departments increase their purchase of EP products and services, with the City's Central Stores in close partnership
- Research recycled and other environmentally preferable products, applications, and service providers
- Communicate appropriate information to department contacts to enable them to incorporate environmental considerations when making purchasing decisions
- Produce an e-mail bulletin to provide users with information about EP³ products and services
- Develop and maintain an internet website which:
 - provides resources and tools to facilitate internal implementation of this policy
 - demonstrates the City's leadership in providing a resource for other agencies and organizations in the region
- Review EP³ requirements with City departments and monitor the status of policy implementation
- Prepare an annual report on the status and progress of EP³ to the Mayor

P&C's role includes:

- Ensure that City bid specifications and contracts require recycled and other EP components whenever feasible and that contractors provide appropriate certification of this content
- Work with product and service contractors to track and report EP purchases made by City departments
- Assemble and disseminate evaluation results and reports of environmental purchases by departments
- Coordinate development and implementation of procurement guidelines and recommend revisions to City policy

In FY08, the following progress was made toward implementation of the program:

ESD:

- Researched environmentally preferable products and services
- Updated and maintained the EP³ website
- Prepared the first annual report of citywide EP³ purchases
- Developed an EP³ Newsletter for city employees and the public, which is posted on the EP³ website.
- Staff gave presentations and participated in discussions with other organizations and jurisdictions to support the development and implementation of green procurement programs.

- Staff met with information technology consultant and Hewlett Packard in February 2008 to discuss the environmental benefits of centralized printer support services and Hewlett Packard environmental initiatives.
- ESD and Custodial Services staff met with Waxie Sanitary Supply for a green cleaning product presentation in April 2008 as part of the Business Process Re-engineering program.
- A program with the Park and Recreation (P&R) department was started in 2006 to help P&R increase EP purchases utilizing the revenues from recyclables that are collected at 44 P&R sites and 15 City offices. In FY08, ESD continued to work with P&R to identify potential expenditures, which should begin in FY09.

ESD and P&C:

- Reviewed and revised several bid documents for EP³ requirements.
- October 2007 to March 2008 – Internal meeting and several discussions regarding the purchase of recycled paper (quality, price, performance) with the existing and new office supply vendor.
- February 2008 – Staff attended a Green Purchasing workshop sponsored by the California State Association of Counties.
- June 2008 – Staples gave a presentation on their green initiatives to ESD and P&C staff. EP³ goals and how to set up default EP product purchases and product restrictions were discussed. Discussions and improvements will continue in FY09.

Future Challenges & Opportunities

As with any new undertaking, there are several challenges that must be faced in the City's efforts to increase environmental purchasing:

- Due to unfamiliarity with the many types of recycled and other environmentally preferable products, staff and contractors may be reluctant to specify these products because of uncertainty about how they might be effectively substituted for more familiar products.
- New and emerging companies that develop and provide environmentally preferable products must first develop successful track records, including establishing the production, marketing, and distribution capacity to meet the needs of their customers.
- EP products and services must be cost effective when taking into account the lifecycle cost and the environmental benefit.
- Obtaining appropriate and pertinent information on environmental products often places unfamiliar demands on participants, which may cause resistance to the program.
- Many products purchased by the City must meet rigorous quality and performance standards, many of which did not originally take into consideration environmental attributes or impacts. Modification of these standards can be a slow process and many environmentally preferable standards and specifications are a work in progress as demand grows and new product offerings are made.

- Potential false claims (“greenwashing”) by vendors increase the need for due diligence and verifying claims and certifications.
- Employees responsible for developing specifications and/or securing purchases must learn to balance competing claims of environmental preferability. These employees must decide how much weight to give recycled content, how much to give low toxicity, how to balance recyclability against energy efficiency and how to prioritize the many other elements of environmental preferability.
- In order to document and monitor the program’s progress, employees must track and communicate to ESD and P&C accurate information about purchases. ESD and P&C staff must have some understanding of the operations and procurement needs of other departments to effectively assist them with implementation and data collection.

