

Civic Case Study



Project Profile

Designed and installed by **SolarCraft**, this solar energy system allows Santa Rosa Utilities to capture the sun to power their operations. The 40,000 square-foot complex in Santa Rosa, CA is now powered by clean solar power.

The 103 kW solar electric system at the Utilities Department facility consists of two separate systems. The first system is mounted on the flat surface area of the roof, consisting of 334 SunPower-230 watt solar panels. **SolarCraft** engineered and installed the non-penetrating roof mount system, utilizing SunPower T10 solar roof tiles that span over 4,608 square feet. The solar roof tiles insulate and protect the roof, while the tilt and reflectors allow for maximum energy output.

The second system is mounted on the four sloping "saw tooth" standing-seam roofs at the north

end of the building, utilizing 120 SunTech 200 watt panels, covering over 1,800 square feet.

Approximately 119,000 kilowatt hours of energy will be generated annually, providing most of the facility's energy consumption. The added insulation saves energy by reducing the building's heating and cooling demands. The buildings have incorporated other energy-efficient features: solar tubes, natural lighting, high-efficiency heating and cooling units, and water recycling systems. The city received nearly \$300,000 in rebates for its energy upgrades.

The new solar system will enable Santa Rosa Utilities to generate enough clean electricity each day to power over 52 homes. It will spare the air nearly 91 tons of harmful greenhouse gases annually. Over the next 30 years, the air pollution saved will be equivalent to eliminating over 6.3 million miles of driving.



Specifications

System Size	103.1 kW DC 91.1 kW AC
Location	Santa Rosa, CA
Solar Panel	(334) SunPower 230 W (120) SunTech 200 W
Inverter	(1) Satcon PowerGate Plus 75 (3) SMA SB7000
Mounting System	ProSolar Non-penetrating
Estimated Annual kWh	119,000
Cumulative Cash Positive	5-6 Years

Customer Profile

The Santa Rosa Utilities Facility is a state-of-the-art operations and maintenance facility that will allow the City of Santa Rosa to provide sustainable, reliable public service well into the 21st century. Located on a 30-acre site that once housed the City's main wastewater treatment plant and a public safety firing range, the new campus has been planned and constructed to include operations, administration and training facilities along with shops, warehousing and material storage.

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.

