



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:** Community Services  
Department  
**Department No.:** 057  
**For Agenda Of:** September 10, 2019  
**Placement:** Departmental  
**Estimated Time:** 1 hour  
**Continued Item:** No  
**If Yes, date from:** N/A  
**Vote Required:** Majority

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**TO:** Board of Supervisors

**FROM:** Department George Chapjian, Community Services Director  
Director(s) (805) 568-2467

Contact Info: Marisa Hanson-Lopez, Sr. Program Specialist  
(805) 568-3530

**SUBJECT:** Strategic Energy Plan Report

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**County Counsel Concurrence**

As to form: Yes

Other Concurrence: Risk Management, General Services,  
Planning and Development, Office of Emergency  
Management

As to form: Yes

**Auditor-Controller Concurrence**

As to form: Yes

**Recommended Actions:**

That the Board of Supervisors:

- A. Consider and adopt the Strategic Energy Plan (SEP) for the County of Santa Barbara (Attachment A); and
- B. Direct Community Services, Planning and Development, General Services and Office of Emergency Management staff to:
  - i. Pursue implementation of Phase One recommended actions, including: 1) Develop an Energy Assurance Plan, 2) Develop a Utility Scale Solar Ordinance and; 3) Update the Uniform Rules for Agricultural Preserves and Farmland Security Zones; and
  - ii. Pursue implementation of Phase Two recommended actions, including: 1) Update the Coastal Zoning Ordinance, 2) Establish best practices for solar + storage permitting procedures, 3) Create a one-stop shop education resource and conduct outreach and; 4) Explore a community solar project; and

- iii. Return to the Board as needed for further direction or approval prior to implementation; and
- C. Determine that the recommended actions do not constitute a project subject to environmental review under the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15378(b)(4), as the actions are the creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project, and Section 15378(b)(5), as the actions are the organizational and administrative activities of governments that will not result in direct or indirect physical changes in the environment.

**Summary Text:**

To meet local climate goals, stimulate renewable energy development, and improve grid reliability, the Board directed staff on September 11, 2018 to engage Optony Inc. (Optony) to develop a Strategic Energy Plan (SEP) (Attachment A) in collaboration with the Cities of Carpinteria and Goleta. The City of Santa Barbara also pursued a similar project with the same consultant.

To develop the SEP, Optony identified the total renewable energy potential in the County; specific areas or sites well-suited to renewable energy projects; current barriers to development; and, recommended actions to overcome those barriers.

Extensive community engagement was conducted to identify barriers to renewable energy development and solutions to mitigate or overcome those barriers. Those barriers and high-level recommended actions, including development phase and timeline, are:

<b>Barrier</b>	<b>Recommended Action</b>	<b>Phase</b>	<b>Timeline</b>
County Institutional	Develop an Energy Assurance Plan to ensure reliability at critical facilities	One	12-24 months
Regulatory	Develop a Utility-Scale Solar Ordinance; update Uniform Rules for Agricultural Preserves	One	12-18 months
	Update Coastal Zoning Ordinance, and Residential Solar and Storage Permitting Procedures	Two	24-30 months
Education and Public Awareness	Create a trusted educational resource to provide current information on costs and benefits of renewable energy	Two	12-18 months
Utility and Infrastructure	Explore community solar project opportunities with Investor Owned Utilities or Monterey Bay Community Power	Two	24-36 months
Financial and Funding	Create affordable financing options and expand programs by diversifying funding streams	Three	18-36+ months

Optony estimates the total generation capacity for all renewable sources is between 1,323-1,992MW, or enough to power between 700,000-1.2 million households. Solar photovoltaics (PV) is identified as having the highest potential. Optony also identified a number of County-owned and private sites on which they conducted detailed technical assessments and financial analysis for solar PV projects.

Accessing the renewable energy potential identified requires addressing the barriers that exist. If those barriers are removed, development of local renewable energy generation projects could support community choice energy programs such as Monterey Bay Community Power, which will launch in Santa Barbara County in January, 2021. It could also provide resiliency and reliability at critical facilities, and support creation of local construction and ongoing operations and maintenance jobs.

Staff recommends adopting the SEP, and directing staff to begin development of the Phase One and Phase Two actions utilizing \$650,000 remaining in Community Choice Energy (CCE) fund balance.

**Background:**

Development of a SEP was motivated by the County's Energy and Climate Action Plan (ECAP), which seeks to reduce greenhouse gas emissions (GHG) through strategies such as a local Community Choice Energy (CCE) program, and increasing adoption of renewable energy. In October 2017, with the feasibility of a local CCE program unclear and GHG emissions trending up in the unincorporated County, the Board directed staff to pursue a request for proposals for strategic energy planning services as both a complement to a potential future CCE program and a beneficial standalone strategy.

