

Comparative Energy Analysis Report

Prepared for
Ocean View Elementary School District

Prepared by
The Energy Coalition

On Behalf of
The Southern California Regional Energy Network Public Agency Project Delivery Programs

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1. Overview

This report is intended to provide a framework for Ocean View Elementary School District, referred to as “Agency” herein, to identify inefficient facilities and infrastructure and prioritize further investigation and energy efficiency retrofit work. This analysis uses only energy billing data provided by the Agency to analyze energy use across Agency assets, and to help identify opportunities for energy efficiency improvements. Many factors affect the energy use in different assets, including age, type of heating, ventilation, air conditioning (HVAC), and lighting equipment, facility occupancy and hours, plug loads, and climate. Once individual opportunities with the greatest potential for energy savings are identified, a more detailed screening of those facilities can be performed to identify the specific sources of the inefficiencies.

This report was created by The Energy Coalition on behalf of the Southern California Regional Network (www.socalren.org). Any questions about this report can be directed to your assigned Project Manager, Casey Novell, at cnovell@energycoalition.org.

2. Total Energy Portfolio

Your Total Annual Energy Cost is **\$229,243**

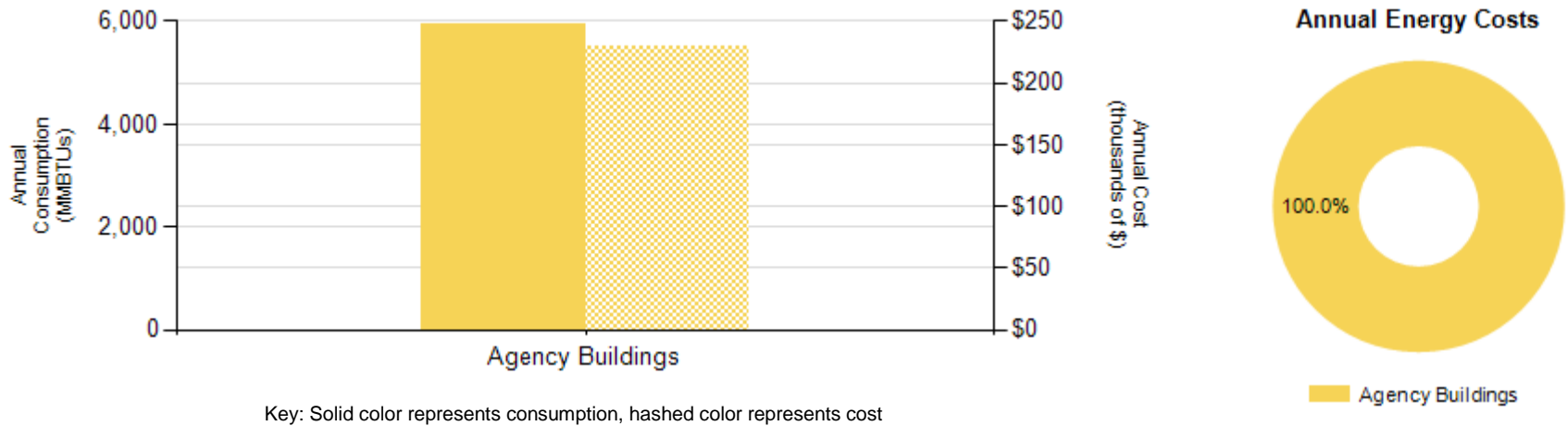


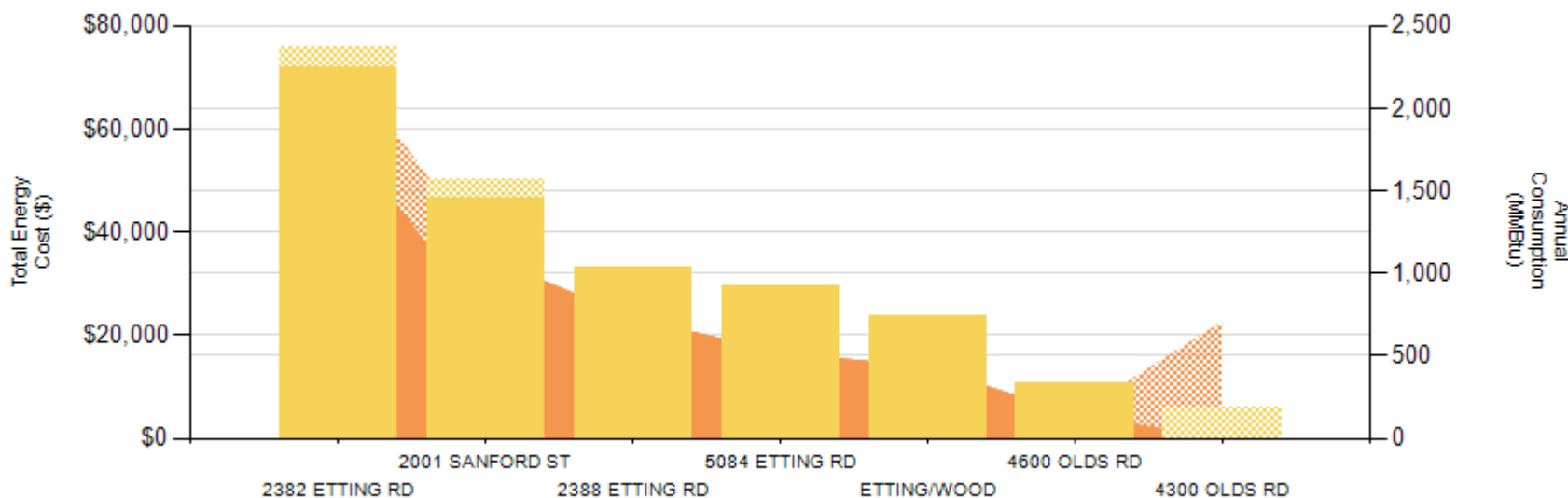
