



BOARD OF SUPERVISORS  
AGENDA LETTER

Agenda Number:

Clerk of the Board of Supervisors  
105 E. Anapamu Street, Suite 407  
Santa Barbara, CA 93101  
(805) 568-2240

**Department Name:** General Services  
**Department No.:** 063  
**For Agenda Of:** September 12, 2023  
**Placement:** Departmental  
**Estimated Time:** 30 minutes  
**Continued Item:** No  
**If Yes, date from:** N/A  
**Vote Required:** Majority

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**TO:** Board of Supervisors  
**FROM:** General Services Kirk Lagerquist, Director (805) 560-1011  
Contact Info: Patrick Zuroske, Assistant Director (805) 568-3096  
**SUBJECT:** Santa Barbara County Energy Efficiency and Renewable Energy Update

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**County Counsel Concurrence**

As to form: Yes

**Auditor-Controller Concurrence**

As to form: N/A

**Recommended Actions:**

That the Board of Supervisors:

- a) Receive and file the Santa Barbara County Energy Efficiency and Renewable Energy Update; and
- b) Determine that the proposed actions are not a “project” as defined by the California Environmental Quality Act (CEQA) Guidelines Section 15378(b) (5), as it is an administrative activity that will not result in direct or indirect changes in the environment.

**Summary Text:**

This item is on the agenda for the Board of Supervisors to receive and file a presentation providing an update on the County of Santa Barbara’s energy efficiency and renewable energy efforts. The presentation will cover a number of topics as they relate to: current electricity providers, approach to energy efficiency, solar infrastructure (existing, current, and future projects), historic funding mechanisms, and key considerations for the Energy Division.

**Background:**

**Overview of County Energy Supply:** The County of Santa Barbara has a long history of energy efficiency, energy conservation, and renewable energy programs. In addition to self-generation, the County of Santa Barbara procures electricity from five sources: Southern California Edison, Pacific Gas and Electric, Santa Barbara Clean Power, Central Coast Community Energy, and Lompoc Electric. Electricity is generated from a variety of sources with natural gas, hydroelectric, nuclear, wind, and solar making up the majority of the sources to the electric utility grid. In most cases, the County procures electricity from Community Choice Aggregators (CCAs) and pays for transmission and distribution fees directly to the Investor Owned Utilities (IOUs). The County currently procures power from Central Coast

Community Energy (3CE) at the 40% renewable energy rate, and Santa Barbara Clean Power at the 100% renewable energy rate. Lompoc Electric also provides electricity with a portfolio of 35% renewable energy. In total, Santa Barbara County's electricity portfolio is made up of 53% renewable energy, which includes 18% generated from County-owned solar arrays.

**Zero Net Energy Efforts:** The General Services Capital Division has worked diligently to develop a robust and successful Zero Net Energy (ZNE) program for all new ground-up construction projects. Fire Station 27 in New Cuyama was recently completed and is the County's first ZNE facility. The Regional Fire Dispatch & Office of Emergency Management Communications facility is currently under construction and designed to be ZNE. The new Probation Headquarters building in downtown Santa Barbara will also be ZNE and is in final stages of design.

**Photovoltaic Solar Array Assets:** The County of Santa Barbara currently owns 2.13 Mega Watts (MW) of solar assets spread across six locations. These projects have been funded in a way to provide County ownership of the systems. This has been accomplished by leveraging grants and incentives, low-interest loans and some general fund dollars. There are also four County solar projects in development totaling 1.32 MW. Additionally, County staff have identified ten potential sites, totaling 4.38 MW of unfunded solar projects, most of which have been submitted for Net Energy Metering applications. Current and future projects all include a Battery Energy Storage System (BESS), which would qualify them as "microgrids". The total estimated cost for the ten future microgrid projects is approximately \$31 Million.

