

Lenzi, Chelsea

From: Craig Lewis <craig@clean-coalition.org>
Sent: Wednesday, September 11, 2019 9:02 AM
To: Lavagnino, Steve; Williams, Das; Hart, Gregg; Hartmann, Joan; Adam, Peter
Cc: sbcob; Elliott, Darcel; McShirley, Kadie; Bertrand, Ethan; Kruzel, Ashley BOS D2; Litten, Jefferson; Fischer, Gina; Nelson, Bob; Bantilan, Cory; Biely, Yvonne; Grey, Skip; Watkins, Ashley; Hanson, Marisa; Wong, Garrett; Gregory Young; Ben Schwartz; Angeline Foshay
Subject: Proposed amended definition of Utility-Scale Solar -- and other Clean Coalition input
Attachments: CC Specific SB County SEP Comment Letter (04_bs, 09 Sep 2019).docx; Proposed amended definition of utility-scale solar in SB County w Direct Relief example (07_cl, 11 Sep 2019).docx

Caution: This email originated from a source outside of the County of Santa Barbara. Do not click links or open attachments unless you verify the sender and know the content is safe.

Dear Santa Barbara County Supervisors,

I want to thank you for your leadership on approving the County's Strategic Energy Plan (SEP) yesterday -- and doing so in nearly unanimous fashion! Personally, I count Supervisor Adam's thoughtful considerations and friendly commentary as being highly favorable to the ultimate success of the Goleta Load Pocket (GLP) Community Microgrid and the renewables-driven resilience it will provide the Santa Barbara region, directly in the South County and as a showcase for similar Community Microgrids in the North County and well beyond.

As promised, please find attached the Clean Coalition's brief on the amendments that are needed to the County's definition of Utility-Scale Solar. The amendments are simple and only needed in two places throughout County code to ensure that the opportunity for solar on built environments is not limited in an unfavorable manner that is entirely unique to Santa Barbara County. The two-page brief is an easy read, covering the following items and including an important visual example:

- Existing definition of Utility-Scale Solar.
- Amended definition of Utility-Scale Solar.
- Specific references to the only two instances where the definition appears in Santa Barbara County code.
- Direct Relief case-study illuminating the critical importance of amending the definition.

Additionally, I am forwarding the Clean Coalition's SEP comments that were submitted late Monday evening (our apologies) but that are comprehensive and worthy of your attention. Now, you have all of the Clean Coalition's SEP input in a single package.

Finally, I want to emphasize the importance of aligning the go-forward SEP activities with the Goleta Load Pocket (GLP) Community Microgrid, which is a highly advanced initiative that stages the Santa Barbara region for renewables-driven resilience. My recent article on achieving resilience through renewables-driven Community Microgrids provides a succinct and colorful overview:

https://www.energycentral.com/c/ec/achieving-resilience-through-renewables-driven-community-microgrids?utm_medium=eNL&utm_campaign=resource_net&utm_content={numberofemployees}&utm_source=2019_09_04

The Clean Coalition looks forward to robust collaborations with the County -- and all the relevant municipalities and other key stakeholders operating within it.

Thank you again for your leadership on accelerating the transition to renewable energy.

Power On!

Craig Lewis
Executive Director
Clean Coalition
Santa Barbara | Menlo Park | Denver
650-796-2353 mobile
craig@clean-coalition.org

----- Forwarded message -----

From: **Ben Schwartz** <ben@clean-coalition.org>
Date: Mon, Sep 9, 2019 at 6:20 PM
Subject: Clean Coalition Supports the Strategic Energy Plan and Urges Immediate Approval
To: <steve.lavagnino@countyofsb.org>, <dwilliams@countyofsb.org>, <ghart@countyofsb.org>, <jhartmann@countyofsb.org>, <peter.adam@countyofsb.org>, <sbcob@co.santa-barbara.ca.us>
Cc: <delliott@countyofsb.org>, <kmshirley@countyofsb.org>, <ebertrand@countyofsb.org>, <Ashley.Kruzel@countyofsb.org>, <jlitten@countyofsb.org>, <gfischer@countyofsb.org>, <bob.nelson@countyofsb.org>, <cory.bantilan@countyofsb.org>, <yvonne.biely@countyofsb.org>, Craig Lewis <craig@clean-coalition.org>, Gregory Young <gregory@clean-coalition.org>, Angeline Foshay <angeline@clean-coalition.org>

