



GREEN PORT

Port of San Diego

2010/2011 YEAR *in* REVIEW

THE Green Port Program drives the Port of San Diego's environmental, economic and social sustainability initiatives. The program was formed in 2008 after the Board of Port Commissioners adopted the Green Port Policy. The ultimate goal of the Green Port Program is to achieve long-term **environmental, social and economic** benefits through resource conservation, waste reduction and pollution prevention.

The Green Port Program is an important element of the Port's business operations, helping us take a proactive approach to managing our environmental impacts. We are a leader among west coast ports, all of which have programs that manage and reduce environmental impacts. Our member cities and other agencies such as the U.S. Navy and the San Diego Regional Airport Authority are also working on a variety of sustainability initiatives. The Port regularly collaborates with partner agencies to promote change on a regional level.

This year, the Port focused its efforts on the **Climate Mitigation and Adaptation Plan**, the **Green Business Challenge**, and **energy conservation** through our partnership with San Diego Gas & Electric. We are proud to report that the Port has made considerable progress in achieving our goals. This report summarizes the third year of Green Port Program activities from July 2010 through June 2011.

The Port oversees two maritime cargo terminals, a cruise ship terminal, 17 public parks, various wildlife reserves and environmental initiatives, and the leases of more than 600 tenant and sub-tenant businesses around San Diego Bay. The Green Port Program strives to incorporate principles of sustainability into all aspects of these operations.

SUSTAINABILITY IS...

Meeting the needs of the present without compromising the ability of future generations to meet their needs.



ECONOMIC BENEFITS

Sustainability is more than reducing our impact on the environment. There are other positive outcomes that result from proactively addressing resource conservation, including:








DIRECT COST SAVINGS – Through energy and water conservation programs, the Port saved an estimated **\$226,600** (\$154,000 in water, \$72,600 in electricity) in utility costs last year.

REDUCED STAFF TIME – By retrofitting park areas to increase the amount of waterwise landscaping, the Port is not only saving water, but also reducing demands on maintenance staff time.

REDUCED PURCHASING NEEDS – Encouraging the reuse of office supplies results in less waste sent to landfills and additional cost savings.



GREEN PORT AREAS OF FOCUS

-  **Water:** Strategies reduce the Port's water use to preserve San Diego's water supply.
-  **Energy:** Strategies conserve energy and maximize energy efficiency of Port operations.
-  **Waste Management:** Strategies reduce waste from Port operations through material reuse, recycling, and composting.
-  **Sustainable Development:** Strategies enhance the environmental performance of Port buildings while maximizing long-term economic benefits.
-  **Sustainable Business Practices:** Strategies give equal weight to environmental, economic and social concerns in the decision-making process.
-  **Air:** Strategies reduce greenhouse gas contributions and other air emissions from Port and/or tenant operations.
-  **Cost-Saving Initiative:** Strategies resulted in cost savings for Port and/or tenant operations.

GREEN BUSINESS CHALLENGE



• 2011 marked the kick-off of the Port's Green Business Challenge, a voluntary program that provides free tools and resources for Port tenants to reduce their environmental impact and save money.

- **54** Port tenants are part of the 2011 Challenge, and funding is available to continue the program in 2012.
- **25** of these tenants implemented innovative green practices or projects, going above and beyond the Challenge strategies. Some of these efforts include urban gardens, going "off the grid" by using fuel cell energy, and attaining LEED certification.
- The Challenge and participating businesses are showcased in monthly KGTV Channel 10 news segments.



KGTV Channel 10 is the media partner for the Green Business Challenge.

- Attendance is high for the free, monthly workshop series on environmentally-friendly business practices.
- The Port's program is serving as a model for a regional expansion of the Green Business Challenge, which is taking place in the cities of Chula Vista and San Diego in 2012.



2011 Port of San Diego's
Green Business Challenge Participants

greenportchallenge.org

ENERGY EFFICIENCY PARTNERSHIP



• The Port and SDG&E formed an Energy Efficiency Partnership in 2010 to promote and increase energy efficiency around San Diego Bay in order to reduce energy use.

- The Port received a **\$1.85** million grant from SDG&E in 2010 that will fund efforts to build educational capacity, and develop programs to facilitate energy efficiency and cost savings through 2012.
- Green Port efforts funded by the Energy Efficiency Partnership include: the Green Business Challenge, an exterior energy efficient lighting plan, energy savings evaluations at Port facilities, and free training for Port staff and tenants.
- Partnership funding is leveraged for other Green Port initiatives because energy efficiency efforts cross several areas of sustainability.

CLIMATE MITIGATION & ADAPTATION PLAN



- Work began this year on the Climate Mitigation and Adaptation Plan, or Climate MAP, a tool that will establish the Port's climate and energy vision for the future. This plan will identify measures to address greenhouse gas emissions, strategies to adapt to sea level rise, and impacts resulting from climate change. Having a plan in place will help the Port streamline environmental reviews of various projects and identify and manage its future financial and environmental risks.
- The Port is also partnering with the five member cities, the Airport Authority and ICLEI - Local Governments for Sustainability, on a Sea Level Rise Adaptation Strategy for San Diego Bay. This groundbreaking regional collaboration is intended to provide participating jurisdictions with policy recommendations that will make our bay-front communities more resilient to sea level rise.