On September 11, 2018, the County entered into a contract for services with Optony Inc. to identify opportunities for local clean energy projects, determine barriers to development that currently exist, design solutions to overcome those barriers, and develop a roadmap of recommended actions the County may pursue to stimulate clean energy development. The Cities of Carpinteria and Goleta participated via a memorandum of understanding, and the City of Santa Barbara pursued a similar parallel project with the same consultant.

***Stakeholder Engagement***

In coordination with staff, Optony conducted outreach to both internal and external stakeholders. Internal kick-off meetings were held with Public Works, Planning and Development, General Services, Housing and Community Development, Sheriff, Fire and the Office of Emergency Management. The purpose of internal departmental meetings was to understand work already completed or planned related to SEP goals, solicit input on potential opportunities and challenges, and understand broader economic and community development goals that the SEP should support. One overarching priority that emerged from the meetings was the need for grid reliability and resiliency.

In addition to engaging internal stakeholders, extensive outreach was conducted to public agencies, property owners, businesses, environmental non-profits, agricultural landowners, and the community at large. External stakeholders were also asked to identify key issues via survey and a series of six community workshops. Workshop participants were asked to provide feedback on the draft SEP, and encouraged to take advantage of free solar PV site assessments.

***Renewable Energy Resource Potential***

Optony conducted county-wide statistical modeling and mapping to assess the resource availability, and estimate the total amount of renewable energy generation potential of the five types of power generation eligible under California's Renewables Portfolio Standard (RPS): solar, wind, biomass/biogas, small hydroelectric, and geothermal.

Solar potential exceeds every other resource, however, there is sufficient potential, particularly in biomass/biogas and wind power to justify further investigation.

Renewable Resource	Generation Capacity (MW)	Annual Generation (GWh)	Households Powered
Solar PV	1,251 - 1,857	1,700-2,925	595,000 - 1,023,000
Biomass	44 - 78	249 - 375	87,000 - 131,000
Wind	21 - 42	45 - 129	15,500 - 45,000
Biogas	3 - 7	13 - 20	4,500 - 7,000
Hydro	3 - 6	6 - 16	2,100 - 5,600
Geothermal	1 - 2	7 - 13	2,400 - 4,500

**Individual Site Analyses**

Optony worked closely with General Services staff to identify County-owned sites on which to conduct detailed technical and financial analysis of potential solar PV project opportunities. Using information collected during pre-screening sessions and in-person site visits, viable sites on rooftops, parking lots, and open land were analyzed. Four County-owned sites that were analyzed have an estimated combined total output of over 10,000 MWh/year, or enough to power 3,400 homes.

Site	Site Type	Interconnection	System Size (kW)	Energy Output (MWh/year)
Santa Maria Mental Health Building	Roof/Carport	Behind the Meter	161	258
Northern Branch Jail (1)	Roof/Carport	Behind the Meter	1,120	1,813
Northern Branch Jail (2)	Ground Mount	Front of Meter	4,450	7,895
Fire Station 11	Roof	Behind the Meter	30	40
<b>Total County Sites</b>			<b>5,761 kW<sup>1</sup></b>	<b>10,006 MWh<sup>2</sup></b>

In addition to County facilities, Optony assessed 15 privately-owned sites within the unincorporated County. Of the private sites analyzed, both behind-the-meter connections for on-site use, and front-of-meter projects, for selling directly to the grid were included. All private front-of-meter projects identified are sited on agricultural land, and with the exception of one site in Carpinteria, all are in northern Santa Barbara County. The estimated combined total output of projects identified on private sites is over 123 GWh/year<sup>3</sup>, or enough to power 42,000 homes.

<sup>1</sup> One thousand (1,000) watts (W) are equal to one (1) kilowatt (kW)

<sup>2</sup> One thousand (1,000) kilowatts (kW) are equal to one (1) Megawatt (MW)

<sup>3</sup> One thousand (1,000) megawatts (MW) are equal to one (1) Gigawatt (GW)

Site analyses were offered at no cost to site owners, however identifying interested landowners was more difficult than anticipated. In addition to workshops, Optony reached out directly to site owners via phone and email but received little response or interest.

### ***Barriers and Recommended Actions***

Barriers to development were determined through engaging both internal and external stakeholders. The scope of barriers ranged from local and unique to Santa Barbara County, to state and federal concerns. The SEP focuses on obstacles and recommended actions most relevant or particular to Santa Barbara County.

Barriers are grouped into five program areas. For each barrier identified, one or more potential solutions or opportunities are suggested. The most impactful solutions to each barrier are analyzed and explained in detail, and include action plans, estimated timelines, and required staffing. Cost ranges for each action are estimates. Recommended actions have been prioritized and divided into three phases for development. Phases for development and implementation were determined based on current departmental workplans, potential for impact, and budgetary considerations.

