ECO-SUSTAINABILITY OFFICE UPDATES

Greening Schools & Climate Resilience Committee Meeting

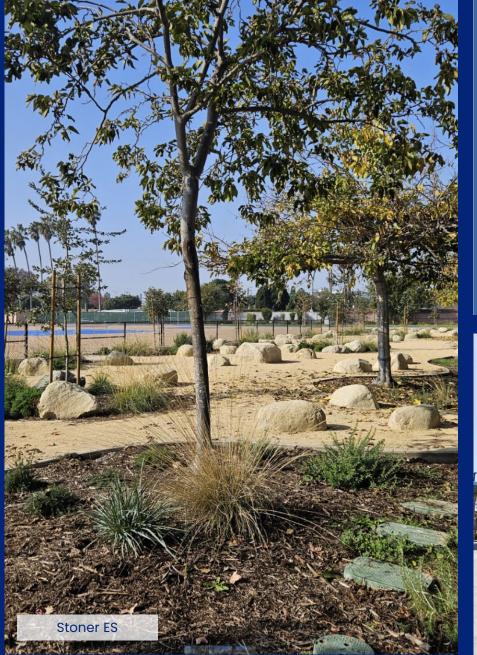
Christos Chrysiliou, FAIA, LEED AP Chief Eco-Sustainability Officer October 29, 2025





Agenda

- Solar Program
- Third Party Greening Partnering Updates
- Eco-Sustainability Plan









Solar Program Updates

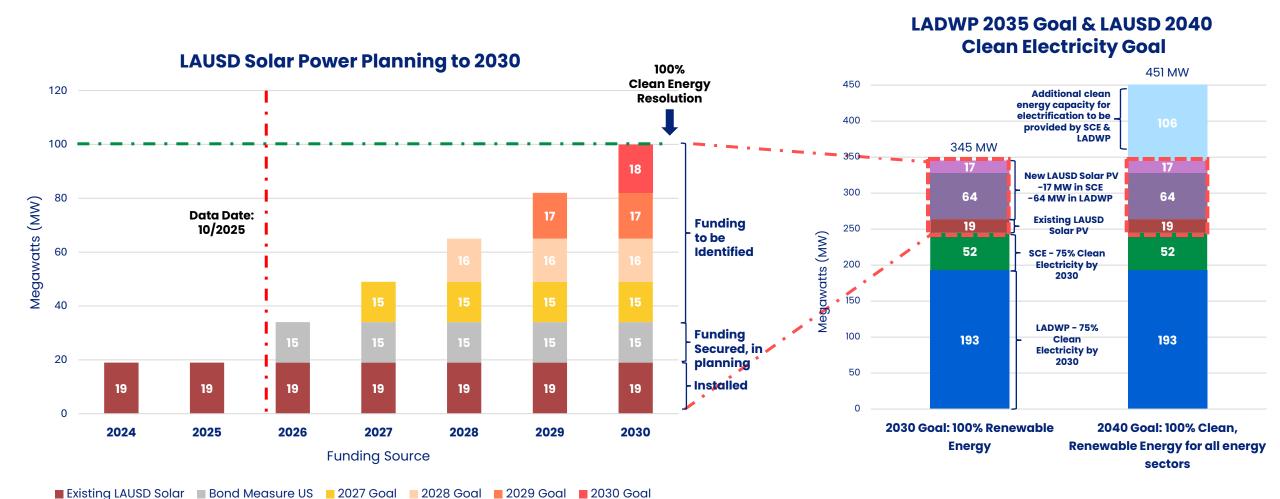
- Roadmap
- Investment Tax Credits
- Timeline







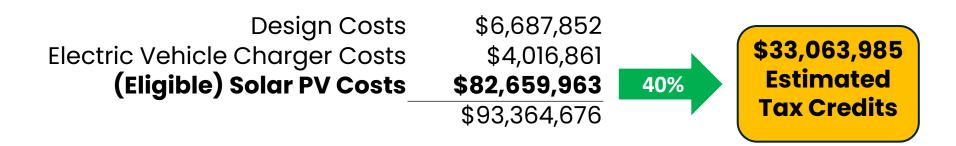
Solar Program





Investment Tax Credit

Solar PV Program - 21 Sites
Total Contract Costs



Goal: Capture available clean energy Tax Credits
Complete all projects by December 31, 2027 – submit Tax return by April 2028



Solar Program



Maywood Academy High School Solar Carport

PROGRAM TIMELINE April 2025

· All 21 solar projects contracts executed.

