

City of San Diego, California

Conservation is Key to City

On January 29, 2002, the San Diego City Council unanimously approved the San Diego Sustainable Community Program- its Climate Protection Action Plan.

This Plan establishes a 15% greenhouse gas (GHG) reduction goal set for 2010, using 1990 as a baseline. The baseline GHG/year emissions are 15,547,000 for 1990. So far, actions taken in the waste sector, including the capture of methane gas from solid waste landfills and sewage treatment plants, combined with recycling programs, have resulted in a significant portion of the decrease in overall GHG emissions. In order to meet their 15% goal by 2010, San Diego has been taking green actions to reduce greenhouse gas emissions to a level of 13,214,950 tons.

On June 1, 2009, the Mayor of San Diego and the City Council is expected to declare San Diego in a Stage 2 water emergency. As part of a region-wide effort to step up voluntary water conservation, the City of San Diego Water Department, in conjunction with the San Diego County Water Authority, issued a daily 20-Gallon Challenge asking San Diegans to conserve 20-gallons of water every day.

The City is committed to leading by example and to conserving water use within every department. City efficiency programs have resulted in water savings of 11.5% from last year, primarily due to the efforts of the Parks and Recreation Department. These savings are better than the citywide average of 5.5%.

San Diego's Plan seeks to use renewable energy, save energy and conserve water. In order to meet their goal, San Diego needs to reduce GHG emissions by another 5,488,000 tons by 2010. The City is now focusing on ways to cut GHG emissions from the transportation sector, such as providing incentives for vehicles that meet the Super Ultra Low Emission Vehicle (SULEV) California tailpipe emission standard.

"We each have a role to play in reducing greenhouse gas emissions and preserving the environment for our children and grandchildren."

-Elmer L. Heap
Jr., Deputy Chief Operating Officer for
San Diego Community Services

Green Actions Snapshot

- Adopted Sustainable Community Program, 2002
- Retrofits made by San Diego County Water Authority to Kearny Mesa headquarters' landscaping
- Installed solar panels at three city libraries
- Installed LED lights in traffic signals
- Updated Balboa Park buildings to be more energy efficient
- Created 20 Gallon Challenge for residents to conserve 20 gallons of water each day

Environmental Benefits

- Landscaping retrofits to the City's Water Authority building saves 242,000 gallons of water a year
- City efficiency programs have resulted in water savings of 11.5% by municipalities
- Energy efficient building retrofits save 300,000 kilowatt hours of energy a year

Cost to City

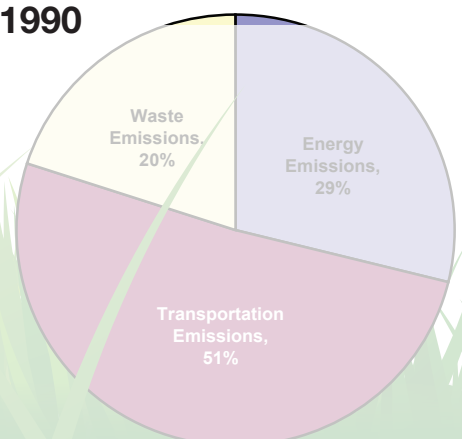
- \$153,543 to retrofit County Water Authority

Estimated Yearly

- Cost Savings:
 - San Diego County Water Authority saves \$600 from headquarter landscape retrofits
 - \$15,000 from library solar panels
 - \$1.3 million with LED traffic signals
 - Balboa energy efficient updates save \$38,500
- Greenhouse Gas Emission Reductions:
 - 953,500 tons of CO₂

GHG Emissions in 1990

In 1990, 61% of the GHG emissions were from transportation, while 29% was from energy and 20% from waste. This data is from the City of San Diego (2/05).



What Action Did San Diego Take to Conserve Water?

The San Diego County Water Authority retrofitted the Kearny Mesa headquarters' landscaping to help conserve water. The headquarters retrofitted 1.5 acres with artificial turf, water-wise planting, shade trees and high-efficiency irrigation equipment. The project cost a total of \$153,543, but will save the headquarters over \$600 a year. The retrofits will save approximately 242,000 gallons of water a year too.

What Actions Did San Diego Take to Use Solar Energy?

Three solar panel systems were installed in 2006. North Clairemont Library received a 22.8 kilowatt system, Oak Park Library a 20.3 kilowatt system, and Canyonside Recreation Center a 29 kilowatt system. Together, they generate as much as 8,000 kilowatt hours of electricity a month. The solar systems generate about one-third of the libraries' annual power requirements and 10% of the Canyonside Recreation Center's electrical requirements. This saves taxpayers \$15,000 a year.

What Actions Did San Diego Take to Save Energy?

The Casa del Prado building, and the adjacent Casa del Prado Theater, in Balboa Park were upgraded in 2006. Upgrades to the lighting and HVAC system were made, including the installation of a Turbocor compressor and software designed to optimize system functioning. Prior to the energy upgrades, the Casa del Prado and the Theater consumed 850,000 kilowatt hours annually, costing taxpayers over \$110,000 a year. With the energy improvements, the building is expected to consume 300,000 fewer kilowatt hours each year thus lowering energy costs by \$38,500, which is 35%. The improvements have a four and a half year pay back.

The City has completed upgrading almost 90% of the City's 1,486 signaled intersections to energy-efficient light emitting diode (LED) lamps. Each year, these LEDs reduce energy use by 13,212 megawatt hours, eliminate 7,437 tons of greenhouse gases, and save the City \$1.3 million. The San Diego Gas & Electric rebate program, which ended in 2002, provided \$1.4 million since 1997 to pay for 30,415 of the LEDs.

The City of San Diego reduced their GHG emissions by 3,814,000 tons between 1999 and 2003. Between 2003 and 2010, the city had a target to reduce an additional 5,488,000 tons to accomplish its goal.



Photo Credit: Sandy Huffaker /New York Times

The Casa del Prado building in Balboa park was upgraded in 2006 along with its adjacent theater. The lighting and HVAC system was upgraded to be more energy efficient. With the energy improvements, the energy costs were reduced by \$38,5000 a year.



The average per capita municipal and industrial water use in 2006 for San Diego County was approximately 180 gallons a day, enough to fill all the 5-gallon buckets in this pyramid above.

Contact Information

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