Dear Santa Barbara County Supervisors,

Attached to this email is a comment letter from the Clean Coalition in support of the Santa Barbara County Strategic Energy Plan. The Clean Coalition is a firm believer that having a clear roadmap is an important step towards developing renewable energy and resilience, which are both desperately needed throughout the Goleta Load Pocket. This SEP is a good first step in the right direction, and with Clean Coalition suggestions, it can be even more effective.

The Clean Coalition advocates that the County Board of Supervisors directs staff to begin implementation of long term solutions with Clean Coalition amendments, while taking short term actions to streamline development of projects on built environments. This will most effectively allow the region to unleash the potential of renewable energy.

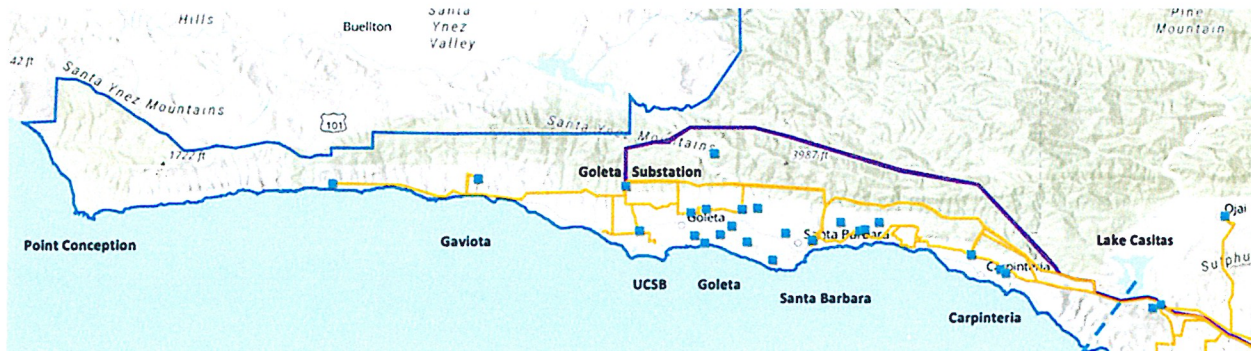
Best regards,

Ben Schwartz
Policy Associate
Clean Coalition

August 9, 2019

To the Santa Barbara Board of County Supervisors,

The Clean Coalition fully supports the ambitious renewable energy goals set by the Board and the cities of Goleta and Carpinteria. Achieving 100% renewable procurement (in Goleta) and reducing the County emissions levels by 50% of 1990 levels by 2030 will certainly require taking multiple large and progressive steps in a very short period of time. We applaud the comprehensive Strategic Energy Plan (SEP) written by County staff and Optony as a first step towards securing Santa Barbara's clean energy future. The Clean Coalition advocates that the board approve the SEP, emphasizing a few key directives so that staff may ensure timely and effective implementation of Phase One and Phase Two recommended actions. Amending, approving, and implementing the Year One and Year Two action plans as soon as possible is essential to catalyze renewable energy development within the Goleta Load Pocket.



Map of the Goleta Load Pocket (GLP)

