



OAKLAND UNIFIED
SCHOOL DISTRICT

Community Schools, Thriving Students

OUSD Energy Update



Presented to CBOC Committee

October 9, 2017

www.ousd.org



@OUSDnews



Solar: 17 Schools to Date

10.72 GWh of
electricity generated
to date

\$1.9 million of
avoided electricity*

\$3.14 million in
rebates received

Other benefits:
Sunpower Solar
Academy, etc.



*Assuming OUSD's 3-year average rate of \$0.1797 per kWh.

OUSD Electricity Use (Data from PG&E)

- OUSD electricity demand is reduced as utility rates increase.
- 2014
 - 28,220,737 kWh
 - \$4,885,653 – Electricity
 - Average rate \$0.173/kWh
- 2015
 - 23,861,106 kWh
 - \$4,303,354 – Electricity
 - Average rate \$0.180/kWh
- 2016
 - 23,762,097 kWh
 - \$4,667,706 – Electricity
 - Average rate \$0.196/kWh



LEEC Case Study

- La Escuelita Education Center includes the following design features: solar panels, an evaporative cooling system, a rainwater aqueduct system, thermal mass construction, daylighting orientation and displacement ventilation.



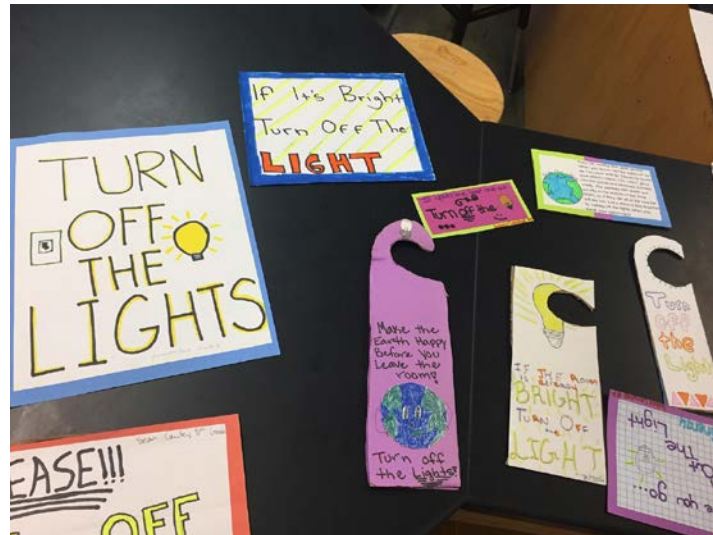


LEEC Case Study

- La Escuelita Elementary School, the Great Room and the CDC were modeled to be grid neutral, excluding MetWest HS, the Health Clinic, and KDOL. Note that this model was developed based on *anticipated* building use and LEEC has since become a desired location for extra meetings and activities.
- **Solar annual production is 485,765 kWh**
- **Additional annual energy use is 376,962 kWh or \$48,474 (per PG&E true-up bill)**
- This site is currently being analyzed by PG&E for inclusion in their annual ZNE case study book, which will provide more insights.



OUSD Energy and Water Plan



- The OUSD Energy and Water Plan was approved by the OUSD Board of Education in May 2007.
- As a means to save money on utility bills, the Plan calls for replacing inefficient equipment, adopting sustainable design guidelines and providing training for staff and administrators.



Energize Schools Energy Conservation Competition

Oct 26 - Nov 15, 2017

What is the competition?

A 3-week challenge for K-12 schools served by Pacific Gas and Electric (PG&E) to compete to save electricity.

Why participate?

Like most buildings, energy conservation opportunities can be found in your school too. Engaging students, teachers, & staff on energy conservation has many benefits, including:

- Saving money through smarter energy use
- Reducing carbon emissions from your school's energy use
- Preparing students for careers in the green economy

REGISTER BY OCTOBER 1ST!

Register on www.EnergizeSchools.org/Competition by October 1st.



EVERY STUDENT THRIVES!

Questions?



**OAKLAND UNIFIED
SCHOOL DISTRICT**
Community Schools, Thriving Students

1000 Broadway, Suite 680, Oakland, CA 94607

www.ousd.org



@OUSDnews

Contact us for additional information : <http://www.ousd.org/facilities>
Phone: 510.535-2728 | FacilitiesMgt@ousd.org

Appendix: OUSD Schools with Solar

Sankofa
Bret Harte
Westlake
Oakland Intl
Havenscourt
Roosevelt
Madison
Lowell
King Estates
Edna Brewer
McClymonds
Oakland HS
Oakland Tech
Monterra
Castlemont
Skyline
LEEC (not part of CSI projects)