ATTACHMENT 1

Santa Barbara County
2017

Future Renewable Energy Report

Santa Barbara County 2017 Future Renewable Energy Report

For County Owned Facilities

Prepared for:
County of Santa Barbara
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Executive Summary

The County of Santa Barbara General Services Department has been evaluating the feasibility of installing renewable energy systems to help reduce the cost of utilities used by the County. On May 2, 2017, the Board directed General Services to return within 90 days with potential future solar projects. This report describes possible renewable energy project components, phases and locations, and discusses the need to ensure our existing facilities are energy efficient and the potential options of making that happen.

As a result, General Services plans on developing a two phased approach. Phase one will solicit a request for proposals (RFP) for installation and operation of Future Renewable Energy systems for County owned facilities. Phase two will explore innovative methods of retrofitting existing County buildings to ensure they are energy efficient.

The first request for proposals (RFP) will ask for pricing on various configurations and return on investment of renewable energy systems as well as a discussion of the advantages and disadvantages of the available financing options. The RFP also seeks different options for solar thermal, solar photovoltaics, and small wind. A future RFP (Phase two) will explore the option of energy performance contracting and building energy retrofits.

Once the renewable energy system proposals are received, a detailed analysis will be completed and a presentation made to the Debt Advisory Committee (DAC) for financing direction. The projects will then be brought back to the Board for authorization to proceed.

1 Introduction to Renewable Energy Systems and County of Santa Barbara Progress to date

1.1 Benefits of Renewable Energy Systems

Utilizing solar, wind generated energy, and energy retrofits contribute to global energy sustainability, and it benefits Santa Barbara County both environmentally and financially. By installing renewable energy systems, the County can reduce its monthly electric and gas bills, receive rebates to subsidize the system cost, reduce its carbon footprint, and play an important role in moving the state toward a cleaner energy future.

Building efficiency upgrades (LED lighting, more efficient pumps and motors, HVAC system controls, etc.) can shrink the energy load of our buildings, allowing the County to maximize the proportion of clean power generated on-site at the least cost. In other words, ensuring County buildings are energy efficient gives the County the most bang for its renewable energy buck.

Santa Barbara County recognizes that climate change has the potential to dramatically affect our businesses and residents, as well as other communities around the world. Santa Barbara County also recognizes that local governments play a significant role in the efforts to reduce Greenhouse Gas (GHG) emissions and mitigate the potential impacts of climate change. The benefits from these actions include lowered energy bills, improved air quality, reduced emissions, economic development, and an improved quality of life throughout the County of Santa Barbara. Some of the benefits of Renewable Energy Systems are:

- Solar produces local on-site energy which reduces the need for extensive high-voltage transmission lines or a complex infrastructure.
- Solar and wind energy support national energy independence because the County can generate electricity where it is consumed.
- The installation of renewable energy systems create local jobs for our new energy-conscious economy.
- Solar is reliable over the long term. Solar photovoltaic and solar thermal systems can last for over 25 years.
- Solar is predictable and is most efficient when utility rates are at their highest.
- In some areas of Santa Barbara County, such as in Lompoc or Santa Maria, wind is predictable. Predictability is key to managing wind power's variability and is important for its economic integration into the power system.
- Solar costs are predictable and equal to or below retail energy rates.
- Solar and wind energy create clean renewable energy that will sustain and support the health of future generations.
- Solar and wind energy do not emit greenhouse gasses.
- Renewable energy uses little to no water in the production of zero-emission electricity.
- Solar and wind energy are renewable alternatives to building power plants that burn fossil fuels and emit greenhouse gases.
- Energy retrofits like LED lighting and updating HVAC systems compliment renewable energy systems. It doesn't make sense to add renewable energy to inefficient buildings.

1.2 Renewable Energy Projects Completed by the County of Santa Barbara

1 MW Solar Photovoltaic (PV) Renewable Energy Power Generation Plant near the Santa Barbara County Jail, installed by Endelos Energy, Inc., that will save the County an estimated $9.2 million in electricity costs over the life of the system.

https://solrenview.com/cgi-bin/cgihandler.cgi?&sort=pvi_IDs&cond=site_ID=1368&min

1 MW Solar Photovoltaic (PV) Renewable Energy Power Generation Plant at the Public Works Sanitation District, installed by Premier Power, that will save the County an estimated $9,000,000+ in electricity costs over the life of the system.

38.64 kW Solar Photovoltaic (PV) System on the Emergency Operations Center that will save the County over $400,000 in electricity costs over the life of the system.

http://live.deckmonitoring.com/?id=santa_barbara_county___emergency_operations_center__

11.97 kW Solar Photovoltaic (PV) System on the Public Works building on Foster Road that will save the County over $150,000 in electricity costs over the life of the system.

20.0 kW Solar Photovoltaic (PV) System on the carport parking lot in Isla Vista that will save the County thousands of dollars in electricity costs over the life of the system.

2 Types of Renewable Energy Grid Connections, NEM and Components

2.1 Renewable Energy Grid Connections

Currently all the County solar projects are grid tied connection without batteries like nearly all renewable energy projects. The grid interactive inverter is a special device that converts the DC electricity from the solar modules to AC electricity that is synchronized with the AC utility grid. Some off-grid inverters either cannot sync with the grid or do not offer the safety features required to do so. The overwhelming majority of grid interactive inverters do not require batteries at all. Nearly all non-battery based grid interactive inverters will shut down during a grid power outage. Renewable Energy projects that utilize batteries are completely different than standard grid tied inverters. This linked presentation shows the different systems. Additional information on renewable energy can be obtained at "GoSolarCalifonia.Ca.Gov". The County is beginning to explore various newer battery technologies and the concept of hybrid buildings.