Table 1: Total Energy Portfolio (Annual)

Agency Energy Use	Electric Consumption (kWh)	Electric Cost (\$)	Gas Consumption (therms)	Gas Cost (\$)	Total Energy Consumption (MBTUs)	Total Energy Cost (\$)	GHG Emissions (lbs CO2)
Agency Buildings	1,292,185	\$215,674	15,482	\$13,569	5,954,509	\$229,243	668,060

3. Building Summary



Your Annual Energy Cost for Buildings is **\$229,243** and **100.0%** of the Total Cost.



Key: Displays the top 7 consuming Buildings. Yellow columns represent Cost, Orange area represents Consumption. Electricity is the solid shade, Natural Gas is the hashed shade.

Table 4: Building Summary (Annual)

Site Name	Address	Electric Consumption (kWh)	Electric Cost (\$)	Electric Rate (\$/kWh)	Gas Consumption (therms)	Gas Cost (\$)	Gas Rate (\$/therm)	Disadvantaged Community (Yes or No)
MAR VISTA ELEMENTARY SCHOOL	2382 ETTING RD	553,413	\$71,944	\$0.13	4,401	\$4,014	\$0.91	Yes
TIERRA VISTA ELEMENTARY SCHOOL	2001 SANFORD ST	206,513	\$46,582	\$0.23	4,000	\$3,723	\$0.93	Yes
2388 ETTING RD	2388 ETTING RD	213,547	\$32,993	\$0.15	0	\$0	\$0.00	Yes
LAGUNA VISTA ELEMENTARY SCHOOL	5084 ETTING RD	151,650	\$29,632	\$0.20	0	\$0	\$0.00	Yes
ETTING/WOOD	ETTING/WOOD	125,607	\$23,777	\$0.19	0	\$0	\$0.00	Yes
OCEAN VIEW EARLY EDUCATION SCHOOL	4600 OLDS RD	41,455	\$10,745	\$0.26	0	\$0	\$0.00	Yes
OCEAN VIEW JR. HIGH SCHOOL	4300 OLDS RD	0	\$0	\$0.00	7,080	\$5,832	\$0.82	Yes

Appendix A - Methodology

PM CEA Methodology Instructions: Delete before sending

Please reference red text for edits to be made:

