

Solar Energy Systems

Reducing Energy Costs at Key Facilities



**Improving
INFRASTRUCTURE**

Solar energy systems produce clean energy and reduce energy costs for the San Diego County Water Authority at its three largest facilities. Solar panels have been installed on the roof and carport structures at the Kearny Mesa headquarters and the Fred A. Heilbron Operations Center in Escondido. The Twin Oaks Valley Water Treatment Plant north of San Marcos includes a large-scale solar array.



*Photo courtesy of Borrego Solar Systems, Inc.
Solar panels at Twin Oaks Valley Water
Treatment Plant.*

Water Authority Solar Power Systems

	NUMBER OF SOLAR PANELS	ESTIMATED ANNUAL PRODUCTION (kilowatt hours)	% OF ENERGY FROM SOLAR
Kearny Mesa Headquarters	1,918	600,000	55%
Escondido Operations Center	742	250,000	38%
Twin Oaks Valley Water Treatment Plant	4,844	1,700,000	31%

pany owns and operates the systems and sells the energy to the Water Authority at a reduced and fixed rate with an annual price escalation factor.

The environmental benefits of the three solar power systems over 20 years are comparable to reducing emissions by approximately 36,000 metric tons of carbon dioxide equivalent

(MTCO₂e). That's similar to the amount of carbon dioxide emissions created by charging 4.6 billion smartphones. ■

Power generated by the solar power systems reduces the Water Authority's energy costs, making agency operations more efficient for ratepayers. The solar power systems generate about 2.5 million kilowatt-hours each year. Combined, they will cut the agency's energy expenses by nearly \$3 million over 20 years.

The Water Authority's solar power systems use photovoltaic panels to convert sunlight directly into electricity.

No-Cost Installation

The solar energy systems were installed at no cost to the Water Authority through a 20-year contract with CleanCapital. The Com-



*Rooftop solar panels at the Water Authority's
Kearny Mesa headquarters.*