2.2 What is Net metering

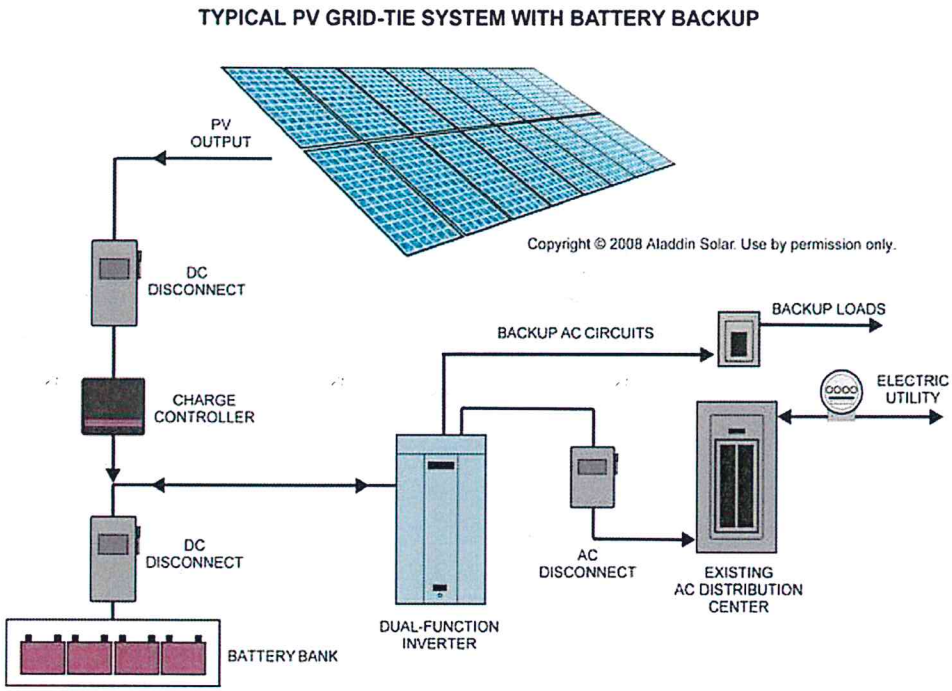
Net energy metering, or "NEM", is a special billing arrangement that provides credit to customers with solar PV systems for the retail value of the electricity their system generates. Under NEM, the customer's electric meter keeps track of how much electricity is consumed by the customer, and how much excess electricity is generated by the system and sent back into the electric utility grid. Over a 12-month period, the customer has to pay only for the net amount of electricity used from the utility over-and-above the amount of electricity generated by their solar system (in addition to monthly customer transmission, distribution, and meter service charges they incur). When the County installs a renewable energy system, it will select a NEM rate option. With NEM, the County can zero out its bills by receiving a credit for any surplus energy the County generates beyond what it consumes.

As of July 1, 2017 Net Energy Metering 2.0 will be the new option for renewable energy projects. It will still allow a credit for surplus energy generated. However, as each NEM program progresses, it becomes slightly less favorable to customers to go solar. NEM 2.0 will expire in 2019.

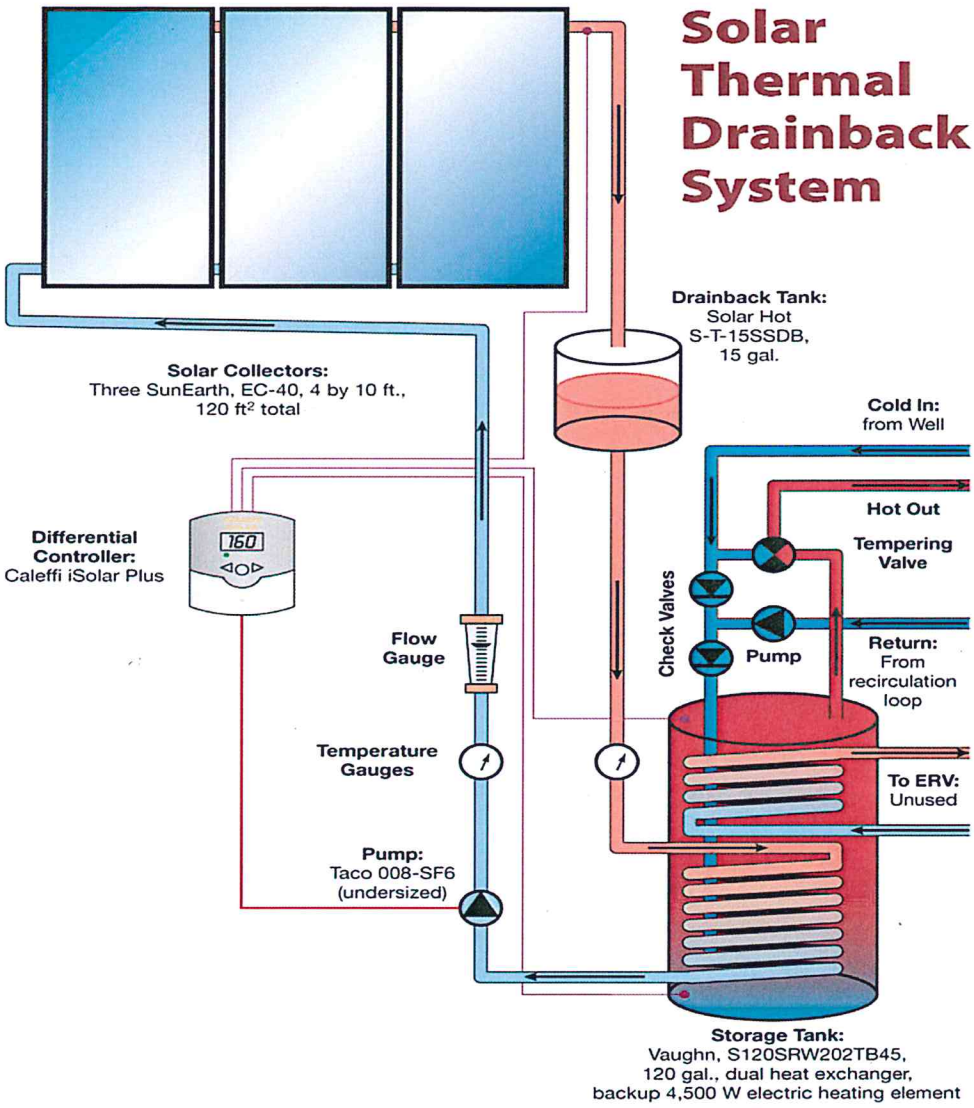
2.3 Renewable Energy System Components

Renewable Energy System components that might be installed on Santa Barbara County facilities are Solar Photovoltaic (PV) Panels, Small Wind Energy Turbines, and Solar Thermal Collectors. These can be placed on rooftops with minimal visual impacts. Below are examples of renewable energy systems:

Photovoltaic



Photovoltaic (PV) is a method of generating electrical power by converting solar radiation into direct current electricity. In general higher quality panels are monocrystalline silicon. This technology will be utilized on all County owned buildings where sunlight is available and structurally capable. Silicon solar panels are rigid panels that come in two types: crystalline (made from a single large crystal) and polycrystalline (made from blocks of silicon that contain many small crystals). Silicon solar panels are the most efficient on the market, but also the most expensive. They are also the best-performing panels in low-light conditions. Thin-Film flexible solar panels are made by spreading silicon and other solar-producing materials in a very thin layer (about the thickness of a human hair) directly onto a large plate that is usually made of glass or ceramics. Thin-Film panels are less efficient than silicon solar panels. The thin material of these solar panels makes them ideal as building-integrated solar products such as solar shingles and tiles.



Solar Thermal

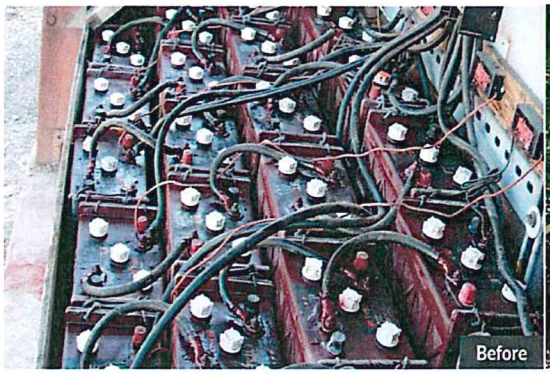
A single solar thermal panel produces approximately 15,000 BTU/Day energy savings. The Solar Thermal Collector compact size panel (3"D x 10'L x 4"W) allows for easy installation on building exterior walls and rooftops. Solar Thermal Collectors consist of a drain-back system that utilizes distilled water as a heat transfer fluid. The drain-back system configuration helps protect the system from freezing or over-heating by allowing all the water in the collectors to drain back into the solar storage tank during times of extreme weather. The drain-back system also puts less stress on the system's components because it is non-pressurized, and it can be up to 15% more efficient than closed-looped water glycol systems. This technology will be utilized at all County owned buildings with a demand for hot water (except the County Courthouse).

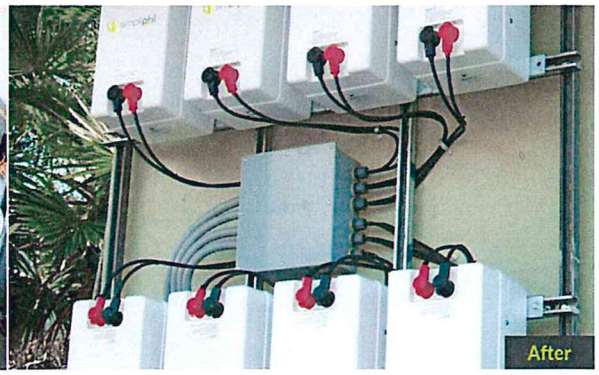
Small Wind energy turbines

The Small Wind Energy Turbine technology of choice is the 2 Kilowatt Vertical Access Wind Turbine (VAWT) and the 240 Watt Wind Appliance. The 2 Kilowatt WindCharger Turbine VAWT (2 Kilo-Watt with turbine addle size 5'H x 4'W x 6' Diameter), is a bird-friendly, highly efficient, vertical access wind turbine.

Batteries

The County is not currently utilizing battery storage technologies, but is exploring the option of doing so. This includes newer hybrid building technologies. Battery technology has changed dramatically lately and will continue to be monitored. Many of the new batteries have increased power capacity while their footprint decreased, eliminating maintenance, toxic off-gassing and losses typical of lead acid batteries. New lithium batteries can be made of non-toxic and non-hazardous recyclable materials and have recycle value at the end of their life. The pictures below show some of the differences from acid filled batteries and new lithium batteries:





Reference http://simpliphipower.com/

2.4 Building Energy Upgrades

When designing a solar array for a building, it becomes cost effective to upgrade several of the building's systems and make it as energy efficient as possible. For example; it is more cost effective to change the HVAC filters on schedule, rather than purchasing extra solar panels to compensate for the extra power used by the HVAC system because of dirty filters. It makes little sense to use solar energy to power buildings that are not energy efficient.

Renewable energy solutions should be paired with making County buildings more energy efficient, cutting their energy use with more efficient lighting along with modern heating and air conditioning systems.

This is referred to as "load shedding" and it's the best way to get the most out of the County's investment in solar. That's because it's usually cheaper to reduce energy usage through affordable efficiency upgrades than it is to have to purchase enough solar panels to power a leaky building with outdated lighting and HVAC.

As a result, in addition to exploring solar and other renewable options, the County will also be developing a plan to implement energy retrofits to our existing buildings. This could be done through energy performance contracting (see section 5 of this report) or other means and paid for with the savings generated from reduced utility costs rather than utilizing scarce capital dollars.

Building energy conservation measures that will be explored during this phase 2 of this project include:

HVAC Upgrades:

- Variable speed motors, brushless permanent magnet motors, magnet bearings
- Higher sheer rating, larger filters, new designed systems,
- Air balance HVAC systems
- Duct Cleaning of HVAC Systems
- Re-design HVAC Distribution systems to more effective/efficient
- Replace older thermostats with programmable controls
- Re-Insulate air conditioning piping
- Plate & frame heat exchanger to central plant chiller system
- Add variable speed devices (VSD) to cooling tower fans
- Retro-Commissioning of major mechanical systems
- Interlock general & rest room exhaust fans with major HVAC units
- Replace existing HVAC units with Mini Splits or variable refrigerant flow for zoned comfort

Lighting:

- Lighting sensors can control dimming, occupancy, and time. For example occupancy sensors detect indoor activity within a certain area. They provide convenience by turning lights on automatically when someone enters a room, and save energy by turning lights off soon after the last occupant has left the room.
- LED lighting retrofits save energy and reduce maintenance due to the extended life of LED bulbs. There are numerous opportunities for LED retrofits in County buildings.