ESD and P&C staff will address these challenges by:

- Maintaining liaisons between City departments and ESD and P&C to facilitate program implementation, purchases, and data collection
- Researching new applications for recycled and other EP products and encouraging supply and contract managers to specify them whenever possible
- Providing departments on-going training, information and assistance in developing specifications and contracts for EP products and services
- Maintaining links to the most comprehensive and authoritative databases to assist in the use of product specification language and specific products and vendors, including those that are third-party certified
- Helping product suppliers obtain feedback from various end users to assist them in refining product development and helping them understand the City’s procurement processes
- Working with vendors to self report their EP product sales to the City
- Continuing to network with other agencies and organizations to share information and successful implementation strategies

III. Citywide Purchases

Purchase Summary

During FY08, City employees continued to make progress in sourcing environmentally preferable products and services by purchasing approximately \$42.2 million of “green” goods and services, and also realizing annual savings and revenue of almost \$13 million as a result. Despite extensive outreach, this likely does not represent all EP³ activities undertaken by the City because communication channels supporting these efforts continue to be developed. For example, at the time the FY07 report was written, ESD had not received complete information on all of the street repair and resurfacing work in FY07. As a result, the slurry seal and overlay program was not included in that report. Similarly, energy sales from Metropolitan Wastewater’s Pt. Loma Water Reclamation Plant were omitted from the FY07 report. These values have since been obtained and they accounted for \$19.6 million of purchases and \$830,000 of revenue in FY07, bringing the total estimated FY07 purchases to \$37.4 million and savings and revenue to \$11.4 million. The FY08 totals

represent increases of approximately 13% in purchases and 14% in savings and revenues over FY07 numbers. The following tables summarize environmentally preferable product purchases and savings for the FY08 reporting year (July 1, 2007 – June 30, 2008).

Citywide FY08 EP³ Purchases ⁽¹⁾	FY08 Amount
Paper & Office Products	
Recycled copy/printing paper ⁽²⁾	\$ 672,906
Office products ⁽³⁾	\$ 534,198
Konica Minolta copiers/printers ⁽⁴⁾	\$ 2,379,286
Computers, monitors, printers	\$ 1,986,711
Computer equipment recycling	\$ 25,900
Technotrash recycling	\$ 1,529
Subtotal	\$ 5,600,530
Vehicles & Maintenance	
Hybrid vehicles	\$ 477,716
Coolant (1,500 gallons)	\$ 4,380
Re-refined oil (3,363 quarts)	\$ 7,473
Liquefied natural gas fuel (46,940 gallons)	\$ 49,835
Retreaded tires	\$ 518,052
Subtotal	\$ 1,057,456
Building and Construction Materials	
Slurry seal ⁽⁵⁾	\$ 6,800,000
Overlay ⁽⁵⁾	\$ 14,200,000
Asphalt	\$ 1,284,850
Aggregate road base (100% recycled)	\$ 140,000
Asphalt crack sealer ⁽⁵⁾	\$ 858,000
Traffic cones	\$ 24,780
LEED Silver certified building – Fire Station 47 ⁽⁵⁾	\$ 5,306,190
Subtotal	\$ 28,613,820
Building Supplies, Maintenance & Energy Efficiency	
Janitorial supplies (cleaners, bag liners, bath tissue, paper towel)	\$ 779,443
Garden hose	\$ 8,562
Compost and mulch (68,661 cy)	\$ 232,760
Goats for brush management	\$ 4,975
Energy efficiency building upgrades (lighting and HVAC)	\$ 832,182
LED “Walk/Don’t Walk” signals	\$ 50,000
Green power purchase (methane and photovoltaic)	\$ 2,200,000
Subtotal	\$ 4,107,922
Other	
Steel storage lockers - refurbished	\$ 35,118
Trash and recycling carts	\$ 1,070,796
In-ground recycling containers	\$ 80,000
Water conservation incentives	\$ 315,987
Reclaimed water (1,190,936,847 gallons)	\$ 1,273,729
Recycled glass awards	\$ 3,000
Subtotal	\$ 2,778,630
Total Citywide EP³ Purchases	\$ 42,158,358

(1) Not a complete listing.