With the recent fires and subsequent mudslides, southern Santa Barbara County has proven to be both disaster prone and transmission vulnerable. In a 70-mile stretch of California coastline from Point Conception to Lake Casitas, called the Goleta Load Pocket (GLP), there are only two transmission lines, which both run on the exact same transmission towers through tens of miles of mountainous terrain that is rated at the highest fire risk level - resulting in the GLP being extremely vulnerable to transmission outages, including during Public Safety Power Shutoffs (PSPS). The GLP's single point of interconnection to the transmission system exists at the Goleta Substation, and as indicated, if one of the transmission lines goes out, the second and only other transmission line will go out too; and the GLP will completely lose the source of vast majority of the energy that serves it. While there are several distribution lines

routed along the coast through Carpinteria that can be energized in the case of a transmission outage, they would not provide enough electricity to power the entire area. As outlined by the Clean Coalition's Goleta Load Pocket Community Microgrid Initiative¹, 200 MW of solar and 400 MWh of energy storage need to be interconnected with the GLP in order to provide the GLP 100% resilience against a complete transmission outage. This can be achieved through the construction of solar on built environments (rooftops, parking lots, and parking structures). Although 200 MW of solar sounds daunting, it represents just five times the amount of solar that is currently installed in the region, and the Clean Coalition has assessed that 200 MW of additional solar will require 7% of the commercial-scale solar siting potential on GLP rooftops, parking lots, and parking structures - assuming all 200 MW of solar is sited on built environments, which is being very conservative, since some solar will definitely be deployed on residential rooftops, and some will potentially be deployed on open ground as well.

With respect to the 400 MWh of energy storage, Southern California Edison has already proposed to deploy 280MWh of energy storage from their Local Capacity Requirements solicitation process, accounting for 70% of the 400MWh needed. Reaching these targets has become more urgent given the announcement by Southern California Edison (SCE) that the first PSPS in the Santa Barbara County region occurred on September 7th. As a region subject to planned outages and frequent natural disasters, improving energy resilience is essential to ensuring the safety and quality of life for Santa Barbara County residents.

The Clean Coalition has several recommendations that go beyond the Strategic Energy Plan to catalyze local opportunities for the siting and installation of renewable energy and energy storage within the GLP, as delineated in the following pages.

Changing the definition of "Utility-Scale Solar"

One of the easiest barriers that the County can fix in streamlining the solar development is to correct the definition of Utility-Scale Solar so that it does not include solar on built environments like rooftops, parking lots, and parking structures – regardless of whether the projects are interconnected behind-the-meter (BTM) or front-of-meter (FOM). The County's current definition of Utility-Scale Solar currently includes FOM solar on built environments, which preempts such projects from participating in certain market opportunities through SCE and/or Monterey Bay Community Power (MBCP), including Feed-In Tariff (FIT) and community solar opportunities. Importantly, solar on built environments are exempted from the

¹ Link for the Clean Coalition's Goleta Load Pocket Community Microgrid Initiative <https://clean-coalition.org/community-microgrids/goleta-load-pocket/>

<https://clean-coalition.org/community-microgrids/goleta-load-pocket/>

California Environmental Quality Act (CEQA) through automatic negative declarations, and Santa Barbara County's currently flawed Utility-Scale Solar definition is the only one the Clean Coalition has ever encountered that includes any type of solar on built environments. Additionally, this one simple definitional change can be done quickly and avoid the certain delay in implementing the SEP recommendation for a Phase Two ordinance that redefines Utility-Scale Solar to include CEQA-challenged, ground-based solar throughout the County.

- The Clean Coalition agrees with the assessment in the SEP and is strongly in favor of amending the definition of Utility-Scale Solar to not include solar developments on any type of built environment (rooftops, parking lots, and parking structures), regardless of project size.
 - The new definition would need to be changed in two places, the Land Use Development Code and the other in the Comprehensive Plan (Land Use Element).

Amending the Coastal Zoning Ordinance

The SEP made it quite clear that the Naval Exclusion Zone that covers the entire coastline in the Santa Barbara County is an obstacle for any type of renewable projects near the coast, including offshore wind projects.

- Allow the construction of solar on built environments to proceed without a Coastal Development Permit (CDP), provided the project in question is compliant with all other provisions of the county code.
 - There should be no restrictions relating to: on-site consumption, Net Energy Metering (NEM), Virtual Net Energy Metering (VNEM), or community solar programs.
- Amend the Coastal Zone Ordinance to allow for onshore and offshore wind projects to be approved by the county, dependent on approval of a Coastal Development Permit (CDP).
 - Currently both onshore and offshore oil and natural gas projects are allowed (under Division 9 of the Coastal Zone Ordinance); hence, there is no reason why wind projects should not also be approved.
 - Apply pressure to the appropriate bodies to grant exceptions to the Naval Exclusion Zone in the Point Conception area of the GLP, which has excellent wind resources.