Phase one recommended actions – development of a utility-scale solar ordinance, updating the Uniform Rules for Agricultural Preserves, and developing a countywide Energy Assurance Plan – have been identified by staff as having the highest potential for stimulating utility-scale solar development, and addressing electricity reliability and resiliency at critical facilities. The suite of recommendations ranges from near to long-term efforts, and will likely require county investment and external funding.

Type of Barrier	Barrier(s)	Description	Recommended Actions	Timeline	Phase	Responsible Department	Estimated Costs <sup>4</sup>
<b>County Institutional</b>	Energy Assurance Plan (EAP)	County does not have a formal EAP	Create an EAP to ensure reliability at critical facilities	12-24 months	One	<i>Lead:</i> Sustainability Division <i>Support:</i> OEM, General Services	\$250,000 - \$350,000
	Limited County-owned Parcels	County owns limited parcels for development					
<b>Regulatory</b>	County LUDC	Utility-scale solar projects limited to Cuyama Valley	Develop Utility-scale Solar Ordinance	12-18 months	One	<i>Lead:</i> Planning & Development <i>Support:</i> Sustainability Division	\$300,000 - \$350,000 for the Utility-Scale Solar Ordinance  Other cost estimates to be developed as directed
	Williamson Act	Large amounts of ag land enrolled in Williamson Act constrains use of ag land for utility-scale renewable projects	Update Uniform Rules for Ag Preserves	12-18 months	One		
	Coastal Zoning Ordinance	Utility-scale renewable energy prohibited in coastal areas	Update Coastal Zoning Ordinance	24-30 months	Two		
	Solar + Storage Permitting	Lack of standardized solar + storage permitting	Establish best practices to enhance solar and storage permitting procedures	24-30 months	Two		
<b>Education and Public Awareness</b>	Cost Awareness of Renewable Energy	Lack of public awareness of the costs/benefits of renewables	Create a One-Stop-Shop education center to act as a hub for renewable energy information	12-18 months	Two	<i>Lead:</i> Sustainability Division	\$50,000 - \$75,000
<b>Utility and Infrastructure</b>	Transmission Grid	High-potential sites far from transmission grid have increased costs. County served by two separate, unintegrated utilities	Consider forming, or joining an existing CCE <sup>5</sup>	15 months	Underway	<i>Lead:</i> Sustainability Division	\$150,000 - \$200,000
			Community solar project	24-36 months	Two	<i>Support:</i> General Services	
<b>Financial and Funding</b>	Financing Mechanisms	Lack of financing options for renewable energy projects	Replicate loan-loss reserves used in past programs to create a low-interest funding source	18-24 months	Three	<i>Lead:</i> Sustainability Division	\$285,000 - \$335,000
	Funding Sources	County's funding focuses heavily on energy efficiency, lacks funding for distributed energy generation	Diversify funding streams with regional, state, and federal grants	Ongoing	Underway		
	Altered Time of Use (ToU) Rates	Recent changes in electricity rates will lower value of future solar production	Provide financial incentives to fill gaps in economic viability	36+ months	Three		
<b>Estimated Implementation Costs</b>					<b>\$1,035,000 - \$1,310,000+</b>		

<sup>4</sup> Estimated costs are one-time, and inclusive of staff time, consultants, and some materials that may include, but are not limited to, physical projects, hard collateral, and webhosting. Project costs and incentives are not included.

<sup>5</sup> Since the writing of the Strategic Energy Plan, the Board of Supervisors elected to join Monterey Bay Community Power.

**Fiscal and Facilities Impacts:**

Budgeted: No

**Fiscal Analysis:**

The Sustainability Division has \$650,000 in Community Choice Energy (CCE) fund balance, plus the additional \$391,000 your Board appropriated for FY 19-20. Staff recommends the \$650,000 in CCE fund balance be used to implement SEP recommendations to assist with achieving the more aggressive ECAP greenhouse gas reduction goal of 50% below 1990 by 2030 set by the Board on December 11, 2018, and bolster resiliency.

Planning and Development have budget allocated to develop a utility-scale solar ordinance, but would require additional funding to undertake any other recommended actions within the SEP.

**Key Contract Risks:**

N/A

**Staffing Impacts:**

No additional staffing requests are being made at this time.

**Special Instructions:**

Please send one copy of the minute order to Marisa Hanson-Lopez.

**Attachments:**

Attachment A: County of Santa Barbara Strategic Energy Plan

**Authored by:**

Marisa Hanson-Lopez, Sr. Program Specialist, Sustainability Division