



El Monte Union High School District Energy Resiliency Upgrades Across Five Facilities

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Project Summary

In January 2020, SoCalREN provided El Monte Union High School District with energy efficiency audit services across five high school sites. SoCalREN identified HVAC modernization measures to help the district save money, enhance thermal comfort, and improve indoor air quality. By leveraging SoCalREN's project management, technical assistance, procurement support, and construction support services, the agency was able to install energy efficiency measures across all sites to save over 7.6 million kWh of electricity and \$1,161,684 on their energy bills! SoCalREN also provided the district with a technical review on design documents for a battery energy storage project, giving the district the confidence necessary to move forward with battery installations across three high school sites.



\$1,161,00+
lifetime cost savings



7,687,000+ kWh
lifetime savings



1,170+ cars
taken off the road
lifetime kWh savings equivalency

Participating Sites

The district performed mechanical upgrades at Ledesma High School, Rosemead High School, Arroyo High School, El Monte High School, and South El Monte High School.



Pictured: Battery storage at South El Monte High School.



[SoCalREN] provides added capacity to complete projects that a school district does not provide. SoCalREN was most beneficial in beginning stages of planning the project and getting buy-in.



Lena Luna, Facility and Energy Manager for El Monte Union High School District



Project Details

\$139,980

annual cost savings*

931,330 kWh

annual electricity savings

Jan 2020 - Oct 2022

full project timeline

8.3 years

estimated useful life of energy efficiency technologies

Internal funds, bonds, and a grant

were used for project funding

Project Timeline

Jan 2020

SoCalREN completed seven site audits focused on HVAC, chillers, and boilers

Sep 2021

SoCalREN provided technical support on the District's 95% design for their battery systems



Apr 2020 - Jun 2021

SoCalREN developed benchmarking data and submitted for AB802 compliance

Feb 2022 - Oct 2022

Construction and post-installation inspection completed

Energy Efficiency Technologies Installed

- HVAC unit replacement
- HVAC energy management system upgrades
- Demand control ventilation
- Central plant cooling tower variable frequency drive



Pictured: Ledesma High School's new wireless thermostat. Similar thermostats were installed across all air conditioned zones.

Battery System Sizes

- Arroyo HS: 500 kWh and 250 kW
- Rosemead HS: 1000 kWh and 500 kW
- South El Monte HS: 1000 kWh and 500 kW

SoCalREN Services Used

Below are the no-cost services SoCalREN provided that led to a successful project with El Monte Union High School District.

- Project management
- Energy audits
- Technical review
- Financial analysis
- Procurement support
- Technical specifications
- Incentive application support

SoCalREN Services Used

The Energy Coalition - Project Manager
Veregy - Engineer
ACCO - Contractor