(2) Purchased by City Print Shop. Includes in-house and outsourced jobs.

(3) Includes recycled content copy paper purchased from Corporate Express and Staples for office use.

(4) Contract is for equipment lease and includes maintenance and imaging charges.

(5) Price includes labor and material.

FY08 Savings / Revenue from EP³ Purchases⁽¹⁾	Amount
Energy efficiency and renewable energy savings ⁽²⁾	\$ 8,800,000
Reclaimed water savings	\$ 2,875,444
Overlay program – recycled in place savings	\$ 103,000
Retreaded tires savings	\$ 221,214
Reused steel storage containers savings	\$ 25,600
Renewable energy sales revenue	\$ 908,700
Recycling of old or damaged blue and black bins revenue	\$ 65,300
Total Citywide Savings / Revenue from EP³ Purchases	\$ 12,999,258

(1) Not a complete listing.

(2) Assumes energy cost of \$0.14 per kilowatt hour (kWh).

Purchase Detail

City departments purchased a variety of EP products and services, including recycled paper, energy efficient products, green power, recycled pavement products, re-refined antifreeze and motor-oil, tire-retreading services, reclaimed water, and hybrid vehicles. Many of these products were more economical than those they replace. Following is a summary of these purchases.

Paper and Office Products

Copy and Printing Paper

Paper purchased by the City Print Shop for standard printing and copying projects contains a minimum of 30% recycled content. The Print Shop also specifies recycled paper where practicable for jobs that are completed by outside printers. City departments purchase 30% recycled copy paper for use in each department through the City's office supply vendor and restrictions are placed on purchases of virgin paper through the vendor.

Office Products/Equipment

Office supplies were purchased through citywide contracts with Corporate Express until May 13th and with Staples after that. In FY08, the City purchased over \$530,000 of EP office supplies (mostly recycled content) and recycled paper on these two contracts.

Computer and Imaging Equipment

Staff from the Office of the Chief Information Officer (CIO) took an active role in greening the City's computer equipment purchases by participating in an online training seminar sponsored by the Responsible Purchasing Network about the EPEAT standard for computer equipment. CIO staff disseminated this information to other staff and the City's information technology contractor to ensure that this standard is considered in equipment specifications. All of the 439 laptops, all but one of the 1,135 desktops computers, and all but eight of the 1,948 monitors purchased by the City in FY08 met the EPEAT Silver or Gold standard. In addition, 110 of the 293 printers that the City purchased were Energy Star compliant.

For office copying and printing needs, the City contracts with Konica Minolta to lease multi-function copier/printers. These machines consolidate copy, print, scan, and fax functions and help eliminate the need for separate pieces of equipment. All of the machines are Energy Star compliant and capable of duplex printing and copying. The FY08 cost of this contract was \$2,379,286, which includes maintenance and imaging charges.

Electronics Recycling

Since 2004, the City has been recycling obsolete computers, TV's and other electronic equipment through a competitively bid contract with a local recycling firm. During FY08, the City recycled 7,220 pieces of equipment including computers, monitors, printers, and miscellaneous equipment and paid \$25,900 in recycling fees. In addition, the City began a "technotrash" recycling program in FY07 to recycle small electronics and storage media such as CDs, DVDs, floppy disks, video tapes, handheld electronics, and digital cameras. In FY08, the City spent \$1529 on the program and recycled 656 pounds of technotrash.

Vehicles & Maintenance

The City purchases low emission and hybrid vehicles that increase fuel-efficiency and reduce greenhouse gas emissions. In FY08, City purchases of hybrid vehicles increased by almost \$200,000 over FY07. The City purchased 17 Ford Escape Hybrids, as well as many other vehicles that meet the California Ultra Low Emissions, Super Ultra Low Emissions, and Partial Zero Emissions standards. In addition, the trash and recycling collection fleet and some other heavy vehicles run on re-treaded tires and many fleet vehicles utilize re-refined oil and recycled anti-freeze.