Water:

- Upgrade/Replace tank water heaters to tank-less - on demand units
- Insulate hot water piping
- Replace boilers with Low NOX / ultra-high efficiency units
- Upgrade to low flow toilets (1.28 gpf valves)

Others:

- Add Insulation to selected locations of County buildings

3 Renewable Energy Transition Plan: Project Phases

3.1 Next Steps

In addition to the existing County-owned solar installations previously mentioned, several additional County-owned facilities have been identified that can benefit from the Renewable Energy Transition Plan to continue the County's sustainable green energy future. Installation of renewable energy systems for these identified facilities can be accomplished in four project phases.

1. Identify potential facilities and locations to place renewable energy:
    - Show possible potential future solar at the sites.
    - Estimate costs.
    - Estimate income and return on investment from each site.

2. Receive guidance from the Board of Supervisors:
    - Inform the Board of possible potential projects and receive feedback.
    - Take direction and issue RFP.

3. Board awards feasible RFP projects:
    - Recommend potential projects and financing options.
    - Take direction from the Board and award projects.

4. Begin construction of renewable energy projects.

3.2 Renewable Energy Systems - Typical Funding Mechanisms

MORTGAGE: (Not a common practice by County).

BONDS: (The County will own the project from the beginning) (Highest risk but largest savings and lowest interest rate).
State and local governments often sell debt instruments such as bonds to finance public projects, particularly capital improvements. COPs (Certificates of Participation), are the standard for the County. Low interest QECBs (Qualified Energy Conservation Bonds) are also a type of tax-credit bond and were utilized for the Calle Real Solar and Public Works Solar Projects). CREBs (Clean Renewable Energy Bonds), a type of tax-credit bond, offer a unique financing mechanism for municipalities to encourage/finance renewable energy projects.

TAX-EXEMPT LEASE PURCHASES (Medium risk and medium savings) (low interest rate).
Local governments seeking to avoid issuing bonds can consider entering into tax-exempt lease-purchase (TELP) programs, similar to those used by many cities to fund other types of construction projects. Leases may be more flexible than bond financing, which can be attractive. The interest rates on a tax-exempt lease-purchase agreement are typically much lower than those on a taxable commercial lease-purchase agreement. TELPs allow local governments to buy a solar installation over time through lease payments, while also saving on current and future utility bills. Both the local government and the developer benefit from these arrangements. By lending to a local government, the developer receives federal tax credits and often tax-exempt interest. The County is required to pay the current market price of the project whenever it wants to buy out of the lease.

SOURCES OF FINANCING FOR THIRD-PARTY OWNERSHIP (Low risk and low savings) (Highest effective interest rate).
In many states, local governments have collaborated with private entities to defray some of the upfront costs of solar installations and share the risks of the investment through third-party ownership. Put simply, the private entity owns the PV installation located on local government or private property. Public-private partnerships, are also relevant in the use of solar power by local governments. Partnering with third-party entities to finance large-scale installations allows counties and municipalities to hedge against risk associated with rising energy costs by agreeing to a fixed electricity price for the entire period of the agreement.

Third-party financing provides for agreements which lock customers into a fixed rate for electricity and allow the system to be used over a set number of years. In exchange, the private companies maintain the system and bear the upfront cost.

The two primary ways public-private partnerships occur in solar financing:

Power Purchase Agreements (PPA).

In these projects, the local government usually provides the land or structure for the PV system installation, and the private entity finances, builds, and manages the system itself. Per the agreement, the County is required to buy all the energy produced by the PV system (whether needed or not) at predetermined rates (which is usually cheaper). Pricing scenarios, contract length, and ownership of renewable energy certificates or other revenues from the sale of excess renewable energy within a PPA can vary.

Energy Services Performance Contracting (ESPC): Integrating Solar with Energy Savings Audits.

