# Stanislaus Union School District



**K-12 School District**

**Bundled Energy Systems**

## 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Stanislaus Union Schools District's buildings were equipped with inefficient and outdated HVAC equipment and basic building automation system controls.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 SmartWatt 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▪ **Mechanical Systems:** The outdated HVAC units were replaced and new ECM motors were installed on fans.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 it's 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 helped the district reduce energy and maintenance costs, and their environmental impact.

**$59K** / annual energy cost savings

**339 Tons** / $CO_2$ reduction

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

Annual electricity savings: **438,080 kWh**

Annual fuel savings: **$9,709 therms**

Planting **291** acres of trees

Removing **65** cars