ESD's Collection Services Division began using dual fuel trash and recycling collection trucks that ran on liquefied natural gas (LNG) and diesel in 2001. However, by 2004 these vehicles proved to be somewhat problematic and performance was less than anticipated. Furthermore, the development of ultra-low sulfur diesel fuel (ULSD) fuel was found to produce lower emissions than the LNG dual fuel vehicles. Therefore, the City began switching to diesel vehicles and ULSD fuel as the dual fuel vehicles reached the end of their life cycle. The last of the LNG dual fuel vehicles were retired in FY08.

The state of California began to phase in ULSD as the new standard for all on-road diesel vehicle fuel in June 2006, and by January 2007, it was required for off-road and marine vessel fuel as well. This standard lowers the sulfur content from 500 parts per million (ppm) to 15 ppm. In FY08, ULSD was the only diesel fuel that the City purchased. However, it is not included as an EP product anymore since it is no longer an option, but rather a mandated standard that is used throughout the state.

Building and Construction Materials

Street Repair and Resurfacing

The Street Division uses crushed aggregate road base and asphalt that are made with recycled content. The division also has contracts for rubberized slurry seal and street crack repair sealant that is manufactured with recycled crumb rubber from tires. In FY08, the division pilot tested Cold In-Place Recycling (CIPR) on 1.72 miles of streets. CIPR involves grinding down the existing asphalt concrete pavement; mixing it with emulsifiers and other additives as needed; spreading and compacting the recycled mixture; and overlaying the recycled surface with a new layer of hot mix asphalt. This reduces the need to haul away grindings and bring in new material, reduces truck trips and emissions, conserves resources, and costs less than traditional methods. Street Division will continue to monitor the performance of the pilot test area and evaluate its use in future applications.

FY08 street resurfacing highlights:

- Slurry Seal Group 1: \$6.8 million was spent to slurry seal 97 miles of city streets. The material used for this project utilized recycled crumb rubber from approximately

- Overlay Group 1: \$5.9M was spent to overlay ten miles of city streets. The asphalt concrete used for overlay totaled 43,500 tons on 50 city streets. Approximately 8,700 tons (20%) was recycled aggregate. One street was selected to receive CIPR, which recycled 100% of the existing pavement aggregate (2,100 tons).
- Overlay Group 2: \$8.3M to overlay 17 miles of city streets. The asphalt concrete used for overlay totaled 65,000 tons on 70 city streets. Approximately 13,000 tons (20%) was recycled aggregate. One street was selected to receive CIPR, which recycled 100% of the existing pavement aggregate (2,600 tons).

Plastic Manholes

In October 2007, the Metropolitan Wastewater Department (MWWD) pilot tested a plastic manhole to replace the concrete manholes that are usually installed. The plastic manholes are purported to have a longer life due their resistance to corrosion and have a much lower carbon footprint in the manufacturing and transportation phases. MWWD will evaluate the plastic manhole for two years for settlement and root intrusion. The plastic manholes are costlier than the concrete manholes, but the difference may be covered by the longer time before rehab and quicker and easier installation. The vendor provided the manhole used in the pilot project at no charge to the City.

Green Building

The City requires that all new municipal structures greater than 5,000 square feet meet the U.S. Green Building Council's LEED® Silver standard. Construction of the 10,500 square foot Fire Station 47 was completed in FY08. This station was a partnership between the City and Pardee Homes to design and construct a facility serving Pacific Highlands Ranch, Del Mar Mesa, and Torrey Highlands. The station brings together a mix of green building technologies and traditional early California Mission style architecture.



LEED Silver certified Fire Station 47 combines traditional Mission style architecture with modern green building technologies.