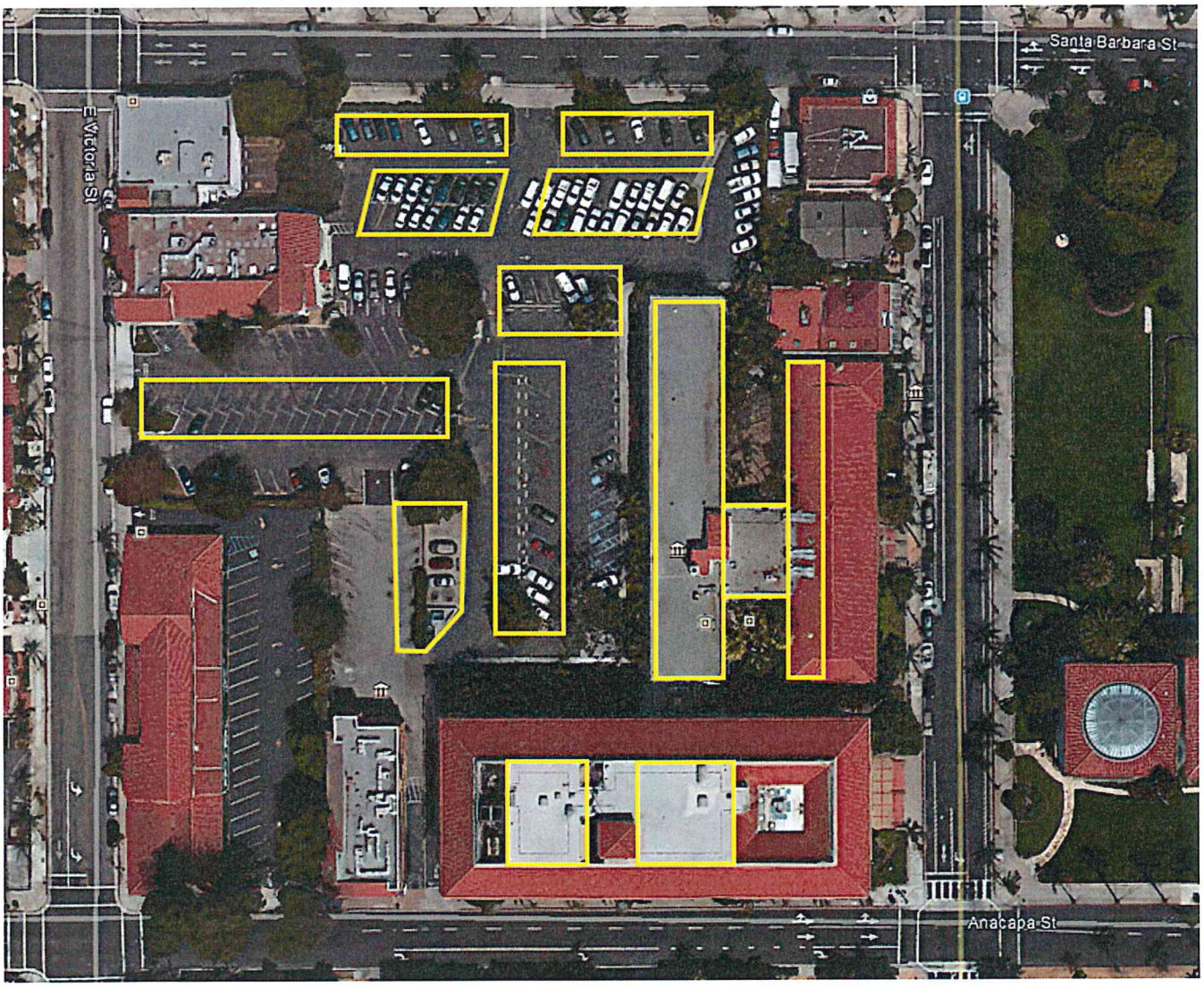
In a typical Energy Savings Performance Contract (ESPC), a local government will engage an energy services provider (also known as an energy services company or ESCo) to conduct an audit of a facility to determine where energy savings can be made. Please see section 5 of this report for the County's proposed strategy related to Energy Performance Contracting.

Usually the Energy Performance Contract would involve an energy audit of a local government facility, which could be more or less detailed based on local government needs. The energy services provider then offers recommendations on effective energy conservation measures. These recommendations typically also consider cost-effectiveness and reasonable measures based on the local government's budget. One recommendation that could result from an energy audit might be the installation of solar PV panels. The energy services company will then install energy conservation measures and guarantee savings for the County. The primary benefit of a performance contracting arrangement is a performance guarantee that ensures that the local government obtains financial savings regardless of whether or not the energy conservation adjustments are effective. Again, please see Section 5 for further details on energy performance contracting.

4 Possible Solar Locations That Will Be Considered

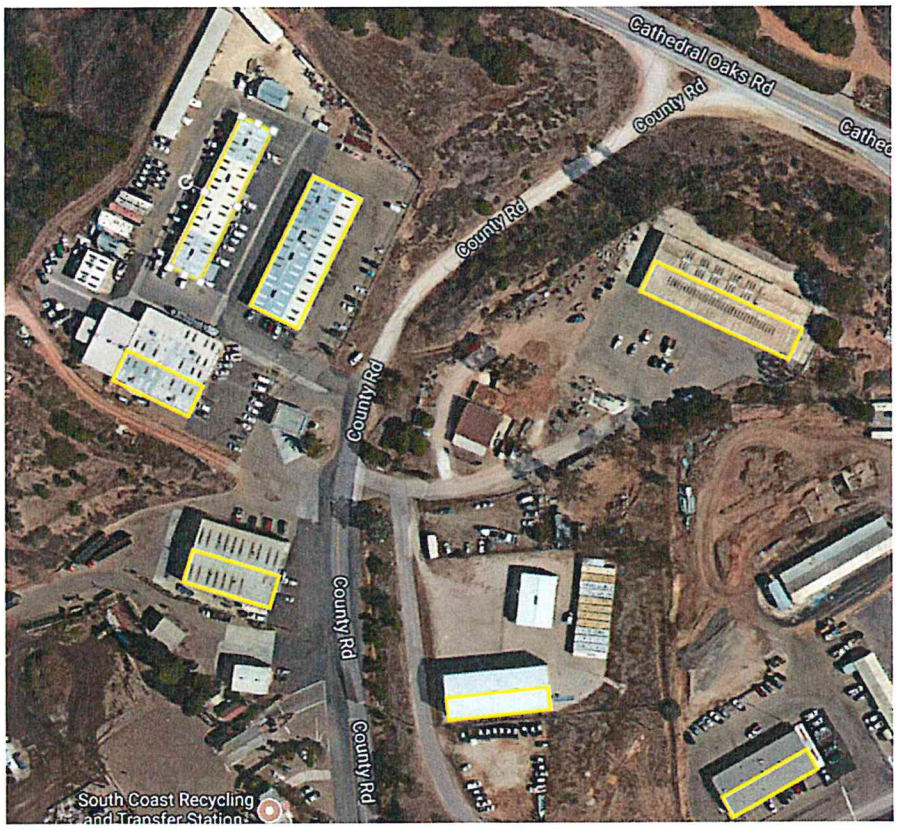
There are numerous variations of panel configurations. Below are some examples of the possible location of solar arrays on County facilities. Each picture has a conceivable configuration or a portion of a configuration that may be possible at several County campuses. When the RFPs are returned, recommendations for placement of solar panels will be evaluated and brought to the Board for consideration.

