

Energy Management and Sustainability Update on Investment Grade Audit

Facilities Committee Meeting, February 19, 2026
OUSD Facilities Planning & Management in partnership with Willdan



**OAKLAND UNIFIED
SCHOOL DISTRICT**

Community Schools, Thriving Students

Ask of the Committee

Purpose of Meeting: Update on the findings from the Investment Grade Audit (IGA) and associated facilities improvement analysis.

What we need from you: Feedback, questions, comments or concerns.

No decisions are needed at this time.

Energy Efficiency Investment Grade Audit (IGA)

Background

The Investment Grade Audit Project was approved in **June, 2025**. (OUSD legistar [link](#))

This audit is in alignment with the OUSD Sustainability Policy

Willdan was selected to identify energy cost-saving equipment upgrades and other measures to improve efficiency across District facilities. Cost savings will contribute to the Green Revolving Fund.



Oakland Tech Battery: Solar Energy Storage

Energy Efficiency Investment Grade Audit (IGA)

The Team

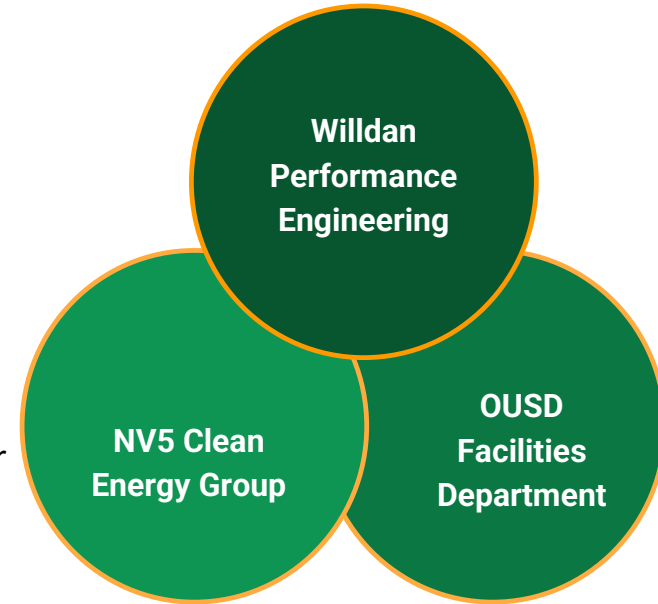
NV5 Clean Energy Group - *Owner's Representative | IGA*

Oversight

- Nationally recognized engineering and consulting firm
- Extensive experience providing independent owner's representation and technical advisory services for California public entities on energy and sustainability projects

Willdan Performance Engineering - *Energy Services Partner*

- NAESCO-accredited
- OUSD's partner to conduct the district-wide IGA
- Supported California public entities for over 60 years, with 15 offices and 700 employees statewide



Investment Grade Audit (IGA) Outcomes

Goals & Alignment with OUSD Efforts

- Develop a collaborative roadmap for lasting, transformational outcomes. *(Appendix slide 19 and 20)*
- Align with the Facility Master Plan, Sustainability Policy and Plan, and Energy Management Planning efforts
- Standardize materials, systems, and operations districtwide
- Shift O&M from reactive to proactive through improved processes and staff capacity
- Maximize grants, incentives, and financing to ensure fiscal responsibility. *(Appendix slide 20)*
- Deliver resilient, healthy facilities that enhance student learning through STEM and trades integration

Moving Forward – Major Steps in Phase 2 of the Investment Grade Audit (IGA)

- **30% Milestone.** IGA complete. Identified project scopes, life cycle cost analysis, funding and savings estimates, and developed Energy Master Plan.
- **60% Milestone.** Begin design of priority scopes in parallel with full IGA and Energy Master Plan development.
- **90% Milestone.** Designs ready for competitive bid. Prepare implementation plan; manage bid process; coordinate with DSA/SFM; develop commissioning, Measurement and Verification (M&V), Operations & Maintenance (O&M), and training plans.
- **100% Completion.** Deliver turnkey, guaranteed-maximum Energy Savings Performance Contract (ESPC) price project proposal and complete IGA/Energy Master Plan report.
- **ESPC Contract and Funding Approval.** District approves projects, executes contract, and Willdan secures funding/financing as applicable. Move forward with construction.