The following sustainable measures were incorporated into the project during the planning, design, and construction of the facility:

- Over 30% of the building's energy is produced by a photovoltaic system, and the remaining power is supplied by 100% wind power through a purchase agreement for the first two years, thereby reducing up to 122,397 pounds of CO₂ emissions
- Use of reclaimed water, water-efficient plants, and high-efficiency irrigation to reduce and eventually eliminate the use of potable water for landscape irrigation
- High efficiency light fixtures

- Recycled, local/regional, seismically superior cold-formed tubular steel framing system wrapped with exterior rigid insulation to reduce thermal bridging
- Cool roof design with Energy Star clay roof tiles and “cool” membrane roofing with high solar reflectance and high emissivity, along with light-colored, high-albedo concrete paving to reduce heat islands
- Individual controls of operable windows, lighting, ceiling fans, thermostats, and skylights harvesting natural light to promote productivity, comfort, health and well-being of occupants
- Low-flow toilets and faucets
- HVAC system free of CFC, HCFC and Halon-based refrigerants to reduce ozone depletion
- Optimized energy performance 35% better than 2001 CA Title 24 requirements via high performance building envelope and lighting design
- Low-E insulated glazing with high visible transmittance
- Large waste and recycling area and easy-access bins for separation, collection, and storage of recyclables
- Over 75% of construction waste was diverted from landfill disposal and recycled
- Over 35% of the building’s materials were manufactured regionally, and 10% were extracted locally, within a 500-mile radius of the project
- The building’s materials contain over 10% combined recycled content
- Cabinetry made from FSC-certified wood

Building Supplies, Maintenance and Energy Efficiency

Mulch and Compost

Mulch produced from green material brought to the City’s Miramar Greenery is used for erosion control throughout the landfill, eliminating the need to purchase straw or other virgin products. The Greenery’s compost and mulch are also currently used for all restoration work at the City’s inactive landfills and at City construction projects. In addition, the Park & Recreation department uses mulch in some areas for weed suppression, reducing the need for crews to cut the weeds. In FY08, 68,661 cubic yards of mulch and compost were applied to the City’s landfills and parks, an increase of about 3,000 cubic yards.



Mulch applied by Park & Recreation for weed suppression.

Goat Brush Management

In FY08, the Park & Recreation department conducted a pilot project using goats for brush management. The goats cleared about 6 acres at a cost of \$4,975, which was comparable to the cost of a hand crew. The larger brush still had to be cleared by hand, while the goats did better with grass and lower leaf material. Further use of the goats is being evaluated by the department.



Goats clearing brush in Carmel Valley at start of project...



...and at end of project.

Janitorial Supplies and Paper Products

Environmentally preferable janitorial products include soap, cleaners, recycled content paper towel, bath tissue, and trash bag liners; and reusable mops and rags. The City purchased over \$779,000 of these products in FY08, up from \$701,976 in FY07.

Energy Efficiency and Alternative Power

The Energy division of ESD works with departments across the City to pursue its goal of energy independence and become a model city in energy conservation and the use of renewable energy. The City of San Diego is a US EPA Green Power Partner and, at the end of FY08, was the 5th largest local government green power purchaser.

The City currently produces 11.5 megawatts (MW) of renewable energy through the following projects:

- The majority comes from self-generated power at cogeneration facilities using methane from sewage treatment and landfill disposal. Excess power is sold to San Diego Gas and Electric (SDGE). Some of the power is produced through an agreement with a private third party that produces and sells the power to the City at a negotiated below market rate.
- A little over 1 MW comes from hydroelectric power generated by the flow of treated wastewater to the ocean outfall.
- 13 photovoltaic systems are installed throughout the region on City-owned facilities capable of producing 1.2 MW. The City has a power purchase agreement with a private firm that installed, owns and operates the photovoltaic system at the Alvarado Water Treatment Plant. All the power



Photovoltaic system at Alvarado Water Treatment Plant

generated by the solar panels is purchased by the Water Department at a negotiated below market rate and the City did not need to front the \$6.5 million capital costs to install the system.