The Goleta Load Pocket Community Microgrid as a fundamental component of the EAP

The Clean Coalition agrees that it is of paramount importance that the County develop an Energy Assurance Plan (EAP) with contingency plans for PSPS and actual disasters like fires, debris flows, and

earthquakes that cause a transmission outage. The SEP did a great job making the EAP an immediate priority, so the Clean Coalition wants to provide some recommendations to help guide this process effectively.

- Develop an EAP that centers around the GLP Community Microgrid Initiative goals, including the development of 200MW of solar and 400 MWh of storage within the GLP, as a fundamental component to secure energy resilience for the region.
- Consider methods to apply pressure to the CCA to promote renewables-driven microgrids to help unleash the potential of resilient renewable energy throughout the GLP.
- Pressure Southern California Edison to install grid isolating switches throughout the GLP.
 - The SEP identifies that during the Thomas Fire, the Ellwood peaker plant was unable to provide energy because of technical issues. If proper grid isolating switches were in place, this would have not been the case. Of course, the Ellwood peaker needs to be replaced with solar and storage, but the need for proper grid isolating switches remains the same.
- Prioritize resilience for all energy planning. This should include pressuring SCE to focus on resilience in the GLP and the CCA to roll out programs for local renewables and other distributed energy resources.
 - Importantly, resilience must be properly valued and compensated.

Getting Municipal Properties in Play

The County should prioritize considering municipal properties for renewable resilient backup power. Since it has sole jurisdiction, it can act quickly.

- As part of this Solar Siting Survey, the county should consider solar+storage opportunities for all municipal facilities.
 - The SEP mentions that in the South County alone, the County is in the process of completing an energy efficiency audit of over 50 buildings, covering 823,000 square feet; these buildings should be evaluated for solar and storage at the same time.

Implementing a Feed-in Tariff²

² Explanation of a Feed-in Tariff
<https://clean-coalition.org/feed-in-tariffs/>

The SEP mentions the concept of a Feed-in Tariff (FIT) as a mechanism to effectively deploy solar in the description of six of the sites it identified. The Clean Coalition supports the creation of a FIT for unleashing solar and solar+storage on built environments because FITs provide a standardized, long-term, guaranteed contract that allows commercial-scale projects to sell power to the local utility or other load-serving entity like CCAs.

