

School Case Study



Project Profile

To control rising energy costs and provide an example in teaching students about energy conservation and sustainability, Windsor High School in Windsor, CA has flipped the switch to solar power. **SolarCraft** designed and installed a 26 kW solar electric system for their new Digital Communications Facility. The Sonoma County School now captures the sun's energy to power its facility.

The system consists of 93 SunTech 280 watt solar panels that convert sunlight directly into electricity and will generate approximately 36,000 kilowatt hours of energy annually. The roof mounted system spans 1,944 square feet and also helps to shade and protect the roof.

The new system will reduce the school's utility costs by thousands

every year, freeing funds for educating students. Excess power generated during the day is sent back to PG&E for credit towards future use.

Solar power generated from the system will produce enough clean energy each day to power 11 average homes. Over the next 30 years, the air pollution saved will be equivalent to eliminating over 1.6 million miles of driving and spare the air nearly 690 tons of carbon emissions.

The system is expected to pay for itself in 5-6 years, requires minimal maintenance, runs silently, and has an operating life of 25 years or more. It will provide Windsor High School clean, reliable power and energy savings for decades to come.



Specifications

System Size	26.0 kW DC 22.3 kW AC
Location	Windsor, CA
Solar Panel	(93) SunTech 280 W
Inverter	(1) SMA SB7000 (208 V) (3) SMA SB6000 (208 V)
Mounting System	ProSolar (anchored & ballasted)
Estimated Annual kWh	36,000
Cumulative Cash Positive	5-6 Years

Customer Profile

Windsor High School has a unique "core" system for its students to make the large school seem not as large. All students are enrolled in an academic core along with other non-core classes. The core structure incorporates teams of three teachers who work together to deliver instruction through interdisciplinary project-based strategies. Each core of three teachers meets with students on alternating days for 4 ½ hours of continuous instruction to deliver content in three subject areas.

About SolarCraft

SolarCraft is one of the most experienced solar energy contractors in California. For more than 27 years this certified Green Business has been providing Solar Electric, Solar Pool Heating and Solar Hot Water services including consulting, design, installation, financing, monitoring and maintenance. **SolarCraft** is a full-service solar contractor, employing licensed and certified solar installers who are experts in their field. Since 1984 **SolarCraft** has installed more than 4,700 solar energy systems in California with over 1.3 million square feet of solar collector surface area, saving customers more than \$7 million annually and preventing production of more than 28,000 tons of greenhouse gases every year.

