



Success Story

City of Brea

California



The City of Brea prides itself on its small town atmosphere and commitment to sustainable growth. In July 2011, the city took a bold step forward, becoming the largest municipal producer of solar power in Orange County.

With its more than 40,000 residents, the City of Brea provides a diverse range of services while at the same time focusing on the goal of investing in sustainable programs that produce long-term benefits for the community. The city's *Green Life, Green Brea* program underscores its strong commitment to sustainable growth and offers a forum for sharing green practices with residents and businesses.

Leading the Way toward Sustainable Communities

In July 2010, the city initiated a comprehensive program to improve energy efficiency and generate clean solar power. It selected Chevron Energy

Solutions (CES) to design and implement the citywide program, which included energy efficiency improvements and a 1.8-megawatt solar power generating system. The energy efficiency and solar power program positions Brea as a leader in sustainability among California cities and in the nation.

Chevron has a long and active history working with the City of Brea and, as part of a community where it lives and works, CES took special pride in helping Brea move closer to its *Green Life, Green Brea* goals.

Program Impact

The energy efficiency and solar power program delivers significant and long-term benefits to the City of Brea. The program generates savings for the city's General Fund and Water Fund by reducing overall utility consumption and mitigating future water pumping costs. Facility upgrades, such as new air conditioning units and improved lighting,

Projected Program Savings

\$13 million over program life

Program Highlights

- Citywide streetlight retrofit
- Indoor and outdoor lighting retrofit at 14 sites
- Heating, ventilating and air conditioning upgrades at six sites
- 1.8 MW solar power generation system at three sites
- Real-time solar production monitoring
- Solar performance guarantee
- Utility costs reduced by as much as 40 percent
- Mitigates future water pumping costs

Program Size

\$17.7 million

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translate to better indoor and outdoor public use environments.

Key benefits include:

- \$2.6 million in energy cost savings projected in the first five years and a net cost savings of \$13 million projected over the life of the project.
- Utility costs reduced by as much as 40 percent, generating annual savings to pay for infrastructure upgrades.

- New air conditioning units at the Community Center provide consistent indoor climate quality and improved comfort.
- Brighter, energy-efficient lighting reduces maintenance costs and improves lighting quality and aesthetics.
- Informational display of real-time solar production data at the Brea Community Center and on the city's website.

- Clean, solar power generation offsets the production of greenhouse gas emissions – 86,000 metric tons of CO2 over 25 years – equivalent to removing 16,000 cars from the road.



Power generated by the solar panel arrays atop the reservoir at the Maintenance Yard will help to mitigate future water pumping costs.



Overhead solar panels provide an aesthetically pleasing addition to the Brea Civic and Cultural Center, offering shade during the day and improved lighting at night.

Streetlight retrofits were designed to preserve the city's historic architectural integrity.