

Bonita Canyon Elementary School
Multipurpose Building



SUSTAINABILITY PROGRAM UPDATE

SUSTAINABILITY PROGRAM OVERVIEW

- **Trane – Energy Savings Projects Updates**
- **Solar Overview**
- **IUSD EV Charging Plan**
- **SB 1383 – Organic Food Waste Recycling**



SELF FUNDED ENERGY SAVINGS PROJECT BY TRANE: PHASE I UPDATES

- **Purpose:** Replace old inefficient equipment, save energy use and costs at 11 sites
- **Scope of Work:** LED lighting upgrades and replacement of HVAC, Controls, and Transformers. Scope was assessed, prioritized and reviewed by IUSD staff.
- **Status:** 95% complete
- **Paid to Date:** \$6.8 Million of \$7.2 Million
 - Pending Measurement & Verification of Savings Reports
- **Project Completion:** Summer 2023



SELF FUNDED ENERGY SAVINGS PROJECTS PHASE I

11 Completed Energy Saving Projects

- **Alderwood ES**
 - LED
- **Bonita Canyon ES**
 - LED, HVAC
- **Turtle Rock ES**
 - HVAC
- **Culverdale ES**
 - LED, Transformer
- **College Park ES**
 - LED, Transformer
- **Northwood ES**
 - LED, Transformer
- **ECLC**
 - HVAC, Controls, Transformer
- **Sierra Vista MS**
 - LED, Transformer
- **Woodbridge HS**
 - LED, HVAC, Transformer
- **Northwood HS**
 - LED, Transformer
- **Irvine HS**
 - HVAC, Transformer

- ❖ Phase I targeted the sites with the highest energy usage and costs
- ❖ Phase II is still to be determined.

CURRENT AND FUTURE SOLAR OVERVIEW

First System Activated in August 2010

Most recent solar projects: Solis Park, Creekside HS, Venado MS, Deerfield ES

- Summer 2022 thru Winter 2023

Currently 48 Solar Arrays at 37 Sites (80% of all sites)

- 21 Rooftop Installations
- 27 Solar Vehicle Shade Structure Installations
- 13.2 Megawatts of Generating Capacity
- As of June 30, 2022, cumulative energy savings have been estimated at **\$3.9 Million**

SCE's RES-BCT Tariff allows non-solar sites (beneficiary accounts) to benefit the same carbon offsets and savings as the solar sites (host accounts)

IUSD on a path to reach **Carbon Negative emissions by Summer 2023!!**

(Offsetting more carbon emissions through solar renewable energy than contributing to the environment)

SOLAR SITES

Spring/Summer 2022 Solar Vehicle Shade Structure Installations



System size 941 kW DC
Site Energy Usage Offset: 1,456 MWh per year
***Our largest solar system**

SOLAR SITES

Summer 2022 Solar Vehicle Shade Structures and New Parking Lot Installations



Deerfield Elementary School



Venado Middle School

System size 313 kW DC
Site Energy Usage Offset: 474 MWh per year

SOLAR SITES

Summer 2022 Solar Vehicle Shade Structures and New Parking Lot Installations



Deerfield Elementary School – New Parking Lot w/ Solar



Deerfield Elementary School – New Parking Lot w/ Solar

**Adds an additional 42 New Staff Parking Spaces; 2 ADA stalls
System size 258 kW DC
Site Energy Usage Offset: 390 MWh per year**