October 2025

 All 21 solar projects - Issue Notice to Proceed for Design.

All 21 solar projects - Issue Construction Directive to purchase 75% of materials to establish Beginning of Construction by 12/31/25 under 5% Safe Harbor

Continuous Construction or Efforts Required



April 2027

 For solar projects completed in 2026, submit tax return for clean energy tax credits

December 2027

· All solar projects completed and energized

April 2028

 For solar projects completed in 2027, submit tax return for clean energy tax credits

ITC CRITICAL DATES

July 4, 2025

 Passing of the One Big Beautiful Bill Act (OBBBA) – Includes revisions to eligibility timelines for solar PV and battery storage projects tax credits under section 48E

September 2, 2025

• 5% Safe Harbor available for solar PV systems less than <u>1.5 MW</u> to establish Beginning of Construction

December 31, 2025

 Deadline to use 5% Safe Harbor to establish Beginning of Construction and avoid Foreign Entity of Concern (FEOC) materials assistance restrictions

January 1, 2026

 Solar PV and battery storage materials purchased after 12/31/25, must comply with all FEOC requirements to remain eligible for clean energy tax credits under section 48E

July 4, 2026

- Work beginning before 7/4/26 will have four (4) years to energize the system to be eligible for tax credits
- Work beginning after 7/4/26 will have to energize the system by 12/31/27 to be eligible for tax credits

Third Party Greening Partnering Updates

- LAUSD Commitment to Partnerships
- Project Streamlining
- Lead Paint Protocols
- Funding to Offset LAUSD
 Fees







Streamlining Project Supervision



Updated approach for review and oversight of third-party greening projects

- To help grantees navigate LAUSD's processes and requirements, ESO will serve as the single point of contact for the partners throughout the entire project
- A 'Tiger Team' dedicated to third party greening projects will provide rapid resolution of design, testing, construction, and inspection issues that may arise. The team of technical staff from FSD and OEHS will provide consistent guidance for grantees, with coordination by ESO
- ESO will monitor District charges for specific tasks to identify opportunities for reducing project costs



Lead Paint Protocols

Key Clarifications & Changes

I. Are we required to abate painted lines before removing the asphalt?

No

II. Why do we need to follow lead safety protocols?

Student safety, regulatory compliance, protection of the environment

III. Can waste characterization testing take the place of lead content testing?

No. Determining lead content for health protections is totally separate from determining lead content for waste disposal.

IV. Can we just have the painted lines sampled before the project begins to see if there is any lead in the first place?

Yes

- Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES)
 analysis
- Sampled by qualified District or Contractor personnel
- If results are below reporting limit, no lead safety or disposal requirements are required



Kids Learn Better Lead-Free



Funding to Offset LAUSD Fees

- LAUSD will contribute \$3 Million from the General Fund for immediate use to support current third-party greening projects:
 - Funds will be allocated proportionately based on grant amounts
 - We will provide corresponding credits or reimbursements to help grantees offset costs
- ESO will provide a transparent cost breakdown for District charges