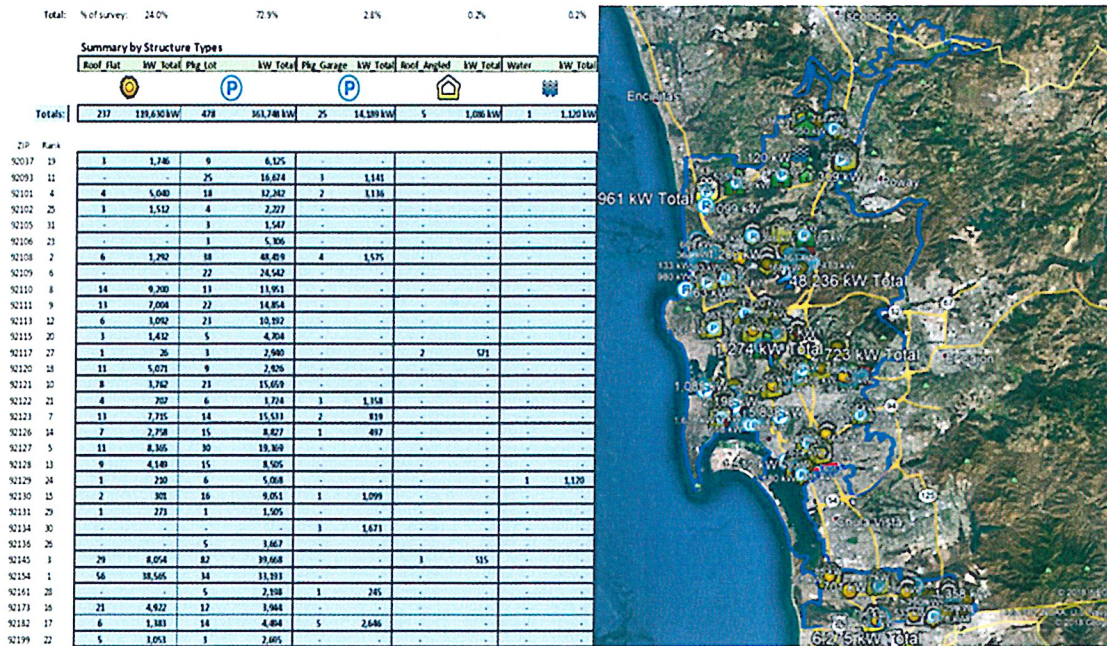
- Push both SCE and the CCA for a FIT design that includes a Market Responsive Pricing mechanism and a Dispatchability Adder.
 - Market Responsive Pricing allows subsequent contract prices to adjust based on market response to pricing of current contracts— ensuring that energy is procured at the lowest possible prices without the gross inefficiencies associated with commercial-scale solar and solar+storage. This ensures project development success while protecting ratepayers.
 - A dispatchability adder is a fixed ¢/kilowatt-hour (kWh) capacity bonus on top of the FIT rate to attract energy storage that make renewable energy fully dispatchable.
- Pressure SCE to create a Feed-in Tariff for critical facilities within the Goleta Load Pocket. This would reduce cost barriers associated with participating in any solicitation processes, which preempt commercial-scale projects due to the \$150k minimum average costs per MW of participating in solicitation processes – with a very high probability of no award (note that SCE has never selected a renewable energy project in the GLP through a solicitation process).
 - Push the CCA to allow establish a FIT as identified in the SEP.

Solar Siting Potential³

The small number of solar sites identified in the SEP is a fraction of the solar siting potential on built environments in the GLP. In a Solar Siting Survey that the Clean Coalition completed for the City of San Diego, over 500 MW were specifically identified on built environments with siting potential of at least one MW or greater. The siting potential was estimated at a multiple GW if the minimum project size were lowered to 100 kW, which would be consistent with commercial-scale projects in the GLP. Understanding potential sites for solar energy on both municipal buildings as well as private locations is essential to translating the SEP into the economic development of local renewables throughout the County.

³ Link to the Clean Coalition Solar Siting Survey for the City of San Diego:
<https://clean-coalition.org/solar-siting-survey-san-diego/>

- The Board should amend Phase One of the SEP by calling for a technical Solar Siting Survey that would identify all solar siting opportunities of at least 100 kW on built environments within the Goleta Load Pocket.
 - The Clean Coalition estimates that the 200MW of additional Solar needed to fulfill 100% resilience to the GLP Community Microgrid from transmission grid outages will only require 7% of the total siting potential on commercial-scale built environments.



Map of Clean Coalition Solar Siting Survey for San Diego

Permitting for Solar, Storage, and Solar+Storage Projects

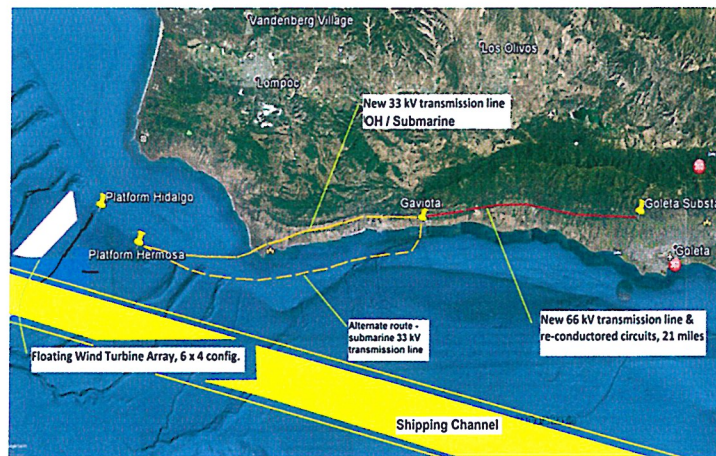
The Clean Coalition also wants to highlight issues surrounding the permitting of standalone solar or storage projects, as well as solar+storage projects. Outrageously long waiting periods and the expensive costs associated with solar+storage permitting are two of the main obstacles preventing the renewable potential throughout Santa Barbara County from being unleashed.

