

South San Francisco Unified School District



"Harnessing the power of the sun helps make our schools more environmentally sustainable, cuts their energy bills, and creates thousands of teachable moments for our students. That's a winwin-win proposition, for our schools and for California."

Tom Torlakson, State Superintendent of Public Instruction, Presentation at SSFUSD Ribbon Cutting Event

The Opportunity

While working on the development of a bond campaign to improve facilities and drive improvements in the learning environment, South San Francisco Unified School District (SSFUSD) wanted to demonstrate leadership in sustainability. The District sought out the development of an energy efficiency and solar power program to help lower its utility costs, while making efforts to further modernize classrooms and support student achievement.

The Partnership

OpTerra Energy Services partnered with SSFUSD to help them explore big picture possibilities for a far-reaching energy program that would have a positive impact on the student learning experience as well as on the District's energy costs. OpTerra designed and implemented several energy conservation measures that translated to robust education opportunities around sustainability science, holding professional development trainings for over 150 teachers. District schools benefited from upgrades to lighting, HVAC and irrigation systems, providing improved lighting quality and indoor comfort and reducing utility and maintenance costs. Importantly, the OpTerra project helped SSFUSD improve classroom learning environments through the integration of advanced, high-performing energy-efficient technologies, meeting a goal central to driving successful passage of the District's local bond.

Program Highlights

- 1.68 MW solar PV power system projected to offset annual electric usage by 60%
- \$20MM in savings expected over the project life
- Hands-on STEM program to support student achievement
- First capital improvement project funded with bond dollars

Technical Scope

- 1.68 MW of solar PV capacity installed at 15 school sites.
- Various energy and water conservation improvements were implemented throughout the District, including new roofs at three schools.



The Impact

To address the District's need for learning opportunities that made the broader energy program come to life for students and teachers, OpTerra provided professional development for teachers, curriculum materials, and hands-on experiments aligned with state standards. The solar installations serve as Living Laboratories that help to promote environmental awareness and energy consciousness. Through on-site solar power generation and energy efficiency, the District expects to cut its annual total electrical usage in half and reduce its carbon emissions by more than 1,044 metric tons per year.

