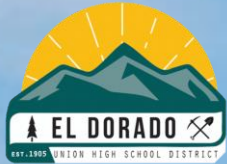


El Dorado UHSD Solar PV Project

An El Dorado Union HSD, ARC Alternative & ENGIE Partnership

*Community Meetings
Union Mine High School 2-28-19*



Today's Agenda

- Solar Program Goals
- Design Approach
- Site Plan
 - Schedule
 - Layouts
 - Tree Removal
 - Savings
- STEM Education Program
- Districtwide Program Summary



Program Pillars

- Generate substantial and sustained **general fund savings**
- **Modernize District's facilities** and campuses with advanced technology and energy efficient systems
- **Reduce the District's carbon footprint** while improving 21st century campuses for learning and achievement
- Empower the District's STEAM efforts through **project-based learning** opportunities for students
- Create **local green jobs**



Energy Design Considerations

- Solar Photovoltaics
 - Prioritize most cost effective solutions
 - Consider Principal, staff, and community feedback
 - Design to offset 62-93% of electricity load
 - Avoid hazards (e.g. baseballs, PG&E lines) and shading
 - Proximity to electric meter



Union Mine High School

- 891 kW of solar PV being installed
- Generating 1,194,096 kWh = removing 179 cars from the road annually
- Offsetting 66% of electrical consumption
- Saving \$2,296,300 over the 25 year life of the solar
- Removing 30-40 trees
- Construction Start: 5/9/2019
- Estimated construction completion: 8/2/2019



Ground Mount Layout Styles



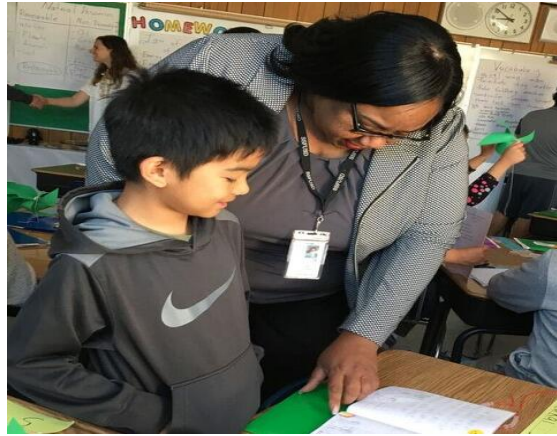
District Wide STEM Education

Making an educational impact!

Living Laboratories & Hands-On Learning Kits

Data Points from the PV installations will be imbedded into student and teacher facing dashboards.

Solar activity sets will be supplied for hands-on learning engagements giving students an opportunity to conduct relevant experiments.



Creation of STEM Lessons

ENGIE will provide lesson plans and activities to support the District's science courses. The lessons will focus on energy, electricity, sustainability, and engineering.



Professional Development

ENGIE will work with teachers to provide professional development sessions to give teachers the tools to successfully deliver the developed STEM lessons and the living laboratories dashboard and hands-on learning kit activities.



Districtwide Total Program Savings Summary

- Total of 3,194 kW of Solar PV
- 4,784,870 kWh of energy produced = removing 718 cars from the road annually
- 77% offset of EDUHSD electrical consumption
- Generates a net benefit of \$12,873,534 over the 25 year life of the program