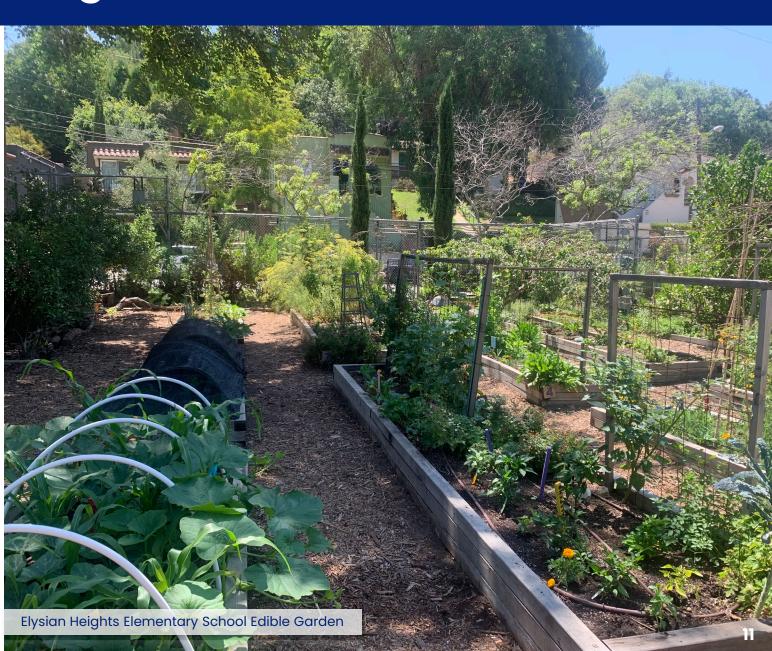


Funding Allocation

- 44 Third Party Greening Projects with a Grant amount total of \$58.1M
- II. Proposed Allocation at 5% of Total Grant
 Award Amount
- III. Project Fees by Phase:
 - 1. PLANNING/DESIGN
 - FETU Testing
 - CEQA & Site Assessment Oversight
 - Design Review

2. CONSTRUCTION

- FETU Phase 3 (if applicable)
- OAR/M&O Support
- A&E Services Construction Admin Support
- Inspection
- IV. ESO will be meeting with the greening partners individually to discuss project specific circumstances



Eco-Sustainability Plan Overview

- LAUSD's Existing Goals
- Plan Objectives
- Planning Process
- Eco-Sustainability Sectors
- Stakeholder Engagement
- Climate Literacy Framework
- Deliverables







LAUSD'S EXISITNG GOALS

100% Clean Energy Resolution 100 % Clean Electricity by 2030 & 100% Electrficiation by 2040