Through the two power purchase agreements described above, the City purchased approximately \$2.9 million of green power generated by photovoltaics and methane from wastewater treatment and landfill gas in FY08.

In addition to green power generation, the Energy division regularly works with City departments and the community to upgrade the energy efficiency of City facilities, businesses, and homes. Much of the funding for these projects comes from grants through the California Energy Commission and California Public Utilities Commission.

Energy efficiency highlights include the following:

- Since 1997, the Street Division of the General Services Department has converted more than 32,000 incandescent traffic signal lights to LED. All the red signal indications and over 90% of the green indications have been converted to LED. Amber indications are converted as replacement is needed. In FY08, 8 new signalized intersections that use all LED red, amber, and green indications were installed in the City. The cost for these new intersection signals did not come out of the Street Division budget, but was paid for by the developer as part of the project.
- In 2003, the Division began converting the “Walk/Don’t Walk” indications from incandescent to neon as replacement is needed. The Division spends approximately \$50,000 annually on the new neon lights. The new “Walk” indications, which are typically lit 35% of the time, reduce energy use from 20 watts to 8 watts; and the “Don’t Walk” indications, which are typically lit 65% of the time, reduce energy use from 38 watts to 8 watts.
- The residential outreach group hosted 38 events in calendar year 2008 where a total of 10,240 LED light strands and compact fluorescent light (CFL) bulbs were distributed to residents, generating an estimated savings of 363,751 kWhs. The business outreach arm visited over 150 businesses to distribute literature and exchanged out 37,039 CFL bulbs, saving an estimated 3,516,238 kWhs. The costs for this program are paid for through a grant and are not included in this report.
- Nearly \$750,000, more than double the amount in FY07, was spent on new energy efficiency lighting and HVAC upgrades at City facilities, which will save approximately 1 million kWh and \$120,000 annually.

Other Purchases

Refurbished steel storage lockers

The Office of Homeland Security purchased 16 reused steel storage lockers to store donated supplies from the 2007 wildfires. The 20 foot lockers are made from old shipping containers that are refurbished and repurposed. Each container saves \$1,600 compared to the cost of a new container.

Trash and Recycling Containers

The City’s Refuse Collection Division purchased over \$1 million worth of automated curbside black trash, blue recycling, and green yard waste carts, all of which are manufactured with recycled plastic content.

In FY08, the City spent \$80,000 to purchase new in-ground trash and recycling containers made with 30% recycled plastic at Mission Trails Park. The containers look like regular trash or recycling containers from aboveground, but extend five feet underground to provide additional storage capacity. This greatly reduces the frequency of sending out a truck to service the containers. Previously, the park used 55-gallon trash containers that needed to be serviced every week. The new trash and recycling containers only need to be serviced once every few months.



Recycled content in-ground recycling containers at Mission Trails Park.

Water Conservation Incentives

In FY08, the City spent \$315,987 on financial incentives for water customers to replace high use fixtures with water efficient fixtures.

Reclaimed Water

Five City departments (Engineering and Capital Projects, ESD, MWWD, Parks and Recreation, and Water) purchased over 1 billion gallons of reclaimed water for irrigation, dust control, and industrial uses at a cost of \$1,273,729. Two new sites were added this year: MWWD South Bay Plant with one meter and Park & Rec Miramar area maintenance assessment district with four meters, bringing the total number of meters for facilities to 39.

Additional Savings / Revenue

- In FY08, the City saved approximately \$8.8 million from energy efficiency improvements, solar panels, and biogas cogeneration facilities. In addition, the City earned \$908,700 in revenue from the sale of excess power produced by the cogeneration facility at the Point Loma Wastewater Treatment Plant.
- ESD's Collection Division recycles old curbside trash and recycling carts once they are no longer functional. This not only saved disposal costs, but also earned \$65,300 in revenue in FY08.
- The City saved almost \$2.9 million by using reclaimed water at a cost of \$0.80 per hundred cubic feet (HCF) instead of potable water, which would have cost \$2.606 per HCF.
- The in-place recycling of 1.72 miles of asphalt cost 80% of traditional overlay costs, which saved \$103,000.
- The use of retread tires saved over \$221,000 in tire costs.
- Purchasing refurbished steel storage lockers instead of new lockers saved \$25,600.