Downtown Campus Santa Barbara



Emergency Operations Center and Upper Calle Real

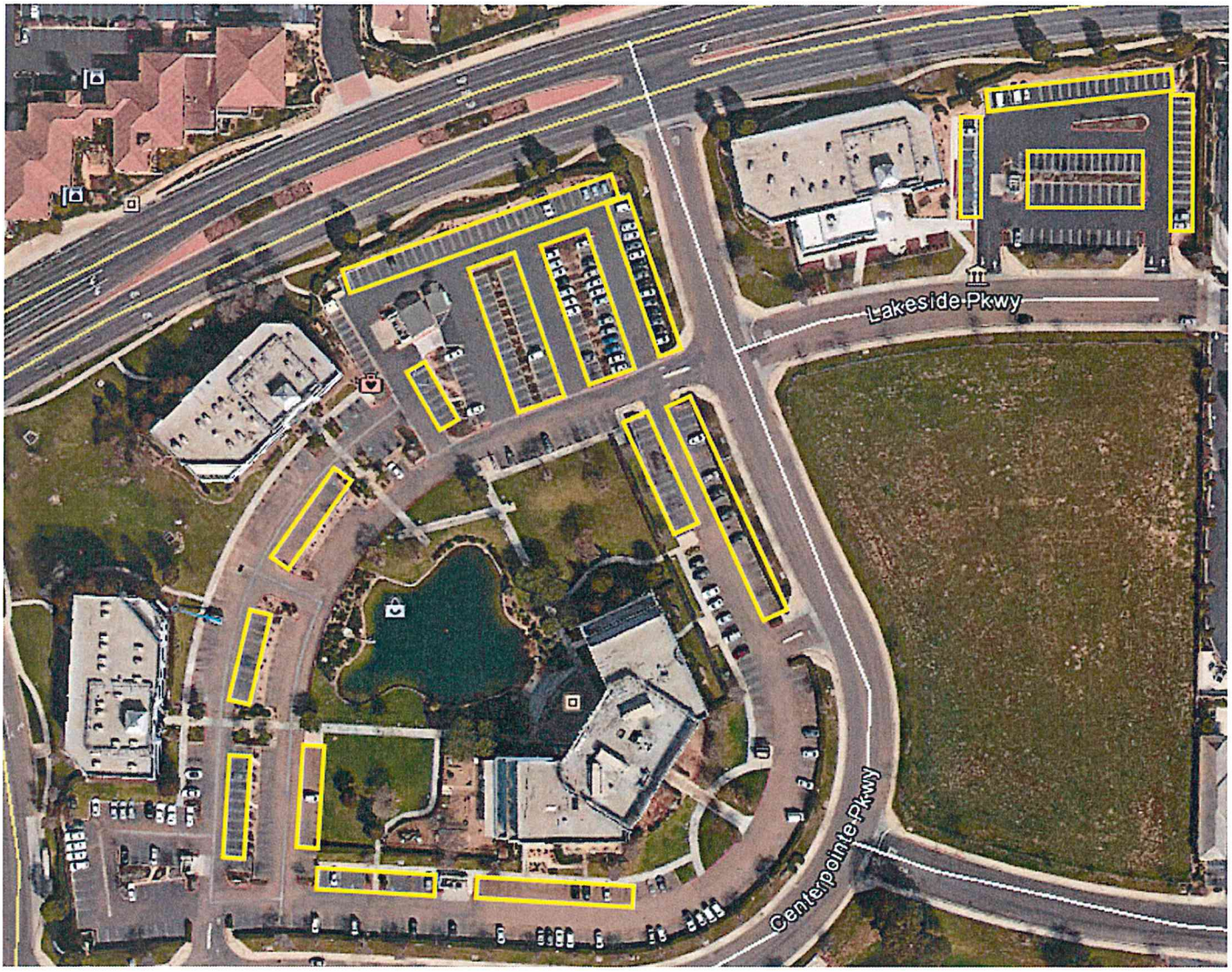
4408 Cathedral Oaks Rd, Santa Barbara
4410 Cathedral Oaks Rd, Santa Barbara
4417 Cathedral Oaks Rd, Santa Barbara



Lower Calle Real Campus

Betteravia Center

2115 CenterPoint Pkwy, Santa Maria
2121 CenterPoint Pkwy, Santa Maria
2125 CenterPoint Pkwy, Santa Maria
511 E. Lakeside Pkwy, Santa Maria