- Prioritize the SEP solutions in Phase Two, calling for an independent commission made up of neighboring Authorities Having Jurisdiction (AHJs) and members of the local solar+storage industry to determine proper guidelines.
- Pre-approve any Electric Vehicle Charging Infrastructure (EVCI) projects in addition to reducing permitting costs associated with them.
- Pre-approve any project on a built environment, especially if it meets certain criteria determined by this new commission.

- Until this step can be achieved, expedite permitting procedures (currently the SEP mentions the County takes around ten days, but according to state guidelines, should only take between one and three days).
- Properly utilize online platforms to improve the permitting process for all clean energy projects, not just storage projects as was suggested in the SEP.
- Study in greater detail – as recommended in the SEP – a virtual inspection system, and extend this to projects of any size on built environments.

Wind Energy Projects

- Immediately approve the 98 MW Strauss Wind Project.
 - The Strauss Wind Project is in the same location as the previously approved Lompoc Wind Project (approved in 2009).
 - The new developer has cut the number of turbines in half while also reducing the impact to local oak trees by almost 90%.
 - The project would also be among the top ten tax contributors in the County.
- Consider the Point Conception Offshore Wind Project and barriers to approving it.



Map of the contemplated Point Conception Offshore Wind Project

The Clean Coalition would like to thank Optony and the County for the hard work they have put into creating the SEP, and we firmly believe that approving it is the first of many important steps. The County is in dire need of more renewable energy and renewables-driven resilience. The few key amendments delineated above will greatly enhance the favorable outcomes of the SEP implementation for Santa Barbara County. We strongly encourage the Board of Supervisors to direct County staff to begin planning for Phase One and Phase Two by prioritizing accordingly. The Clean Coalition is appreciative of

the importance that public input has played throughout the SEP's development, and emphasizes that any future steps – whether that is an amendment of the SEP or the planning and implementation of Phase One and Phase Two - should involve the continued engagement of proper stakeholders.

Sincerely,

Craig Lewis

Clean Coalition Founder and Executive Director

Utility-Scale Solar definition needs to be amended in Santa Barbara County

Currently, Santa Barbara County defines utility-scale solar in a manner that preempts front-of-meter (FOM) solar on built environments and drastically limits the opportunity to deploy commercial-scale solar throughout the County. To fix the issue, the following details are provided in this document:

- 1) Existing definition of Utility-Scale Solar.
- 2) Amended definition of Utility-Scale Solar.
- 3) Both instances where the definition appears in Santa Barbara County code.
- 4) Direct Relief case-study illuminating the critical importance of amending the definition.

Existing definition of Utility-Scale Solar Photovoltaic Facilities:

Utility-Scale Solar Photovoltaic Facilities. Facilities that are connected to the electrical grid on the utility side of the electric meter and are built for the primary purpose of generating and selling wholesale power.

Proposed amended definition of Utility-Scale Solar Photovoltaic Facilities: [Note that the only changes to the existing definition are the underlined additions.]

Utility-Scale Solar Photovoltaic Facilities. Facilities that are not on built environments and connected to the electrical grid on the utility side of the electric meter and are built for the primary purpose of generating and selling wholesale power. Solar facilities of any size that are constructed on built environments, including rooftops, parking lots, and parking structures; and within property setbacks thereof; are not utility-Scale Solar facilities.