Investment Grade Audit (IGA) Effort

Work Completed To-Date



IGA Approved: Jun 2025
Prelim Kick-Off: Aug 2025

Preliminary
utility bill
analysis of



102 sites

Walked and
evaluated
scope at



102 sites

Identification of



**600+
facility**

improvement
measures

Identified over
\$2.4 Million
in annual utility/O&M
savings from
viable projects



\$235+ Million

in infrastructure
improvements

Assessed

200+

PG&E meters for
electric and gas
energy savings



Investigation of
applicable incentives,
rebates credits
and grants



Projects organized
for alignment to
streamline decision
making and funding



Identified Project Goals

District Comments To-Date

1

Improved Classroom Environment

Air-quality and comfort

2

Alignment with District Initiatives

Facility Master Plan, Sustainability Implementation Plan and Energy Management Plans

3

Demonstrate Fiscal Responsibility

Leverage energy savings performance contract (ESPC) to maximize facility improvement benefit and stabilize operating costs

4

Standardization

Standardized Equipment, Maintenance, Operations, and Standards

5

Student & Community Engagement

Leverage energy savings performance contract (ESPC) to maximize facility improvement benefit and stabilize operating costs

Key Highlights

IGA Observations

\$11.28M spent on
(gas & electricity)
utilities in 2025

Many sites lack
cooling and
proper ventilation

**Meeting Heating,
Ventilation, and Air
Conditioning (HVAC)
goals/needs**
will increase operating
costs

**Electrifying and
decarbonizing buildings
(without energy
management)** will increase
operational costs

**The district has significant
challenges/opportunities** to
bring buildings up to modern
standards.

Solution Approach

Responsible Methodology

Intentional Design – Due to diminishing returns of investing in aging systems and buildings, shortcut energy saving measures were not included.

- No controls on existing/aging HVAC systems
- No pure “efficiency” HVAC upgrades unless driven by cooling or fresh air updates
- No piecemeal HVAC upgrades leaving portions of buildings without an upgrade
- No major envelope upgrades without major HVAC upgrade path determined (right size and locate equipment)
- No simple/low payback envelope upgrade on aging building without envelope upgrades (no window sealing on single pane windows)
- LED Lighting and solar recommended

Align Willdan Approach with OUSD’s Approach to Bond Projects – We want to integrate as much of our project into the District’s planned bond work, to maximize funding and expedite project delivery.



Recommended Facility Improvement Measure (FIM) Summary

Recommended OUSD Facility Improvement Measures

Measure	Potential Scope	Proposed Sites Improved
 LED Lighting Upgrades	Good Option	54
	Better Option	96
	Best Option	96
 Solar Photovoltaic and Battery Energy Storage System (BESS)	Hi-Return on Investment Solar	5
	Shade Structures for Students	5
 Retro-Commissioning	Review control operation of 30 sites with existing full building controls, and restore to designed/efficient operation	30
 HVAC and Associated Infrastructure Upgrades	Adding Cooling and Fresh Air – Tier 1	11
	Adding Cooling and Fresh Air – Tier 2	40
	Adding Cooling and Fresh Air – Tier 3	23

Example Proposed Measures

Lighting

★
GOOD
- Simple

★★
BETTER
- Suitable

★★★
BEST
- Future Forward

TLED
(Tubular LED)

Hybrid
(TLED + Retrofit Kit)

LLLC
(Luminaire Level
Lighting Control)

Major Opportunities

*Easiest/Cost
Effective to Install*

*Meets Control
and Light Level
Standards*

*Most Advanced
Control and
Energy Savings*

Major Challenges

*Less Savings
Simpler Controls*

*Moderate
Cost/Installation
Complexity*

*Most
Complicated/
Highest Initial
Price Point*



Estimated Funding Sources

Funding Source	Description	Estimated Amount
First Year Savings	Utility Savings	~\$2.4M*
	Operations & Maintenance (O&M) Savings	
Grants/Incentives	Solar Investment Tax Credit (ITC) Direct Pay	~\$6-10M**
Bond Dollars	Bond dollars and deferred maintenance funds can be pooled and applied upfront to reduce the financed amount and lower annual payments.	TBD
Deferred Maintenance Funds		
Tax-Exempt Lease Purchase	Low Interest Rate – Flexible Term Structure	As-Needed

Notes:

Project will be implemented as an Energy Savings Performance Contract, where turnkey project costs will be paid for by associated project savings over a set period. Willdan will guarantee the performance and savings, ensuring new project is successful and savings can pay for loan payments.

*Based on project scenario discussed at 30% meeting. If scope changes, so does estimate first year savings amount.

**Based on solar being installed at ~5-10 sites identified at 30% ROM meeting stage. 5% of project material must be ordered by July 3rd, 2026.

Community Partnership



Create Business Incubator in conjunction with OUSD and National Association of Minority Contractors – Northern California (NAMC NorCal) to provide education, training, and other qualification assistance services to foster improved capabilities and create more access to the pool.

Increase the number of qualified local businesses to meet the needs of this project and future District projects.

We welcome brainstorming the feasibility of this concept with OUSD.

Hands on STEAM engagement offered by dedicated Willdan student program team.

Partnership includes teacher professional development, classroom energy kits, energy workshops and hands on activities.

Internships for High School students and other learning opportunities for students interested in Engineering and Sustainability.

Willdan's marketing team can create press releases, ribbon cutting and events that tie in STEAM events with project milestones.



Takeaway

This is great opportunity to directly improve Oakland's business community.