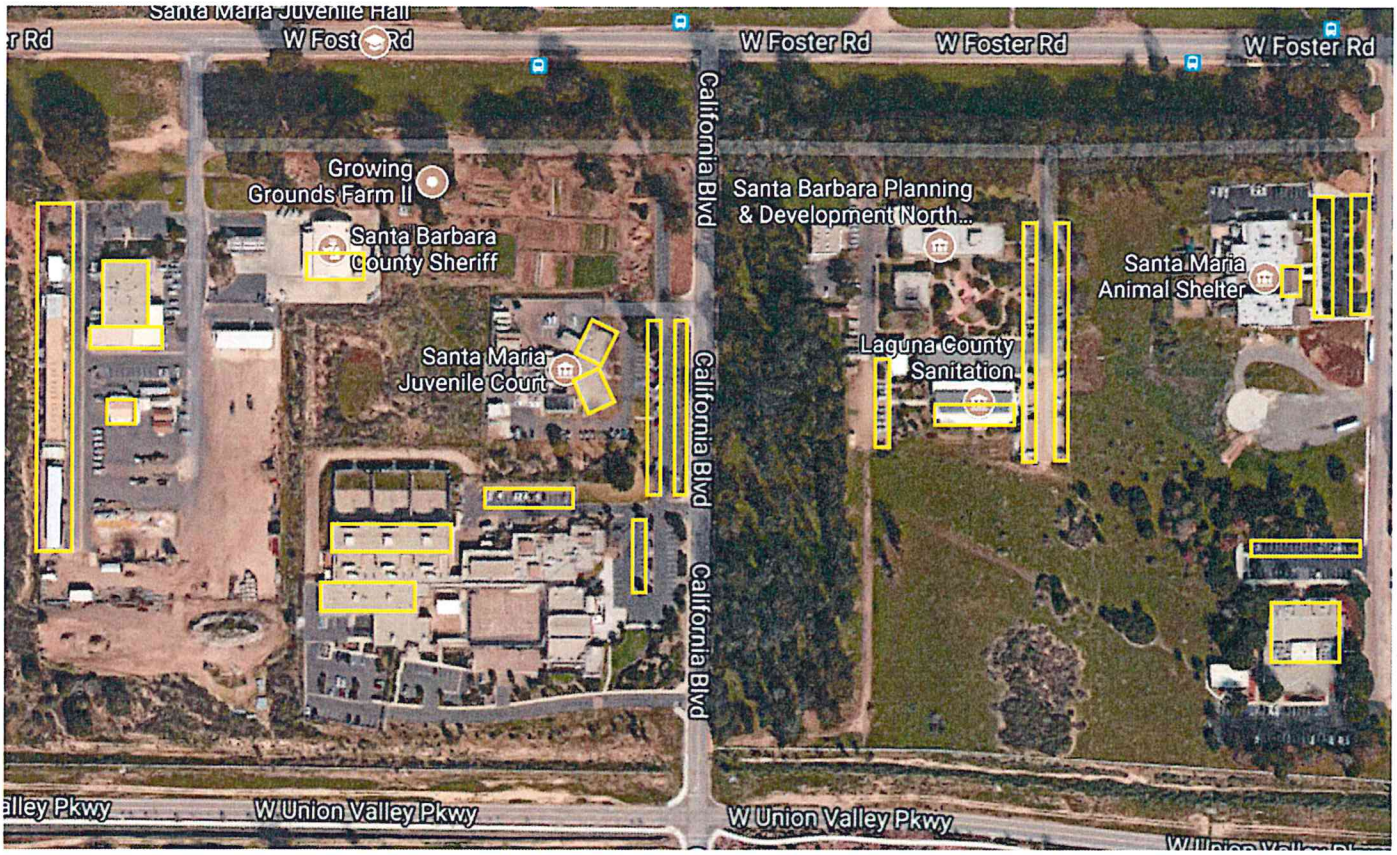


Sheriff Lompoc Station

3500 Harris Grade Rd., Lompoc

Foster Road Complex,

West Foster Road, Santa Maria



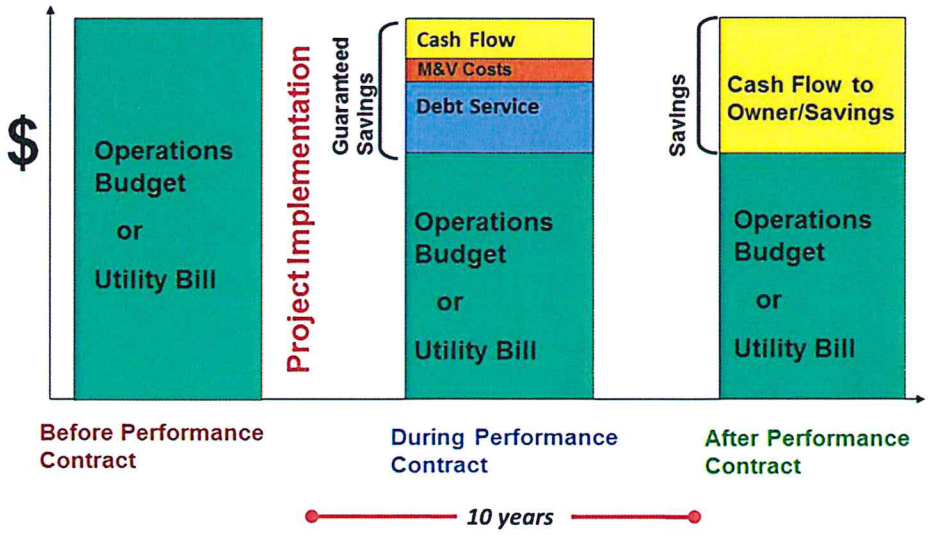
Summary by Zip code: Possible Potential Solar Projects

City/zip	Annualized kwh	Solar PV Max, KWDC	Solar System Quick Estimated Cost at $3.50/Wdc	Solar Production Total Annual
Buellton CA 93427	24,622	16	$ 57,452	$ 5,764
Carpinteria CA 93013	52,867	35	$ 123,355	$ 10,503
Goleta CA 93101	101,656	68	$ 237,198	$ 17,360
Goleta CA 93117	272,412	182	$ 635,628	$ 45,396
Lompoc CA 93436	1,421,644	948	$ 3,317,169	$ 299,086
Los Alamos CA 93440	47,484	32	$ 110,795	$ 12,880
Montecito CA 93108	28,091	19	$ 65,545	$ 5,342
New Cuyama CA 93254	110,024	73	$ 256,722	$ 26,688
Orcutt CA 93455	372,312	248	$ 868,728	$ 76,122
Orcutt CA 93457	15,844	11	$ 36,968	$ 3,621
Santa Barbara CA 93101	3,745,563	2,497	$ 8,792,199	$ 523,753
Santa Barbara CA 93105	1,153,121	769	$ 2,690,616	$ 243,583
Santa Barbara CA 93109	16,386	11	$ 38,234	$ 3,255
Santa Barbara CA 93110	5,200,336	3,467	$ 12,134,118	$ 704,288
Santa Barbara CA 93111	37,280	25	$ 86,986	$ 4,995
Santa Maria CA 93455	3,789,813	2,527	$ 8,842,898	$ 741,331
Santa Maria CA 93458	91,017	61	$ 212,372	$ 22,985
Santa Ynez CA 93460	56,246	37	$ 131,240	$ 12,951
Sisquoc CA 93454	18,472	12	$ 43,102	$ 4,252
Solvang CA 93463	109,510	73	$ 255,523	$ 24,305
Summerland CA 93067	20,116	13	$ 46,937	$ 5,520
Total	**16,684,815**	**11,123**	**$ 38,983,786**	**$ 2,793,979**

5. Energy Upgrades for County Buildings

As previously mentioned in this report, it doesn't make sense to add solar to buildings without first ensuring that the facilities are energy efficient. This allows for the most efficient and economical use of solar or other renewable energy. There are several ways to accomplish this for County buildings. It starts with a financial grade energy audit of all facilities to identify potential energy conservation measures (ECMs). This can be accomplished in several ways including hiring a company to perform the energy audit and identify ECMs. The County could choose to bid each project separately and then hire contractors to complete the projects it chooses to do (lighting upgrades, HVAC replacements, HVAC control upgrades, etc.), The County could also enter into an energy performance contract (discussed below) for the energy audit and to accomplish the work. Either option will require funding that can be secured using traditional debt methods like COPs or some form of a municipal lease. With either funding mechanism, the debt can be serviced or the payments made (in the case of a lease) using the County's existing utility budget since utility expenses will decrease as a result of the energy savings. This would avoid utilizing precious capital dollars for the needed improvements.

