

# Hacienda La Puente Unified School District

Life Is On



Hacienda La Puente Unified School District (USD) partnered with Schneider Electric to pay for much-needed improvements and to achieve long-term energy efficiency by leveraging an Energy Savings Performance Contract (ESPC).

## The Challenge

Located 10 miles east of Los Angeles, Hacienda La Puente Unified School District (HLPUSD) enrolls students residing in City of Industry, La Puente and the unincorporated Los Angeles County areas of Hacienda Heights and Valinda. The district's 32 schools serve more than 22,000 students in grades K-12.

Faced with maintaining some schools built in the 1950s and 1960s, HLPUSD knew interior and exterior lighting needed to be updated at all the district's schools. Outdated HVAC systems and controls also needed to be replaced due to problems regulating classroom temperatures.

Like many school districts, HLPUSD had deferred maintenance issues due to a lack of funds. But the district understood that reducing expenditures for utilities is one of the only ways to free up funds for critical expenses like maintaining and improving building infrastructure.

In 2009, HLPUSD began to search for an energy services

company (ESCO) to assist in reviewing and implementing energy efficiency measures. In 2010, the district awarded pilot projects to two different ESCOs, including Schneider Electric. Each was asked to audit two schools and recommend energy conservation measures.

Schneider Electric analyzed energy use at each school and recommended a scope of work to HLPUSD. Working collaboratively, they agreed that lighting retrofits and electrical service equipment upgrades were priorities.

In the meantime, California voters approved Proposition 39 (The Clean Energy Jobs Act) in 2012. This initiative, which called for closing a corporate tax loophole, invests new revenue in energy efficiency improvements for K-12 schools.

HLPUSD was well-positioned to take advantage of this new funding source because the district had already partnered with Schneider Electric. The district also got a head start in preparing to apply for funding when it became available.



## Customer Benefits

- Guaranteed energy savings
- Reduced energy consumption
- Increased operational efficiency
- Reduced maintenance issues

Upon completion of the pilot projects in 2013, HLPUSD asked Schneider Electric to work on a larger Phase 2 project to tackle six sites that accounted for 47 percent of the district's total energy bill. The six sites included the District Office, Adult Education School and four comprehensive high schools.

The ESPC enabled HLPUSD to complete energy saving projects without upfront capital costs. Schneider Electric guarantees the energy savings will pay for the project over the term of the contract or they will pay the difference.

## The Solution

Schneider Electric began by helping HLPUSD arrange funding for Phase 2. After submitting its Energy Expenditure Plan for Proposition 39 funding to the California Energy Commission on the district's behalf, HLPUSD received approval for over \$5 million to help pay for the majority of the cost of Phase 2.

Since the Proposition 39 funding will come to the district in yearly installments over 5 years, Schneider Electric helped HLPUSD set up financing through a tax-exempt lease purchase at an extremely competitive 1.92 percent interest rate. The lease purchase financing enabled the district to make the necessary improvements right away and then to pay itself back over time.

Schneider Electric helped HLPUSD address its primary goals related to energy conservation and facility upgrades in Phase 2.

Reducing energy consumption and improving the learning environment began with a comprehensive interior T8 lighting retrofit at all six sites. In addition, HLPUSD received LED exterior and gym lighting retrofits. LEDs use less energy, increase visibility, and reduce maintenance costs due to their long lives.

Two of the district's comprehensive high schools experiencing severe occupant comfort issues received a new building automation system to better control their HVAC equipment, improve comfort levels, and ease maintenance issues.

In 2015, HLPUSD entered into a third phase ESPC with Schneider Electric to further the district's sustainability efforts. The district is using Certificates of Participation (COPs) to fund Phase 3 improvements.

In Phase 3, the implementation of new IT power management software will shut down the district's computers and networked devices when they are not in use. In addition, the installation of all new interior and exterior LED lighting at eight middle schools and the Dibble Adult Education campus will save energy and money while facilitating maintenance efforts. The Dibble campus will also receive all new HVAC equipment.

## The Bottom Line

The California Energy Commission approved HLPUSD's Proposition 39-funded projects for the entire 5-year program. At the time, HLPUSD was one of the largest districts in the state to get its Energy Expenditure Plan approved.

Going forward, HLPUSD expects to save more than \$800,000 annually in energy and maintenance costs resulting from the installation of the lighting retrofits and new building automation system. The district will realize a staggering 38 percent electricity savings at four of the Phase 2 sites while stimulating the local job market through a project labor agreement with the International Brotherhood of Electrical Workers (IBEW).

Schneider Electric conducted an ASHRAE Level II Audit during the development phase, which is required for Proposition 39 projects. The audit included an evaluation of lighting, air quality, temperature, ventilation, humidity and other conditions that may affect energy performance and occupant comfort.

All three phases of the ESPC will have a significant environmental impact on the community, providing energy efficiency savings equal to removing 2,640 tons of carbon dioxide from the atmosphere, taking 567 cars off the roads or powering 341 homes.

## Project at a Glance

Location	City of Industry, California
Project type	Energy Services Performance Contract (ESPC)
Property	32 schools (2,136,176 sq.ft.) (17 elementary, 6 K-8, 4 middle, 4 comprehensive high schools, 1 alternative high schools, adult education campuses)
Funding	Proposition 39 Energy Savings Performance Contract (ESPC) Tax exempt lease purchase Certificate of Participation (COP)
ECMs	Interior and exterior lighting Building automation systems HVAC replacements IT power management Electrical distribution upgrades
Guaranteed savings	\$818,101 annually
Payback	15 years
Installation	Phase 1 completed 2013 Phase 2 completed 2015 Phase 3 expected completion 2016

*"Partnering with Schneider Electric allowed us to directly address our most pressing energy efficiency problems and gave us a 5-year plan to help maximize every Prop 39 dollar."*

Annie Bui  
Assoc. Supt. of Business Services  
HLPUSD

### Schneider Electric

1650 West Crosby Road, TX 75006 USA  
Phone: 800-274-5551  
Email: info@buildings.schneider-electric.com

[enable.schneider-electric.com](http://enable.schneider-electric.com)

©2016 Schneider Electric. All Rights Reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies. 1900BR1503