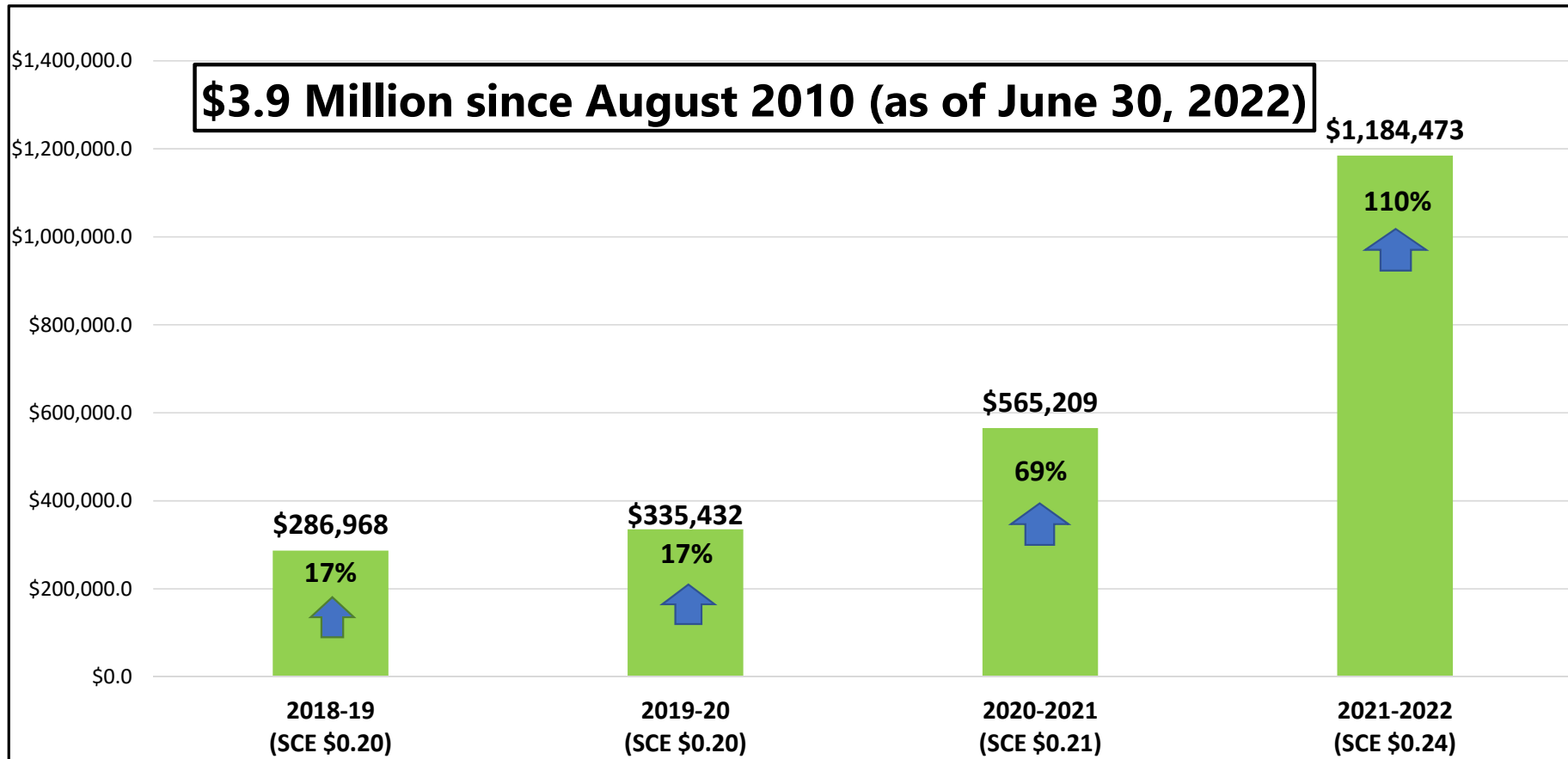
SOLAR SITES

Spring/Summer 2022 Solar Vehicle Shade Structure Installations



System size 674 kW DC
Site Energy Usage Offset: 1,016 MWh per year

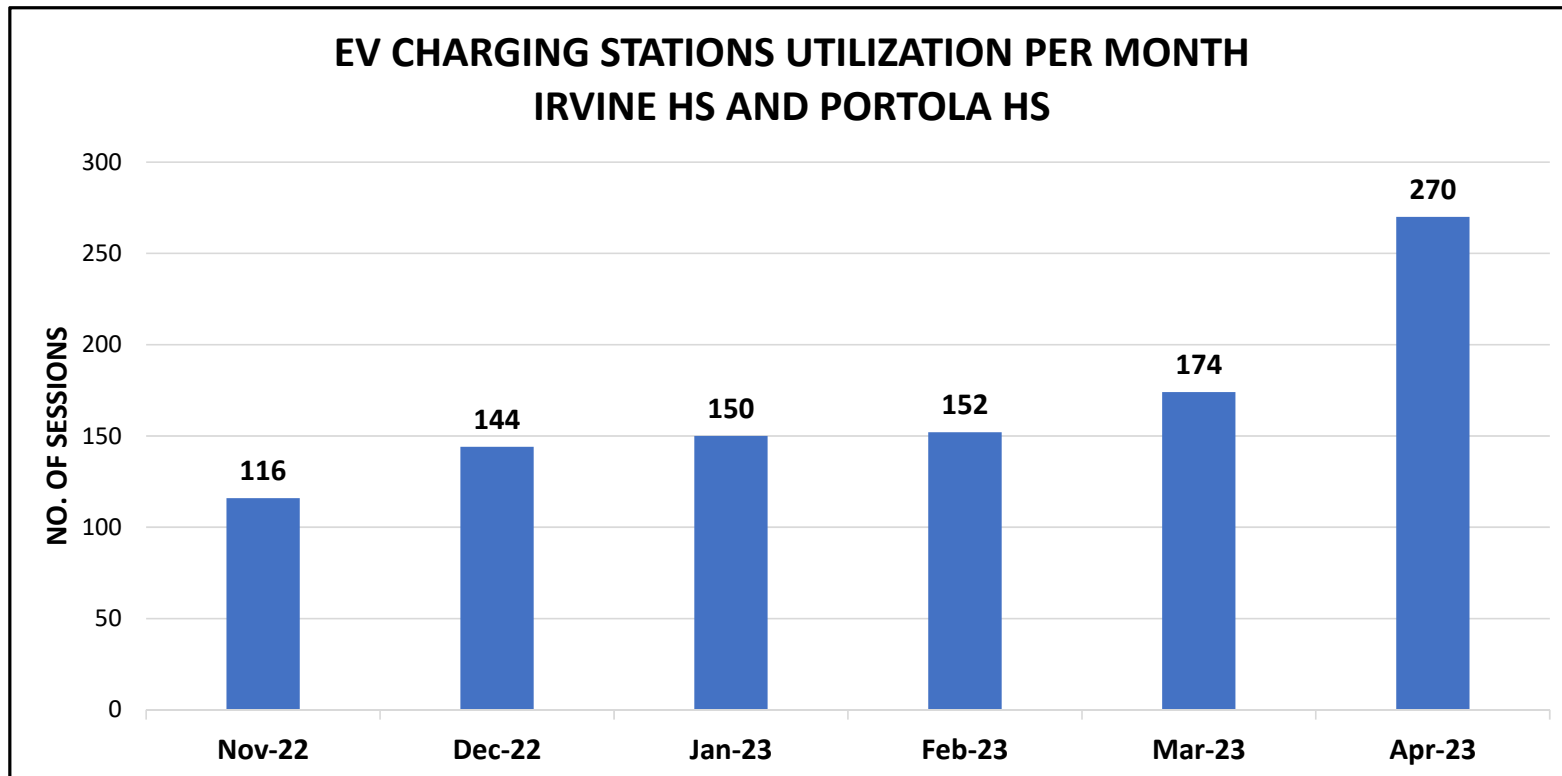
ANNUAL SOLAR AVOIDED COST



IUSD EV CHARGING STATION PLAN

Current Program: SCE Charge Ready Pilot

- Irvine HS – 6 Chargers
- Portola HS – 6 Chargers



IUSD EV CHARGING STATION PLAN

Future EV Charging Station Plan for remaining High Schools and K-8 Schools

- 10 EV Chargers at High Schools
 - ~2% total stall capacity
- 5 EV Chargers at Elementary and Middle Schools
 - ~5% total stall capacity be utilized for EV Chargers

SCE's Customer Ready Rebate Program – 80% rebate for infrastructure only

- Northwood HS and Creekside HS – been approved for 10 stations
- University HS – on waitlist for 10 stations
- Woodbridge HS – pending approval for 10 stations
- Cadence Park School – on waitlist for 5 stations

California Electric Vehicle Infrastructure Project (CALeVIP) – offers rebates for the purchase and installation of EV Charging Stations

- Application pending review and approval for all sites

Exploring PPA finance Structure (no cost to IUSD) to provide infrastructure and EV Chargers with third party

Exploring Electric Fleet and School Bus Funding Opportunities

SB 1383: ORGANIC FOOD WASTE RECYCLING IN CA

- **California Target:** achieve 75% reduction in the level of statewide disposal of organic waste by 2025 and reduce methane emissions.
- Effective **January 1, 2022**, all California schools are required to separate organic food waste from trash and non-organic recyclables and participate in an organics collection program.
- Effective **January 1, 2024**, schools with an on-site food facility (like school cafeteria) will be required to recover edible food and donate to a food recovery organization.