Energy Savings Performance Contracting (ESPC) is a budget-neutral approach to make building improvements that reduce energy and water use and increase operational efficiency. The County has numerous HVAC components and controls that need to be replaced and energy performance contracting may be a way to offset the cost of doing so. By partnering with an energy service company (ESCO), the County can use an ESPC to pay for today's facility upgrades with tomorrow's energy savings—without tapping into capital budgets. Once energy conservation measures are identified by performing an energy audit, the savings generated from the County's utility budget can be used to pay for the energy and equipment upgrades. In this scenerio the ESCO is required to guarantee the savings for the life of the project. Again, it avoids the use of capital funds being utilized for these upgrades and repairs but instead sets aside funds from the County's utility budget to service whatever debt is issued to do the projects, or to pay the payments on a municipal lease if that is the funding mechanism used.



Energy Performance Contracting is a turnkey service, sometimes compared to design/build construction contracting which provides customers with a comprehensive set of energy efficiency, renewable energy, and distributed generation measures and often is accompanied with guarantees that the savings produced by a project will be sufficient to finance the full cost of the project. A typical EPC project is delivered by an Energy Service Company (ESCO) and consists of the following elements:

- Turnkey Service – The ESCO provides all of the services required to design and implement a comprehensive project at the customer facility, from the initial energy audit through long-term Monitoring and Verification (M&V) of project savings. This allows the work to be completed with oversight from the County and may be an option given the lack of staff to design and implement the energy projects.

- Comprehensive Measures – The ESCO tailors a comprehensive set of measures to fit the needs of a particular facility, and can include energy efficiency, renewables, distributed generation, water conservation and sustainable materials and operations.

- Project Savings Guarantee – The ESCO provides a guarantee that the savings produced by the project will be sufficient to cover the cost of project financing for the life of the project.

Appendix A: Definitions

County Owned and Operated Buildings and Facilities
Energy for County owned and operated buildings and facilities includes all on-site energy consumption or production used in the building's operation. In addition to energy for indoor environmental quality, it includes fuels used in the operation of emergency power generators, site or roadway lighting, and parking structures, where connected to building level meters.

Energy Efficiency Standard
Refers to the Policy document approval by the County Board of Supervisors August 30, 2016.

Energy Performance Contract (EPC)
A turnkey service, sometimes compared to design/build construction contracting which provides customers with a comprehensive set of energy efficiency, renewable energy and distributed generation measures and often is accompanied with guarantees that the savings produced by a project will be sufficient to finance the full cost of the project.

Energy Services Company (ESCO)
A commercial or non-profit business providing a broad range of energy solutions including designs and implementation of energy savings projects, retrofitting, energy conservation, energy infrastructure outsourcing, power generation and energy supply, and risk management.

Utility Manager System (UMS)
Building energy performance management system that tracks the County's owned and operated building energy consumption data. When paired with building level-metering it can be used to facilitate real time measurement and verification, trending of building system and equipment performance, and response to changes in building performance. The County has establishing a bridge that allows back and forth communication with the County's ENERGY STAR Portfolio Manager Account.

Zero Net Energy
Zero Net Energy (ZNE) describes the performance of a building or facility when it produces as much energy as it consumes on an annual basis. The County's Zero Net Energy Facilities Resolution (Resolution No.: 14-49), defines ZNE as:

> *"A building that, on an annual basis, will consume as much energy as it produces from renewable sources, while maintaining an acceptable level of service and functionality. Zero Net Energy (ZNE) buildings can exchange energy with the power grid as long as the net energy balance is zero on an annual basis."*

Appendix B: List of Resources

- **American Council for an Energy Efficient Economy (ACEEE):** ACEEE provides a comprehensive listing of state policy resources, policy priorities, and utility policies and programs.

  http://www.aceee.org/sector/state-policy/california

- **California Public Utility Commission:**

  http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/Cost-effectiveness.htm

- **California State Government:** A informational resource on Solar in California http://www.gosolarcalifornia.ca.gov/solar_basics/how.php

- **Colorado State Government:** Slides showing information on Net Metering and Grid-Tied Solar.

  https://www.colorado.gov/pacific/sites/default/files/S.8.2a%20SMPA%20Info%20Packet_Net%20Metering%20at%20SMPA.pdf

- **Database of State Incentives for Renewables & Efficiency (DSIRE):** DSIRE is a comprehensive source of information on incentives and policies that support renewables and energy efficiency in the United States funded by the U.S. Department of Energy.

  http://www.dsireusa.org/

- **Energy Design Resources**

  http://energydesignresources.com/resources/publications/other-publications/zne-defined.aspx

- **National Renewable Energy Laboratory:** A Consumer Guide to Solar Electricity http://www.nrel.gov/docs/fy09osti/43844.pdf

- **New Buildings Institute:** The California Public Utility Commission (CPUC) is working with New Buildings Institute to provide resources that will help designers, owners, facilities managers, policymakers and others expand their knowledge about ZNE and encourage development of zero net energy projects. A new ZNE Communications Toolkit is available to share lessons learned from early adopter owners, address commonly asked questions about ZNE, and support advancing communications around California's goals.

  http://newbuildings.org/index.php?q=shareZNE

Appendix C: List of References

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