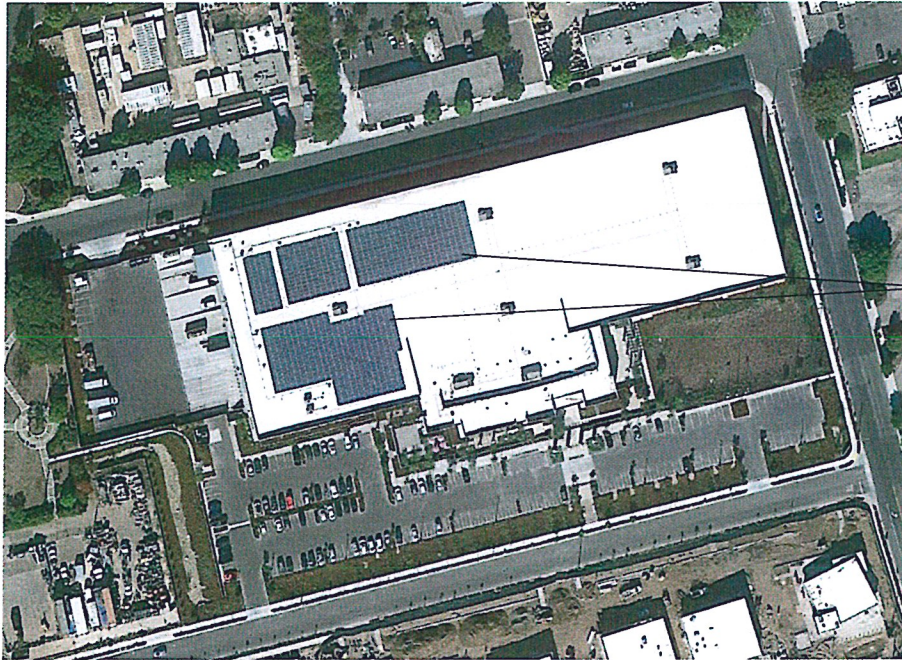
The amended definition needs to be applied in the following two places:

1. Santa Barbara County Comprehensive Plan, Land Use Element
 - **Utility-Scale Solar Photovoltaic Facilities:** Facilities that are connected to the electrical grid on the utility side of the electric meter and are built for the primary purpose of generating and selling wholesale power.
 - *Santa Barbara County Comprehensive Plan, Land Use Element. County of Santa Barbara. Amended December 2016. Pg 150. Found here: <http://longrange.sbcountyplanning.org/programs/genplanreformat/PDF/docs/LandUseElement.pdf>.*
2. Santa Barbara County Land Use and Development Code, Definitions
 - **Utility-Scale Solar Photovoltaic Facilities:** Facilities that are connected to the electrical grid on the utility side of the electric meter and are built for the primary purpose of generating and selling wholesale power. The electricity generated by the facility is not primarily used for on-site activities (such as farming or domestic water heating).
 - *Santa Barbara County Land Use & Development Code. (September 2018). County of Santa Barbara Planning and Development. Chapter 35.11, Pg 64. Found here: <http://sbcountyplanning.org/pdf/forms/LUDC/LUDC.pdf>*

Direct Relief example

Direct Relief serves as a prime example of why Santa Barbara County needs to remove its current preemption of front-of-meter (FOM) solar on built environments: Direct Relief’s headquarter location in Santa Barbara County has far more rooftop and parking lot solar siting opportunity than its existing 320 kW solar project utilizes. Net Energy Metering (NEM) and more general behind-the-meter (BTM) constraints limit Direct Relief to 320 kW of solar even though its built-environments can support almost four time that amount of solar. The currently wasted ~75% of Direct Relief's solar siting opportunity, which Direct Relief is interested in harnessing in support of the Goleta Load Pocket (GLP) Community Microgrid, requires the ability to connect the additional FOM solar on built environments.

Existing Situation



320 kW PV
 *Limited by Net Energy Metering constraints.

Potential Situation



747 kW PV
 Flat roof potential
 *Includes existing 320 kW

1,133 kW PV of total potential
 * Combination of flat roof and parking potential

33 kW PV
 Parking potential

353 kW PV
 Parking potential