OUSD Solar Initiative

Solar array at Lockwood STEAM Academy

Solar array at Hoover Elementary School

Citizens Bond Oversight Committee - May 12, 2025

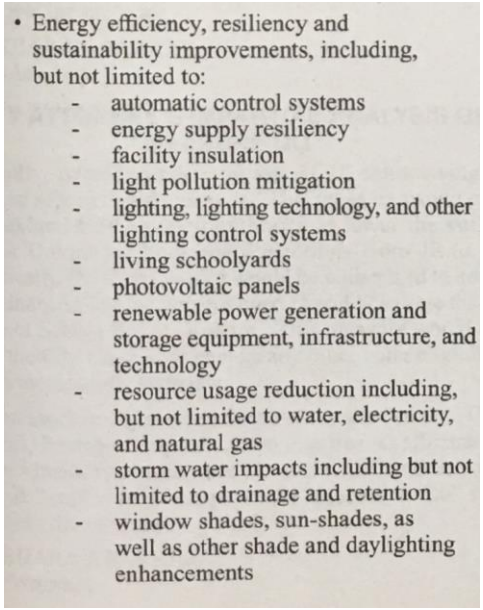
Board of Education - May 14, 2025

Measure Y Bond Language

The 2020 Measure Y Bond language specified the following work:

Energy efficiency, resiliency and sustainability improvements, including, but not limited to:

- automatic control systems
- energy supply resiliency
- facility insulation
- light pollution mitigation
- lighting, lighting technology, and other lighting control systems
- living schoolyards
- **photovoltaic panels**
- renewable power generation and storage equipment, infrastructure, and technology
- resource usage reduction including, but not limited to water, electricity, and natural gas
- storm water impacts including but not limited to drainage and retention
- window shades, sun-shades, as well as other shade and daylighting enhancements



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  - automatic control systems
  - energy supply resiliency
  - facility insulation
  - light pollution mitigation
  - lighting, lighting technology, and other lighting control systems
  - living schoolyards
  - photovoltaic panels
  - renewable power generation and storage equipment, infrastructure, and technology
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Excerpt from 2020 Voter Guide

OUSD Climate Commitments

The OUSD Board approved the Sustainability Policy Adopted March 18, 2025 (File#: 25-0102) establishing the following goals:

100% Clean Electricity by 2030

Phasing Out Fossil Fuels by 2040

Why Solar?

- **Reduces Greenhouse Gas Emissions:** Solar installations help decrease reliance on fossil fuels, aligning with OUSD's carbon neutrality goals.
- **Cost Savings**: By generating its own electricity, the district can lower energy expenses, redirecting funds to educational programs.
- **Educational Opportunities:** Solar projects serve as real-world learning tools, enhancing students' understanding of renewable energy and sustainability. (Curriculum Integration Goal #2, Sustainability Policy)

NEM 2.0 Deadline

Net Energy Metering 2.0 (NEM 2.0) in California was sunset in 2023 and replaced with the Net Billing Tariff (NBT).

Projects that submitted an Interconnection Application (IA) before the April 15, 2023 deadline received a three-year grace period to build their projects and maintain NEM 2.0 status for 20 years.

All five sites have active NEM2.0 IAs.

(Above) Solar array at Highland Community School

Solar array at Frick United Academy of Language

ForeFront Phase 1 Solar - Previously Installed

Site	System Size (kW(DC))	Energy Production Lifetime (kWh)
Frick	138	267,474.7
Highland	123	170,054.8
Hoover	99	202,541.2
Lockwood	255	451,582.5
MLK	116	171,828.2
The Center	116	218,864.2
Woodland	284	375,132.6

Year 1 Analysis - Estimates

The Center and Hoover have completed one year of production to date.

Site	Estimated Annual Production (kWh)	Minimum Guaranteed Output (kWh)	Measured Electricity (kWh)	Performance (%) (Measured/Estimated)	Year 1 Preliminary Estimated Savings ($)
The Center	181,095	172,040	177,878	98%	$9,217.99
Hoover	153,453	145,780	163,775	106%	$7,408.84
TOTAL	**334,548**	**317,821**	**341,653**	**102%**	**$16,626.83**

Upcoming Work

- The (5) sites for the upcoming phase of work include Oakland Academy of Knowledge (51 kW/DC), Horace Mann Elementary School (87 kW/DC), Stonehurst Elementary School (160 kW/DC), Madison Park Academy (197 kW/DC), and Laurel CDC (62 kW/DC).
- **DSA has approved plans for all five sites.**
- System Size total: **558 kW/DC**
- System type: Canopy arrays at 4 sites, and rooftop at Laurel CDC.
- Deadline: 4/15/26 to meet NEM 2.0 deadline with PG&E.
- If approved, Gridscape Solutions would provide Design-Build services with a NTP on 5/15/25. On-site work would begin during summer 2025, with a completion date of March 31, 2026 at all five sites.

Ask of Governing Body

- Review, comment, and approval of the Gridscape Solutions contract for Design-Build services for the Solar Initiative Phase 2 & 3 project.
- Present to Citizens Bond Oversight Committee (CBOC) May 12, 2025
- Bring to Board of Education (BOE) for vote May 14, 2025

Estimated Project Cost

Solar PV Project	Estimated Costs
Vendor Contract Cost	$3,791,641
Project Development, Soft Costs & Contingencies	$1,208,359
Total Upfront Project Budget (Measure Y - Energy Efficiency and Sustainability)	**$5,000,000**
Investment Tax Credit (ITC) Direct Payment*	$1,085,000
Net Project Cost	**$3,915,000**

**There is some risk regarding the ITC due to its political nature. The Inflation Reduction Act (IRA) is embedded in tax code and would require an act of congress to remove or alter. ITC Direct Payment would be filed for and received in the tax year following the project installation.*

Estimated Savings Summary

Estimated Year-1 Savings Summary	
Utility Cost without solar PV	$507,000
Yr-1 Residual Utility Energy Cost	$250,000
Estimated Yr-1 Gross Utility Savings	**$257,000**
Yr-1 Vendor O&M and Operating Costs	$51,000
Estimated Yr-1 Savings*	**$206,000**
Estimated Lifetime Savings Summary	
Gross Utility Savings (Nominal)	**$8.78 M**
Est. Lifetime Savings (Nominal)	**$3.33 M**

Key Modeling Assumptions

Assumption	Value
System Lifetime	25 years
Utility Annual Escalation	3.0%
Net Energy Metering	NEM 2.0 for 20 years, then NBT
Investment Tax Credit (ITC)	25.5%
Decommissioning Cost	$75/kWp
Baseline Tariff Modeling	Assumes Ava Community Energy standard tariffs, not OUSD negotiated rates
Interconnection	Madison Park and Stonehurst modeled as NEM Aggregation with one benefitting meter each.
Upfront District Costs	Project development costs, soft costs, contingencies, etc.
Ongoing District Costs	Inverter replacement, insurance, asset management.
Renewable Energy Credits (RECs)	Sale of RECs not included

Thank You!

Questions?

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