

# Menlo Park Green Facilities Data Collection Report and Recommendations

2023-24

Environmental Literacy and Sustainability Initiative (ELSI)



# Green Facilities Data Collection Report

2023-24





# Project Core Outcome

SMCOE and partner agencies will be able to more effectively identify priorities, coordinate resources and services, and provide support to district and site leaders on sustainability goals and mandates.

Data Collection of district and site buildings and grounds

Status of:

- Energy efficiency
- Electrification
- Renewables
- HVAC
- EV charging
- Green fleet
- Waste management
- Food service
- Gardens
- Other measures

# Project Topical Areas

[Project Description](#)

# 4Cs Framework

## Whole School Sustainability

### CAMPUS



Facilities and operations that model sustainable and climate-resilient practices, minimize disruptions for learning, and serve as a lab for innovation.

### CURRICULUM



Curriculum that integrates environmental and sustainability education, climate literacy, and solutionary principles and practices.

### COMMUNITY



Strategic partnerships that strengthen schools' collaboration with the larger community to create sustainable, climate-resilient systems.

### CULTURE



Sustainability and climate resiliency core values are fully embedded in the organization and embraced by all school community members.



# Findings (Electrification)



School Site	Number of Natural Gas Appliances recorded on site walk	Unit Types			
		Boilers	Rooftop	Furnaces	Other
Encinal Elementary	44	0	5	38	1
Hillview Middle	62	0	19	36	7
Lower Laurel Elementary	29	0	0	28	1
Oak Knoll Elementary	45	0	8	37	1
Upper Laurel Elementary	18	0	2	16	0

# Findings (Electrification)

School Site	Gas Consumption Potential (BTU/Hr)	Total Recorded Units	>20 Years Old	Percent of Total	19-15 Years Old	Percent of Total	14-10 Years Old	Percent of Total	<10 Years Old	Percent of Total
Encinal Elementary	3,560,000	44	21	48%	0	0%	23	52%	0	0%
Hillview Middle	5,990,000	62	8	13%	0	0%	52	84%	2	3%
Lower Laurel Elementary	2,340,000	29	15	52%	0	0%	12	41%	2	7%
Oak Knoll Elementary	6,289,000	45	32	71%	0	0	13	29%	0	0
Upper Laurel Elementary	1,363,500	18	0	0	0	0	0	0	16	100%

BTU/Hr = British Thermal Units per Hour

# Findings (Energy Resources)

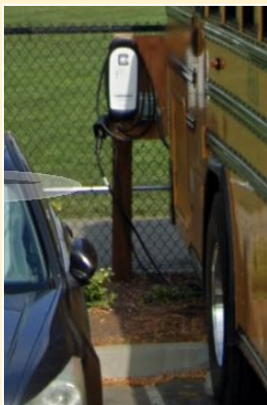


School Site	On-Site Solar	Back-up Battery Storage	On Site Fuel Generator
Encinal Elementary	No	No	Yes
Hillview Middle	Yes	No	No
Lower Laurel Elementary	No	No	No
Oak Knoll Elementary	No	No	No
Upper Laurel Elementary	No	No	No



# Findings (Transportation)

- Menlo Park is already making considerable efforts to electrify their fleet
- Five out of sixteen fleet vehicles are electric
  - 3 Electric Buses
  - 2 Electric Vans



School Site	Number of Public/Employee Stations	Number of Fleet Stations
Encinal Elementary	2	2 (DO)
Hillview Middle	4	0
Lower Laurel Elementary	2	0
Oak Knoll Elementary	2	0
Upper Laurel Elementary	2	0

# Findings (School Grounds)

School Site	Garden Beds	In Use?	Nature Play Equipment	Rain Barrel or Cistern	Number of Outdoor Learning Areas	Estimated Tree Canopy
Encinal Elementary	Yes	Yes	No	No	1	8%
Hillview Middle	Yes	Yes	No	No	2	4%
Lower Laurel Elementary	Yes	Yes	Yes	No	3	22%
Oak Knoll Elementary	Yes	Yes	Yes	No	4	13%
Upper Laurel Elementary	Yes	Yes	Yes	No	2	15%

# Green Facilities Data Collection Recommendations



## Partner Agency Recommendations

### Energy Efficiency

CA Air Resources Board gas furnace ban in 2030  
Replacing gas-consuming units that are easiest first

- Enlist an Energy Service Company to help create a plan for electrification (Willdan, Engie are examples)
- What your current infrastructure supports
  - Furnaces
  - Rooftop Units



## Partner Agency Recommendations

### Transportation

- Install public and fleet EV charging stations to prepare for more fleet vehicles
- Replace any vehicle at the end of life with an electric vehicle
- Consider the option of Vehicle-to-Grid (V2G) energy storage for your sites without energy resources





## Partner Agency Recommendations

### Heat Island Reduction / Water:

- Increasing schoolyard canopy
  - Cooling effect of canopy
  - Reduces runoff and flooding
- Utilizing rainwater resources
  - Rain barrels and cisterns
    - Especially for gardens in use





## **Program Recommendations**

### **Program Recommendations**

The San Mateo County Office of Sustainability provides support to schools for:

- Energy efficiency
- Incentives & identifying potential funding sources
- SMCOE can connect MPCSD with OOS



[smcsustainability.org/waste-reduction/schools-program/administration](https://smcsustainability.org/waste-reduction/schools-program/administration)

## GOVERNMENT & K-12 ENERGY EFFICIENCY PROGRAM

0% FINANCING FOR  
YOUR PROJECT!

