

## The Challenge

Stanislaus Union Schools District's buildings were equipped with inefficient and outdated HVAC equipment and basic building automation system controls. In addition to being energy intensive, the systems were not moderating temperatures at optimal levels leading to occupant discomfort and learning concerns for students, teachers, and staff.

## The Solution

Stanislaus Union School District partnered with Centrica Business Solutions to complete a bundled energy systems optimization project throughout seven of the district's buildings.

- Mechanical Systems: The outdated HVAC units were replaced and new ECM motors were installed on fans. Additionally, new HVAC controls were added to the equipment and tied back to the district's building automation system allowing for more granular control and scheduling of the systems to achieve deeper energy savings.
- **Network Power Management:** A network power management software was installed and tied back to computers, allowing for all network desktop and laptop computers to automatically fall into sleep mode based on a preset schedule or inactivity.
- Solar PV: A new solar PV system was installed to help the
  district generate a portion of its electricity requirements. The
  system includes a web-based monitoring system for ease
  of maintenance and performance reporting with a real-time
  solar production dashboard.

## The Impact

This bundled energy systems optimization project has enhanced security, safety, comfort and aesthetics of district building for students, teachers and staff. Additionally, the upgrades have

339 TONS

Total CO2 reduced

\$59,000

Annual energy savings

438,080 KWH

Annual Electricity
Savings

## Why Centrica Business Solutions?

- Centrica Business Solutions' experience and track record demonstrate preparedness to help organizations find the best solar solution for their business
- 24/7 service, testing and maintenance plan, offering complete peace of mind
- Solar installations are custom-designed to the specific site to maximize energy production based on available sunlight

helped the district reduce energy and maintenance costs, and their environmental impact.

- Annual Energy Savings Cost: \$59,000
- Annual Electricity Savings: 438,080 kWh
- Annual Fuel Savings: 9,079 therms
- Carbon Dioxide Reduction: 339 tons

By removing this quantity of CO2 from the atmosphere, this project will have the same effect on the local community as:

- 5,065 tree seedlings grown for 10 years
- 443 acres of U.S. forest preserved
- 73 cars off the road for one year
- 38,146 gallons of gas saved