Climate Literacy for All Resolution

Green Schools for All Resolution

30% Campus Greening by 2035





50% GHG Emissions Reduction by 2030 Better Climate Challenge

Better Buildings Challenge

20% Energy and Water Use Reduction by 2024



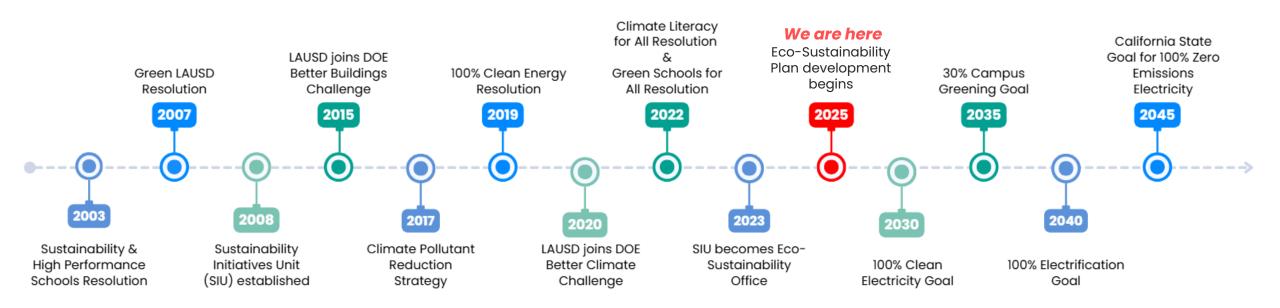


75% Organic Waste Reduction by 2025 Climate Pollutants Reduction Strategy



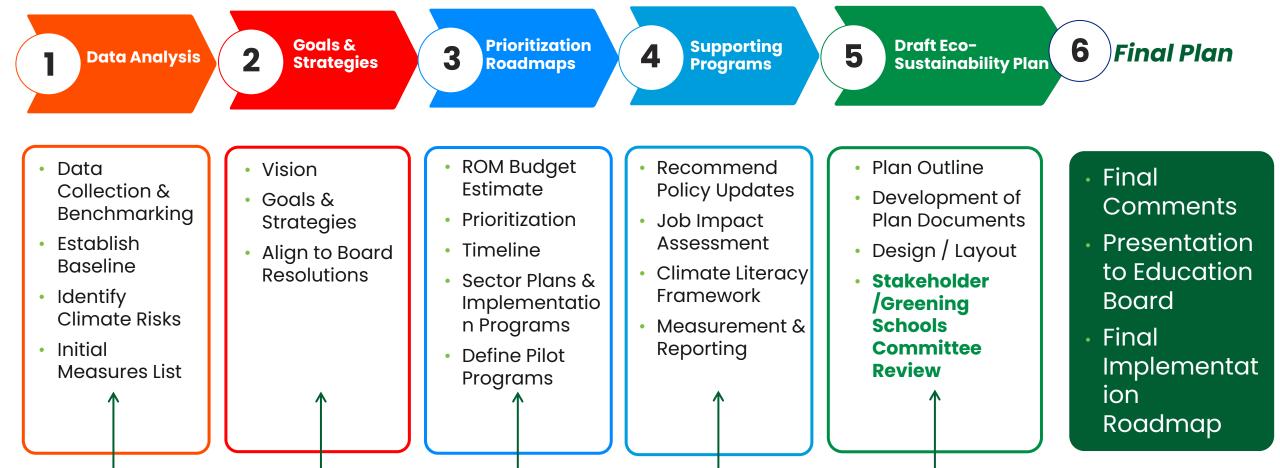
Plan Objectives

- Build on LAUSD's existing efforts, advance existing policies
- Develop a Plan to achieve existing goals and commitments
- Develop specific Roadmaps to guide implementation





Planning Process



Ongoing Stakeholder Engagement



Sectors of the Eco-Sustainability Plan

[2]	Climate Resilience
	GHG Emissions
	Decarbonization
*	Renewable Energy
	Air Quality
4	Energy Conservation
	Stormwater/Wastewater





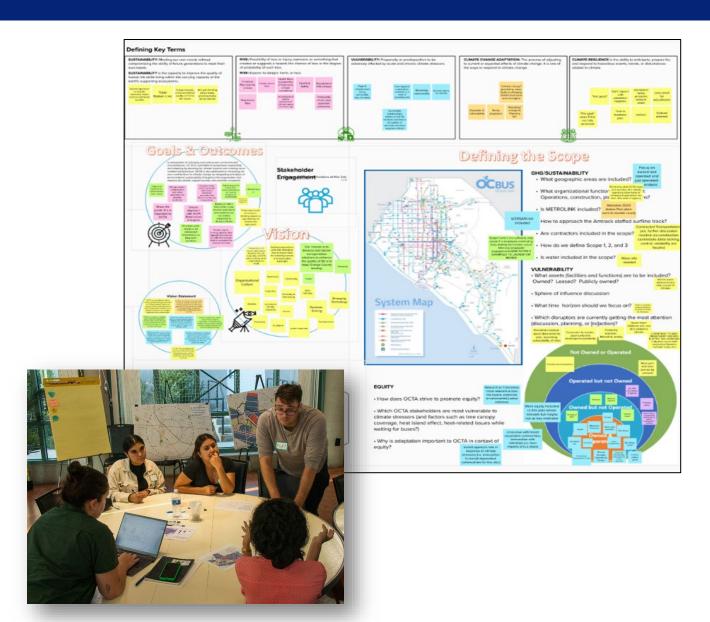
Stakeholder Engagement Overview





Engagement Methods

- Digital surveys
- Social media content and websites
- Newsletters
- Town hall meetings
- Large format interactive workshops
- Small group interactive meetings
- Working groups
- Interviews





Climate Literacy Framework

The Eco-Sustainability Plan supports LAUSD's core mission of providing education.

- Align program recommendations to current level of confidence in the topic
- Utilize the Eco-Sustainability Plan process as a learning tool
- Expert industry partners: 10 Strands & USGBC-CA