The Government and K12 (GK12) Energy Efficiency Program 0% On-Bill Financing (OBF) offers turn-key support services that help local governments improve their facilities with low or no upfront costs.

OBF can help you upgrade to LED lighting, and more, with the option of a CASH FLOW POSITIVE installation while minimizing RED TAPE and PROJECT DELAYS.

### BENEFITS

- Reduced maintenance and operational costs
- Cash flow stable
- Improved system performance
- Increased safety and lighting levels



### STEP-BY-STEP PROCESS



**CONSULT:** Meet with the GK12 team to determine if the program is a good fit for you.



**ASSESS:** GK12 reviews your project and conducts on-site assessments as necessary.



**PROPOSE:** GK12 presents the project scope and costs.



**ENROLL:** GK12 supports OBF enrollment and turn-key installation (upon request).

## Program Recommendations

### GK-12 Energy Efficiency Program

- Cash flow positive turn-key upgrades - **LED Lighting**
- Low to no cost water heater replacements for Offsite Facilities - **Heat Pumps**
  - Includes installation
  - Electrical Upgrades

Laura Wong, County of San Mateo, Sustainability Specialist  
lawong@smcgov.org



# CALIFORNIA ENERGY DESIGN ASSISTANCE

The California Energy Design Assistance (CEDA) provides a complimentary and comprehensive analysis of different energy efficiency options and lays out potential energy savings and incentives tailored to your specific project.

Our dedicated team of energy specialists listen to your project goals and customize energy efficiency options to help you maximize your long term savings potential.



**Complimentary Energy  
Design Assistance**



**Lifelong Energy  
Savings**



**Financial  
Incentives**

## Energy Savings Start Here!

We provide intelligent  
energy analysis.  
You make informed  
energy decisions.

## Program Recommendations

### CEDA Program

- For new construction and major remodels
- Free energy design assistance
- Financial incentives

Laura Wong, County of San Mateo, Sustainability Specialist  
[lawong@smcgov.org](mailto:lawong@smcgov.org)

## Program Recommendations

**Peninsula Clean Energy (PCE)** provides support to schools for:

- Electric vehicle charging stations
- Electric fleets
- Solar and battery systems  
(Available in the future)



## Support for EV Charging Infrastructure

- Free technical assistance to help design and install EV charging stations
- Access to incentives and preferred pricing
- Referrals to qualified contractors

**[PenCleanEnergy.com/EV-Ready](https://PenCleanEnergy.com/EV-Ready)**

Phillip Kobernick, [pkobernick@pencleanenergy.com](mailto:pkobernick@pencleanenergy.com)

## Support for Electric Fleets

- Technical assistance, including fleet analysis, replacement schedule, and plan for charging
- Help with accessing funds and rebates

**[PenCleanEnergy.com/Public-EV-Fleets-Program](https://pencleanenergy.com/Public-EV-Fleets-Program)**

Phillip Kobernick, [pkobernick@pencleanenergy.com](mailto:pkobernick@pencleanenergy.com)



## **Support for Solar + Storage** (Coming in the future)

- Assistance with design, procurement, installation, and maintenance
- Help lower energy costs
- Schools may participate in future rounds

**[PenCleanEnergy.com/Solar-for-Public-Buildings](https://PenCleanEnergy.com/Solar-for-Public-Buildings)**

Peter Levitt, [plevitt@pencleanenergy.com](mailto:plevitt@pencleanenergy.com)

# Menlo Park Sustainability Planning

## 2023-24



# Establishing Policy

- Facilities Master Plan
  - [Menlo Park Facilities Planning Board Presentation, November 2023](#)
  - Other Examples:
    - [San Carlos](#) (see pages 45- 51)
    - San Mateo Community College District
      - [SMCCCD Facilities Master Plan](#)
      - [SMCCCD Sustainability Webpage](#)
- Climate Action Plan
  - Examples: [SFUSD Carbon Reduction Plan](#)

# SMCOE Environmental Literacy and Sustainability Team

---



**Ron Soper**

Director of Sustainable  
Construction and Facilities

[rsoper@smcoe.org](mailto:rsoper@smcoe.org)

650-802-5608



**Julie Hilborn**

Environmental  
Literacy and Sustainability  
Coordinator

[jhilborn@smcoe.org](mailto:jhilborn@smcoe.org)

650-802-5446



**Annalise Eder**

Green Facilities Operations  
Analyst

[aeder@smcoe.org](mailto:aeder@smcoe.org)

650-802-5446



**Brandon Draper**

Green Facilities  
Specialist

[bdraper@smcoe.org](mailto:bdraper@smcoe.org)

650-802-5446