DIVERTING WASTE FROM THE LANDFILL



1,700 lbs

ORGANIC MATERIAL COMPOSTED FROM THE PORT'S CAFÉ

The compost is used in Port parks, which reduces the need for chemical fertilizers.



900 lbs

ELECTRONIC WASTE DIVERTED FROM THE LANDFILL

The waste was collected at the Port's yearly electronic waste event.



283 FLUORESCENT LIGHT BULBS RECYCLED

They were collected through the Port's compact fluorescent light bulb recycling program.



1 TON BATTERIES RECYCLED

Batteries were collected through the Port's battery recycling program.

AIR QUALITY



Cruise ship connected to the Port of San Diego shore power system.

- The Port's first shore power system was installed at the Cruise Ship Terminal in December 2010. Over **23** tons of emissions have been reduced during the 2010 cruise season as a result of the ships that used the shore power system. This serves the same environmental benefit to the region as removing **400** cars from the road each day a ship is connected.



- To date, **59%** of cruise ship and cargo vessel calls to the Port have participated in the vessel speed reduction (VSR) program, which results in an 11-14% reduction in air pollutants from these vessels. VSR is a voluntary program that asks cargo and cruise vessels entering or leaving the Port to observe a slower speed, where their engines run most efficiently.
- Since January 2011, when the Port implemented a ban of trucks not compliant with the state's emissions requirements, **97%** of trucks visiting the cargo terminals are compliant, cleaner, less-polluting trucks.
- The Port's Commuter Assistance Program provided **100%** reimbursement of bus, train and trolley passes to **50** employees this year who commute to and from work using public transportation.

ICON KEY



* Reductions are from Port operations.

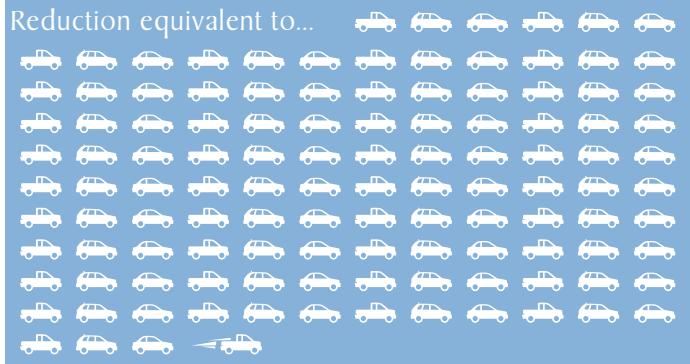
By the Numbers



600 METRIC TONS GREENHOUSE GAS REDUCTION* in 2010

-11.8%
*Compared to the 2008 baseline.

2008 baseline	5,112 Metric Tons of CO ₂ e	2010	4,509 Metric Tons of CO ₂ e
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118 CARS off the Road for One Year.

522,660 KILOWATT-HOURS REDUCTION* IN 2010

-6%
*Compared to the 2008 baseline.



45 Average-sized Households Annual Electricity Use.

73,439,900 GALLONS WATER USE REDUCTION*

-38%
*Compared to the 2007/08 baseline.

Reduction equivalent to...
110 Olympic-sized Swimming Pools

WATER CONSERVATION



- Over **360,000** square feet of Port-maintained landscaping have been converted to low-water or no-water landscaping.



One of the waterwise landscaped areas on Port tidelands.

- Faucet aerators were installed building-wide at two Port facilities, a low-cost option to reduce water use.



FACT: Conserving water also reduces energy use since energy is required to pump and treat water.

OUTREACH & PUBLIC RELATIONS



- **19** free training and outreach events were held, including seminars, office supply swaps and electronic waste recycling events.
- A variety of Green Port efforts have led to the Port being recognized by the public and the media, demonstrating our commitment to the community and to being a world-class leader.
- The Green Port Program serves as a technical and communication resource for projects originating in other Port departments and from tenants.

ICON KEY



SUSTAINABLE DEVELOPMENT



- The Port Pavilion on Broadway Pier opened in December 2010. It has been certified as a **LEED* GOLD** building by the U.S. Green Building Council and includes environmentally beneficial features such as solar panels, water efficient fixtures, low volatile organic compound (VOC) paints and adhesives.



* The 'LEED' Certification Mark is a registered trademark owned by the U.S. Green Building Council and is used with permission.

- Efforts to earn LEED certification for the Administration and General Services buildings are underway. The Port is currently working to meet all prerequisites.
- The Port hosted a free, LEED-Green Associate seminar that was attended by 50 Port employees, tenants and regional local government staff to educate them on the basic principles of sustainable buildings.
- Five Port employees earned LEED-Green Associate accreditation.

* LEED, Leadership in Energy and Environmental Design is an internationally-recognized green building certification system.

LIGHTING PILOT PROJECT



- The Port conducted two pilot projects to test the use of Light Emitting Diode (LED) street and walkway lights.
- Work continues on a Tidelands-wide assessment of exterior lighting, a long-term project that could eventually allow the Port to retrofit all outdoor lighting to more energy efficient alternatives.

LOOKING AHEAD

The Port continues to seek effective and innovative ways to minimize the environmental impact of its operations while continuing to manage the tidelands for the benefit of the public. The focus of future initiatives continues to be the Climate MAP, which, upon completion, will serve as a driver for many future Green Port initiatives.

