swartwatt

Plumas Lake Elementary School District









Plumas Lake Elementary School District, located 30 miles north of Sacramento in Northern California, educates 1,270 students in three different schools. Rio del Oro and Cobblestone house kindergarten through 5th graders while Riverside Meadows educates 6th-8th graders. The rural area is booming, with new jobs, bringing in an additional 79 new students to the district in 2016. To keep up with the population boom, the district recently passed a bond that would build a new middle school and high school for the area, plus make improvements to the existing buildings.

THE CHALLENGE

The district had exorbitant energy costs that are only on the rise.

Growing population: The booming district wanted to protect itself from rising utility costs. As more new students enrolled year after year, it was necessary to cut costs where possible to preserve and grow educational programs to meet their needs.

Sustainability: The district wanted to be a steward of the environment and yearned to set a good example for the community, students and surrounding area with a solar PV project.

THE SOLUTION

To be more sustainable and protect the district from rising energy costs, a Solar PV system was mounted on the roofs of the three schools. The system includes a web-based monitoring system for ease of maintenance and performance reporting with a real-time solar production dashboard display.

THE IMPACT

The Solar PV system achieves 100 percent of the facilities total energy consumption, while having a positive impact on the entire community. The students at the school district, received a first hand lesson in sustainability and the project's impact. The school district was proud at setting an example in sustainability for others to follow.

\$180,000 / Annual Savings

By removing this quantity of CO_2 from the atmosphere, this project will have the same effect on the local community as:

4,181 Tons / CO₂ reduction

Project cost: \$2.1M

Removing 883 cars

Payback period: 12 years

Removing 883 cars

Planting 3,958 acres of trees