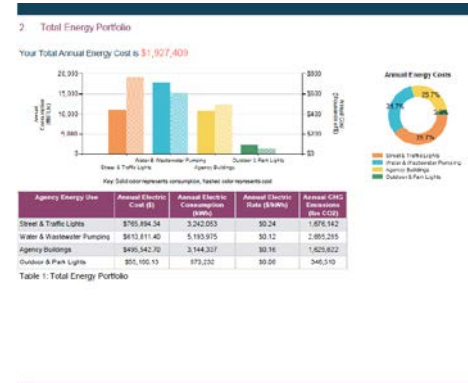
- Delete SCG Gas Tariff/SCE Electric Tariff information if not applicable to data used in the analysis
- Update electric and gas usage period used in the analysis
- Update building information, energy usage and cost data used in this analysis (i.e. ENERGY STAR Portfolio Manager®, Green Button Connect and utility consumption billing data)
- Update properties/facilities (service account, tariff type, and address) excluded in the analysis that do not have energy usage data for the range of the analysis period
- Update properties/facilities excluded in the analysis that could not be matched to gas or electric usage data
- Agency Buildings energy consumption is weather normalized with TMY weather data. All other load types use non-weather normalized data.

1. Data Sources

- Building information, energy usage and cost data used in this analysis were derived from utility consumption billing data provided by agency staff.
- Utility consumption billing data used in this analysis were derived from SCG gas tariffs and SCE electric tariffs
- For more information about the utility tariffs included in this analysis refer to:
 - SCG Gas Tariffs: [For more information about Southern California Gas tariffs](https://www.socalgas.com/regulatory/tariffs/tariffs-rates.shtml); <https://www.socalgas.com/regulatory/tariffs/tariffs-rates.shtml>
 - SCE Electric Tariff: [For more information about Southern California Edison tariffs](https://www.sce.com/wps/portal/home/regulatory/tariff-books/rates-pricing-choices); <https://www.sce.com/wps/portal/home/regulatory/tariff-books/rates-pricing-choices>
- All electricity and gas results were based on usage during period January 1, 2018 – December 31, 2018.
- In some cases, multiple meters were associated with a single facility or asset type. For such facilities, to generate estimates of facility-wide energy use, energy usage and cost values were aggregated by summing energy usage and cost values for each day in the analysis period.
- GHG emissions data used in this analysis were calculated using the conversion: 517 lb CO₂/MWh + 11.91 lbs CO₂/therm [1,2].

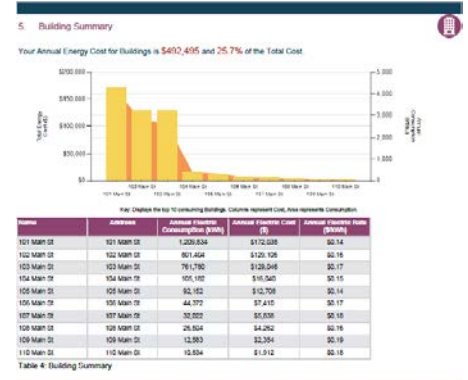
2. Total Energy Portfolio

- Total Energy Portfolio data represents an analysis of each agency facility type annual energy costs, annual energy consumption (kWh), GHG Emissions and total annual energy costs for agency facility types based on MBtus.
- The following agency assets are included in the Total Energy Portfolio:
 - Water Pumping
 - Street & Traffic Lights
 - Buildings
 - Outdoor & Parks Lights



3. Building Summary

- Building summary data represents an analysis of the top ten highest energy consuming agency buildings annual energy costs, annual energy consumption (kWh), GHG Emissions, and total annual energy costs based on MBtus.



Endnotes

[1] Corporate Responsibility Report. (2015). In Southern California Edison. Retrieved from https://www.sce.com/wps/wcm/connect/c0fceef5-e04a-4287-8301-8e66e3e5fbac/2014_Corporate+Responsibility+Report_FINAL+single-page.pdf?MOD=AJPERES&ContentCache=NONE

[2] Adams, L.S., Nicols, M.D., Goldstene, J. N. (2008). Climate Change Scoping Plan. In California Air Resources Board. Retrieved from https://www.arb.ca.gov/cc/scopingplan/document/appendices_volume2.pdf

[3] Based on SoCalREN previous project estimates.
