



## Chino Valley Unified School District



### Chino Valley Unified School District Sets High Standard with Energy Savings

By working closely with SCE on Energy Efficiency (EE) and Demand Response (DR) solutions, and having its schools make conservation-oriented behavior changes, the Chino Valley Unified School District is saving energy and money at a time when every dollar counts.

The district serves approximately 31,000 students at 35 schools in San Bernardino County. Its facilities encompass 2.7 million square feet of building space and 300-plus acres of turf and landscaping.

Energy/Resource Conservation Technician Carla Kleinjan says that since stepping up its energy management efforts beginning in 2008, the district has reduced its electricity costs from a peak of \$4.2 million annually to \$3.25 million annually over the past three years, for a savings of 22.62%. She notes the district's annual kilowatt-hour usage dropped from a peak of 24 million to 21.3 million during the same timeframe.

The district's energy-saving projects offer "cost avoidance, so we can keep more money in the classroom

as well as save jobs," Kleinjan says, adding, "We need to be a good example to our students, and good stewards of the funds our community provides to us."

#### Energy Efficiency Savings

By utilizing EE measures, the district has earned valuable incentives. Through its partnership with SCE on the following projects, the district continues to benefit from long-term energy and cost savings:

#### Express Solutions

- Retrofitting indoor and outdoor lighting, and switching indoor lighting from high-pressure sodium lamps to T5 lamps and other more efficient technologies
- Placing controllers on more than 30 non-perishable product vending machines to shut off their lights and compressors when the surrounding area is unoccupied for 15 minutes or more

#### Customized Solutions

- Installing variable frequency drives (VFDs) on pool pumps, to adjust motor speeds and match pumping demands

#### Estimated Savings by Managing Energy

- *Industry:* K-12 Schools
- *SCE Programs Utilized:* Express Solutions, Customized Solutions, Summer Discount Plan (SDP), Critical Peak Pricing (CPP)
- *Savings to Date:* 1,665,404 kWh energy savings, 152.22 kW average demand reduction, financial incentives of \$317,572 and bill credits of over \$149,157 on CPP and \$102,538 on SDP

#### ESTIMATED SAVINGS

**\$1 million +**

#### REDUCTION IN ANNUAL ELECTRICITY COSTS

**22.62%**

# Energy Management Success Story

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In addition, the district promotes and implements behavioral changes that add up to more savings. Teachers and staff are encouraged to unplug equipment over long weekends and breaks, and facility managers turn off HVAC compressors in unoccupied classrooms during the summer.

### Demand Response Credits

In 2009, the district added to its EE initiatives by enrolling in the Summer Discount Plan (SDP). Through this DR program, SCE provides and installs a cycling device on central air conditioner(s) at no cost. In exchange, participants receive a credit on their summer season electric bills for allowing SCE to periodically turn off, or "cycle," the air conditioner compressors. Customers choose how much credit they are eligible to receive by choosing the plan and the cycling option best suited to their comfort level and operational needs.

Kleinjan says the district earned more than \$100,000 in credits by participating in the SDP over the last three summers.

Additionally, some of the larger schools in the district participate in Critical Peak Pricing (CPP). With CPP's day-ahead notice, the schools have the opportunity to reduce the amount of air conditioning they use as soon as students are dismissed for the day.

Moving forward, Kleinjan adds, the district will continue to pursue a wide range of energy management initiatives, including analyses focused on finding more areas to retrofit lighting and install HVAC upgrades.

She credits the district's Board of Education for understanding short-term energy management project investments offer long-term benefits. "Our actions have a positive impact on our budget and help the district," she says. "We also want to show we're doing what we can to lessen our impact on the environment."

Kleinjan also recognizes the assistance provided by SCE in helping the district save energy, money and the environment.

"We've had a great experience with SCE" she says. "They are always responsive to our requests for assistance, and provide invaluable information to help us through the incentive processes. They've kept us informed of available programs, and made sure we know what the best electricity rates are for our service accounts. They are a true asset to our school district."

To see how Chino Valley Unified School District saved, please watch the video

[www.sce.com/businessvideos](http://www.sce.com/businessvideos)

**"The district's energy-saving projects offer cost avoidance, so we can keep more money in the classroom, as well as save jobs."**

Carla Kleinjan, Chino Valley Unified School District Energy/Resource Conservation Technician

### Earn Even More Savings with Other SCE Offerings

- Install SCE's Automated Demand Response (Auto-DR). It incorporates automated load control systems (an energy management system) to carry out Demand Response strategies and reduce energy load during peak hours, without manual intervention.  
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