Discussion Around Key Direction Needed

Feedback Needed to Successfully Move into the Next Phase of the IGA (60%)

1

Scope – Finalize the project measures.

- LED lighting options: Good, Better or Best?
- HVAC scope? Tier 1, Tier 2 or Tier 3? *(For information on Tiers, see Slide 11)*
- Preferred Solar and BESS sites?
- Any other scope to add, remove, or change direction on?

2

Funding – Let's optimize a self-funding project.

- Can Bond Dollars be utilized toward this project?
- Other District funding sources (e.g. Energy Efficiency initiatives ear-marked)?
- Capital Outlay or Deferred Maintenance funds?
- Necessary to utilize Tax-Exempt Lease Purchase (TELP) and leverage grants/incentives to maximize scope?
- Do we have an approximate dollar amount to use as we move forward with development?

3

Future Meetings – Stakeholder engagement.

- Continue staff engagement and meetings
- Business incubator and STEAM workshops.

Moving Forward – Major Steps in Phase 2 of Investment Grade Audit (IGA)

IGA Phase 2

- **60% Milestone.** Begin design of priority scopes in parallel with full IGA and Energy Master Plan development.
- **90% Milestone.** Designs ready for competitive bid. Prepare implementation plan; manage bid process; coordinate with DSA/SFM; develop commissioning, Measurement & Verification (M&V), Operations & Maintenance (O&M), and training plans.
- **100% Completion.** Deliver turnkey, guaranteed-maximum price Energy Savings Performance Contract project proposal and complete IGA/Energy Master Plan report.
- **ESPC Contract and Funding Approval.** District approves projects, executes contract, and Willdan secures funding/financing as applicable. Move forward with construction.



Thank you

OUSD Facilities Planning & Management:

Preston Thomas, Chief of Systems & Services

Pranita Ranbhise, Executive Director of Planning

OUSD Sustainability Team in partnership with Willdan



**OAKLAND UNIFIED
SCHOOL DISTRICT**

Community Schools, Thriving Students

Appendix



**OAKLAND UNIFIED
SCHOOL DISTRICT**

Community Schools, Thriving Students

Energy Efficiency Audit - Goals and Outcomes

“Collaboratively develop a road map with OUSD that leads to lasting, transformational outcomes”



Transformational Outcomes

- Improved learning environments
- Healthier buildings
- Reinvest in student programs
- Safe campuses
- Increase and stabilize state funding
- Showcase fiscal responsibility
- Positive PR wins
- Expand “enrichment” areas for students (i.e. Living Schoolyards)
- Student STEM and other programs

Expressed District Facility & Sustainability Goals

- Improved comfort including mechanical cooling and ventilation
- Building resiliency
- Stabilize and control utilities and other operational expenses moving forward
- Progress and alignment with District Policies – Facility Master Plan, Energy, and Sustainability
- Onsite generation and energy storage
- Electrification and decarbonization

Fundamental Goals

- Significant utility savings
- Reduce maintenance and operational costs
- Tackle deferred maintenance
- Solve systemic problems and pain points
- Improve ease of operation of systems
- Data accuracy and increased capabilities
- Standardize equipment and materials
- Improved internal O&M and external PM agreements
- Maximize funding sources

Budget Neutral Funding – The Foundation of ESPC

1

Federal & State Programs & Grants

- Up to **40%** Inflation Reduction Act **Tax Credits** - Direct payment for solar, BESS, geothermal, generation, etc.
- Bay Area Air District funding – Options for **EVCS** funding and **increases** if **paired with solar**
- SGIP for various DER systems – Had **\$1B** available in 2024 and currently projecting that for 2025 and 2026, projects need to be shovel-ready
- **Millions of \$** in 179D tax deductions to be passed through to OUSD by Willdan
- Other options being monitored and will continue to explore

2

Decarbonization Incentives & Carbon Credits

- **Millions of \$** in possible CCA decarbonization incentives through the Eva CCA for the Bay Area
- **\$250k+** per application for California Energy Design Assist (CEDA) Program for decarbonization incentives
- **Millions of \$** in potential funding by monetizing carbon credits



3

Utility Incentives

- **Millions of \$** in PG&E incentive and rebate programs
- GK12, in most instances pays for all upfront implementation costs
- PG&E EV Fleet Program
- Others to be explored

4

Leases & Loans

- **0%** OBF through PG&E for qualifying EE and electrification scopes
- **0-1%** CEC financing (multiple options)
- **~3-5%** Green Bonds
- **~4% Grow America**, non-profit 501(c)3 third party hyper low-interest financing
- **5-6%+** Tax Exempt Municipal Lease Purchase (TELP)

Alameda County

- **OPEX Relief Through Use of Bond Funds:** Using Bond money to pay for project while still using 4217 for ESPC, but plan to **reallocate major OPEX savings in budget**
- **Share in Same Challenges:** **Comparable budget challenges** and needed creative approach to relieve increasing operational costs and cuts in other areas