IV. Conclusion

It is envisioned that future progress with EP³ will be through the accomplishments of City employees who are willing to facilitate change by working with vendors and service providers to offer viable and economical environmental products, as well as by pursuing ways to incorporate environmentally preferable products in new applications. FY08 is the first full year that the EP³ has been in place and the purchase of EP products and serviced has increased as more employees and vendors have become aware of the program. Next year's report will continue to focus on the changes and accomplishments that were made by different departments in their procurement practices.

Attachment 1

Environmentally Preferable Purchasing Evaluation Checklist			
Product	Evaluator		
Product Name: _____	Name: _____		
Manufacturer: _____	Dept./Div.: _____		
Item No.: _____	Phone: _____		
Main Use: _____	Date: _____		
Scoring Criteria			
[Select a criteria score of 0 to 5]			
5 = Meets EPP category criteria 3 = Meets some EPP category criteria 0 = Does not meet EPP category criteria N/A = Not Applicable to specific EPP category criteria Unk = Unknown		Meets EPP Criteria?	Criteria Score
		(Y / N)	(0-5)
		(N/A, Unk)	(N/A, Unk)
Environmentally Preferable Attributes/Categories			
Bio-based	Is this product made from plant-based raw materials?	[]	[]
Biodegradable	Is this product capable of being decomposed by natural biological processes?	[]	[]
Compostable	Is this product made of cellulose-containing materials that can be broken down into compost when subjected to biological degradation?	[]	[]
Resource Efficient	Does this product conserve water or energy?	[]	[]
Low Toxicity	Does this product contain less toxic chemicals than other similar products?	[]	[]
	Look for products that are not labeled with any of the following:		
	Caution: mild to moderate hazard		
	Warning: moderate hazard		
	Danger: corrosive, extremely flammable, or highly toxic		
	Poison: highly toxic		
Low Volatile Organic Compound (VOC)	Does this product contain a low amount of organic compounds?	[]	[]
Pollution Reduction (air, water, solid waste)	Does this product prevent waste and harmful substances from contaminating the environment?	[]	[]
Alternative Energy Source	Does this product utilize a form of energy that is capable of doing the same work as traditional forms of energy? (i.e. solar, wind, etc.)	[]	[]
Recyclable	After its intended use, can this product be collected and recycled?	[]	[]
High Recycled Content	Is this product made with a high percentage of recycled material?	[]	[]
Repairable	Can this product be potentially rebuilt or repaired to be used again?	[]	[]
Reusable	Can this product be used more than once?	[]	[]
Product Certification		Y / N	Y = 5 / N = 0
	Has this product received Green Seal certification?	[]	[]
	Has this product received other environmental certifications? (i.e. Energy Star, ISO 14000, etc.)	[]	[]
		# of Y's: Total Points:	
Total Score: (Maximum of 70 points)		[]	[]
Total number of scores rated as N/A (Not Applicable):		[]	[]
Total number of scores rated as Unk (Unknown):		[]	[]

Attachment 2

**Environmentally Preferable Purchasing
Procurement Justification Form**

Product/Service: _____

Please check all that apply:

I have considered the Environmentally Preferable Purchasing guidelines and procedures as outlined in Administrative Regulation 35.80 and have searched for product or service options that meet them.

Compliance with Administrative Regulation 35.80 was not attainable for this purchase because:

Product or service is not available within a reasonable period of time.

(Date needed: _____ Date available: _____)

Product or service fails to meet a performance standard in the specifications.

Specifically: _____

Product or service is not available, or is not available from 2 or more sources.

Product or service was only available at an unreasonable price.

Price of EPP product or service: _____

Price of non-compliant product or service: _____

Compliance would conflict with state or federal law requiring that:

Signature of Purchaser

Printed Name of Purchaser

Date