

Contra Costa Community College District



THE OPPORTUNITY

Contra Costa Community College District (CCCCD) operates three colleges in the San Francisco Bay Area. The District leaders embarked on an energy efficiency and solar program aimed at making its facilities more reliable, efficient and easier to manage, while reducing costs and exposure to utility price fluctuations.

THE PARTNERSHIP

CCCCD selected ENGIE Services U.S. (ENGIE) to design, engineer and construct solar power generating systems at its three colleges (Contra Costa College, Diablo Valley College, and Los Medanos College), as well as add energy infrastructure upgrades and energy management systems at the District's administrative office.

The comprehensive upgrades benefit the District by improving technological, environmental and fiscal elements. Overall, long-term energy costs are lowered by millions of dollars, and exposure to utility price volatility is lowered as well. Grid power purchases were reduced by 7.4 million kilowatt-hours per year, enough to power approximately 1,200 homes. The District saw improved operations through energy management system controls and modern electrical equipment that functions more reliably.

The \$35 million project was financed with \$8.5 million in rebates and incentives. The remaining net amount of \$26.7 million was supported by bonds, and recovered from annual costs savings, which are projected to be \$70 million over 25 years.

3 DIMENSIONS OF IMPACT

ENGIE is committed to building three dimensions of impact in every customer's future:



Supporting People



Saving Money



Protecting the Environment

Program Highlights

- Projected \$70MM net savings over 25 years
- District facilities now generate
 4 million kWh each year up to
 50% of peak electricity demand
- Installed a 3.2 MW solar power system across the three campuses
- High-efficiency lighting and energy management systems at all three colleges and the administrative office

Technical Scope

- 3.2 MW solar power system, comprised of 18,000 PV panels on 34 parking canopies in six parking lots at all three colleges
- High-efficiency lighting, heating, ventilation, air-conditioning equipment and energy management systems installed
- High-voltage electrical system replacements for two colleges

The CCCCD community is experiencing the benefits of their improved learning, teaching, and workplace environments, including shaded daytime parking for more than 1,600 cars and improved parking lot lighting at night. Information became available to the campus community with solar information kiosks that were installed, providing real-time data on the production, conversion and electricity output at each campus.

District facilities now generate 4 million kilowatt-hours each year – up to 50 percent of peak electricity demand. District leaders have successfully accomplished their goal of energy-efficient facilities that are easier and less expensive to manage, all while achieving offsets production of about 5.6 million pounds of ${\rm CO_2}$ per year, or the equivalent to planting 636 acres of trees.