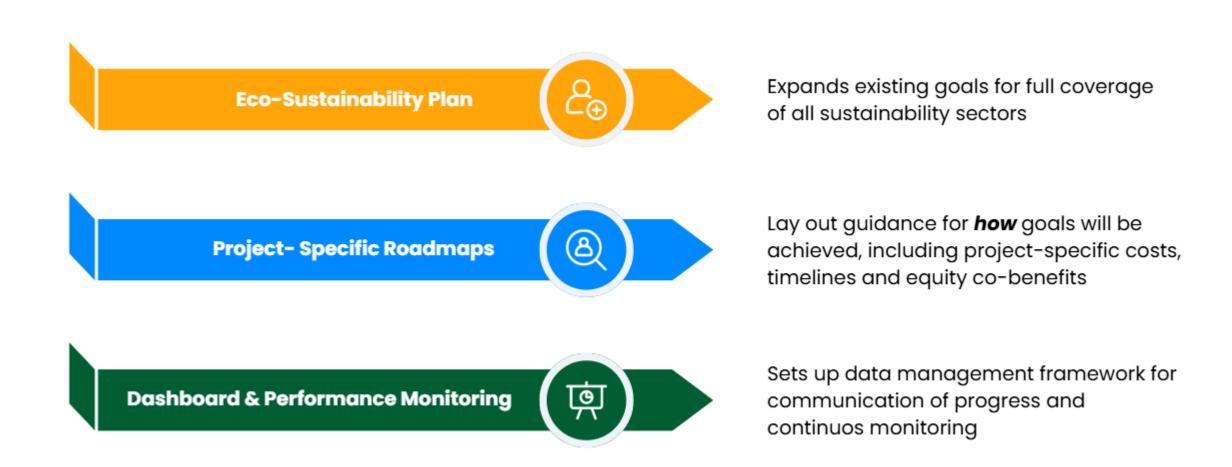








Deliverables Overview





Plan Contents & Design

Table of Contents

- I. Message from Our Superintendent
- II. Section 1 Executive Summary
- III. Section 2 Introduction & Background
- IV. Section 3 Greenhouse Gas Emissions Assessment
- V. Section 4 Eco-Sustainability Sectors & Goals
 - Energy
 - Water
 - Waste
 - Resilience
 - Equity
- VI. Section 5 Roadmaps & Implementation Strategies
- VII. Section 6 Measurement, Monitoring, & Reporting
- VIII. Section 7 Next Steps
- IX. Section 8 Technical Appendix



3.2 Baseline GHG Emissions Inventory

SCOPE AND METHODOLOGY

A GHG emissions inventory is a list of emissions sources and the associated emissions measured using standardized methods. This GHG Emissions Inventory focuses on generated emissions from sources owned or controlled by LBUSD. It includes buildings (school sites and support facilities) and vehicles. Based on industry best practice, emissions are normally organized into three emissions "Scopes," or categories. For the purpose of this emissions inventory, LBUSD included Scopes 1, 2, and select Scope 3 emissions (described further in the next paragraph).

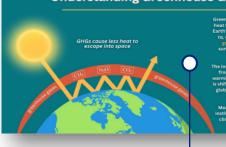
The 2022 inventory includes the following GHG emissions sources:

- Scope 1: Direct emissions coming from sources controlled by LBUSD, including stationary combustion (e.g., facilities natural gas), mobile combustion (e.g., vehicles), and fugitive sources (e.g., refrigerants).
- Scope 2: Indirect emissions from electricity purchased by LBUSD.

 Scope 3: Select indirect emissions from LBUSD's "value chain," meaning LBUSD's organizational operations, including solid waste generation/disposal and water

The Plan presents the District's emissions in metric tons of carbon dioxide equivalent emissions from different types of greenhouse gases into a single unit. The Plan uses emissions calculations based on internationally recognized standards developed by entities like the U.S. Environmental Protection Agency (EPA), the World Resources Institute, and The Greenhouse Gas Protocol. Calculations were based on resource usage data procured by LBUSD, as well as emissions factors from the EPA and those published by the utilities serving LBUSD [Southern California Edison (SCE) and Long Beach Utilities]. These emissions factors represent the quantity of emissions that are released through the energy generation activities of the utilities. Appendix D features a detailed methodology of these





weennouse gases, ard unks, are specing gases that the beat that is raised from the sun and reflected off the Earth's surface. These gases include, but are not limited to, carbon dioxide, methane, and nitrous soide. The greenhouse effect is the warming of the Earth's surface and the air above it, caused by the GHGs in the air that trap energy from the sun.

The increasing concentration of GHGs in the atmosphers from burning fossil fuels is trapping more heat and warming the planet at a higher rate. This global warming is shifting temperature and weather patterns across the globe, which may harm or significantly affect human, animal, and plant life now and in the future.

measuring these emissions enables individuals and institutions alike to understand their contributions to climate change and, more importantly, where and how to reduce that impact.

