



# 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