**Energy Efficiency & Resiliency Roadmap:** Staff are currently working on a comprehensive strategy for long-term capital investments in energy infrastructure; continued management of our current and future energy systems related to our facilities; and to formulate a roadmap for an efficient balance of various energy efficiency and resiliency efforts. This strategy will create a toolkit for funding and project approach options; identify areas of improvement that will move us towards our ZNE and Climate Action Plan goals; and create performance measurements that can help guide funding allocations. Our current efforts include the following:

- **RFQ for Strategy Development:** County staff is developing a Request for Qualifications (RFQ) that will assist in creating a pool of consultant partners that will allow us to evaluate funding options and regulatory programs to maximize our options to leverage future energy efficiency improvements. The result of creating these consulting partnerships will allow the County to be nimble when seeking grant or low interest loan programs.
- **PV Solar Array Expansion:** The partnerships created by the RFQ effort will also provide conceptual design and evaluation of PV solar array projects at our County-owned sites. Moving potential projects closer to shovel-ready status will put us into a position to move faster when funding opportunities arise. There are opportunities for PV expansion on projects ranging from the PSRN program to existing parking lot and building stock.
- **Power Purchase Agreements (PPAs):** While the County has not previously entered into Power Purchase Agreements (PPAs), this funding mechanism will be evaluated as a possible option for implementation as it fits into our overall County strategy. Finding a balance between County-owned assets and systems developed through PPA will be a key consideration of our program.

- Zero Net Energy (ZNE) Efforts: Since its development as a County policy in 2014, General Services staff have been incorporating ZNE design principles into all new, ground-up projects. While staff have made some in-roads into retrofitting existing facilities during renovation and retrofit projects, securing funding for movement toward full ZNE status for these projects has been challenging. Replacing aging equipment and building infrastructure with more energy efficient alternatives is the next phase of the ZNE program. This will include further expansion of our LED lighting upgrades; replacing aging HVAC infrastructure with innovative systems such as heat pumps and mini-split units; installing equipment controls and Building Energy Management Systems (BEMS); and exploring opportunities to transition gas-powered equipment to all-electric alternatives. Electrification of our buildings is the best mechanism to achieve ZNE and Climate Action Plan goals.
- Future Acquisition of Sites for PV Solar Expansion: General Services, CEO, and Planning & Development staff are evaluating sites that could be brought into the County inventory for use as solar farms to increase our local energy production.
- Development of Microgrids at Current County-Owned Sites: Increasing our energy production and management system flexibility will enhance our overall energy efficiency efforts and increase resiliency. Evaluating our campus' for microgrid/macrogrid development through increased battery storage, facility interconnections and increased use of solar and possibly wind power will be a next-step objective for our roadmap to obtain an efficient balance of various energy efficiency and resiliency efforts.
- Continue Building Data Collection and Reporting System: Staff have made significant progress in collecting and evaluating energy use data of the County's varied facility and property inventory. We are committed to modernizing these data collection efforts as part of capital improvements and deferred maintenance programs, however, funding these advancements in technology systems is a challenge. Staff is evaluating potential funding sources and will return to the Board with future updates. Improving this system, including the development of a more robust BEMS infrastructure in our facilities will be an on-going goal of our program.

As Staff continues to build a strategy for energy efficiency and resiliency, we will work with your Board to assess and present the best fit solutions, balancing financial viability, environmental benefit, social benefit, speed of implementation, and support in achieving adopted policies. We look forward to presenting our Energy Efficiency and Renewable Energy progress and challenges to the Board on a regular basis.

**Fiscal and Facilities Impacts:**

NA

**Fiscal Analysis:**

**Narrative:** Staff prioritize projects that have favorable payoff periods and positive net present value (NPV). For each energy project, a cost-benefit analysis is performed that evaluates capital costs, equipment lifespan, reduced energy consumption, cost of electricity, ongoing maintenance costs, occupant

health and safety, ability to meet legal mandates, environmental benefits, aesthetic benefits, and functional benefits.

**Special Instructions:**

None

**Attachments:**

Presentation - Santa Barbara County Energy Efficiency and Renewable Energy Update

**Authored by:**

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