Charts and graphs to convey data and analysis

Callouts to highlight key information

Infographics to translate complex concepts



Framework Sectors for Roadmaps

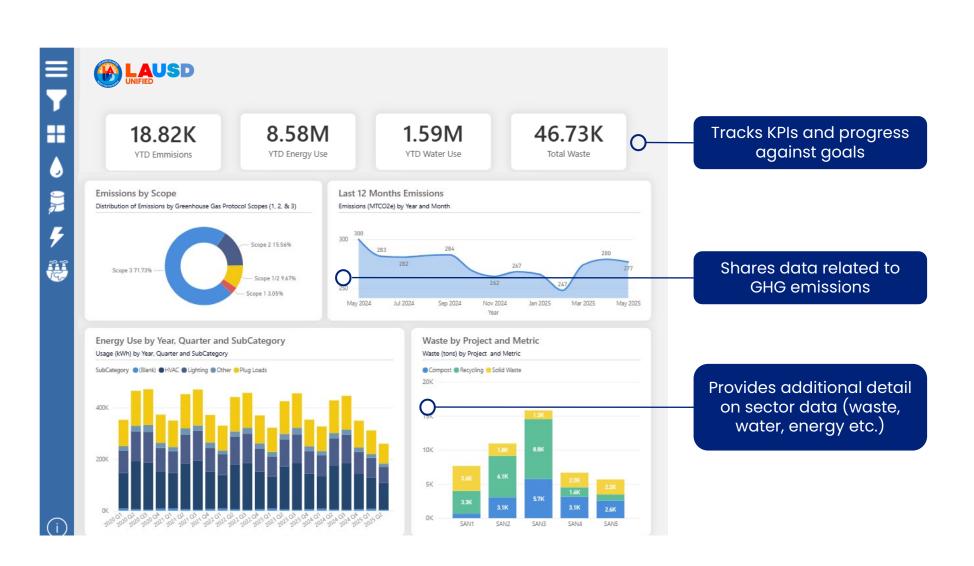
CLEAN ENERGY Goals **Objectives Year-by-Year Actions Funding Needs Reporting and Data** 2026 2026 2026 Establish roadmaps to Action 1 Publish sustainability progress 2027 (can this accelerate) metrics + 2030 Gap Analysis achieve 2030 and 2040 goals 2027 Action 2,3,4 2027 2028 2028 Electrify the yellow fleet 2028 Energy and renewable project LACI Going for Gold (LA28) investigation and scoping PH1 Action 5 2029 2029 Expand photovoltaic Action 6, 7 2030 electricity generation 2030 2030 100% Clean Energy 2029 \$ 50% Emissions Reduction Action 8, 9, 10, 11 Implement clean power Integrate Eco-sustainability 2031 2031 agreements with utilities data to IT Cloud platform Action 12 where feasible 2032 2032 Action 13 Strengthen high performance 2033 2033 schools guidelines for new 2031 construction Action 14, 15, 16 Publish 2030 Clean Energy 2034 2034 **Achievement Report** Action 17, 18, 19, 20 Implement energy 2031 conservations measures to 2035 2035 Energy and renewable project reduce energy use and Action 21 investigation and scoping PH2 greenhouse gas emissions at 2036 + 2035 Gap Analysis/Strategy 2036 existing facilities Action 22, 23, 24 2037 2037 Electrify building operations Action 25, 26, 27, 28 including all HVAC equipment 2036 2038 2038 2040 Gap Analysis/Strategy Action 29, 30 Electrify the white fleet 2039 2039 Action 31, 32, 33 2041 2040 Electrify the food service 2040 2040 Publish 2040 Electrification facilities and equipment 100% Electrification Action 34 Achievement Report

- Integrated roadmaps create alignment between overarching goals, specific year-by-year actions and funding needs
- Critical path dependencies identify risks to long-term goals and provide opportunities for mitigation strategies



Sample Dashboard

- Will be supported by a robust data management infrastructure
- Will serve to monitor progress and communicate success
- Will be tailored to LAUSD's audiences (both internal and external)
- Will serve as an educational tool student-facing dashboard for use in classroom











Thank You



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