

Mount Diablo Audubon Society

P.O. Box 53 Walnut Creek, California 94597-0053 www.diabloaudubon.com

August 14, 2018

ZUI8 AUG I 7 P 3: 13Ms. Jody London, Sustainability CoordinatorContra Costa County Department of Conservation and Development30 Muir RoadMartinez, CA 94553

Re: Contra Costa County Renewable Resource Potential Study

Dear Ms. London:

Mt. Diablo Audubon Society (MDAS) appreciates the opportunity to participate in the County's efforts to assess the County's renewable resource potential, and to update its zoning ordinance to incorporate consideration of renewable energy projects. We support implementation of the State's 50% Renewable Procurement Standard and the formation of Community Choice Associations which promote increased renewable energy; however, we recognize that Contra Costa County is an urban county, and opportunities for development of large-scale renewable projects are limited.

MDAS has two levels of comment relating to the County's study: those addressing broader County objectives and goals that increase use of renewable energy, and those making specific comments on development of zoning ordinance changes.

Suggested County Approaches to Developing Renewable Energy Goals

We encourage the County to develop policies that reduce dependence on carbon-based fuels based on an understanding of the County's current energy budget. In a previous email, we have provided you with data we obtained from the California Energy Commission (CEC) which we hope may be useful to County staff in estimating energy use and production in Contra Costa County.

- 1. An initial step is to estimate:
 - a. Current county-wide annual energy use (total gas and electric consumption by residential and non-residential consumers)
 - b. Transportation fuel consumption, and
 - c. Percentage of energy use derived from renewable sources.
- 2. Establish policies that set achievable energy conservation and renewable energy production targets tied to specific milestones.
- 3. Develop and budget achievable energy conservation and renewable energy targets for the County's facilities and vehicle fleet tied to specific milestones.

Examples of projects to consider are:

- Adding energy efficiency improvements to County facilities;
- Increasing behind-the-meter solar at County facilities such as solar-paneled parking lot covers;

- Replacing retiring fleet vehicles with electric vehicles (EVs);
- Installing charging infrastructure at all County facilities (with EV parking located in prime close-in parking spaces to encourage public purchase of EVs); and
- Increasing renewable electricity purchases through Community Choice partnerships.

Comments on Changes to the County Zoning Ordinance to Accommodate Renewable Energy Development

We are pleased with the County Planning Department's thoughtful approach to development of recommended changes to the zoning ordinance to encourage development of renewable energy projects in suitable locations. We offer the following comments for your consideration:

- 1. We support development of solar energy projects on brownfield sites, parking lots and infill areas such as freeway cloverleafs.
- 2. We support the development of renewable resources inside the Urban Limit Line. However, we do not believe any change in the current Zoning Ordinance should allow or support renewable development beyond the Urban Limit Line without a Conditional Use Permit and full Environmental Impact Report (EIR). This includes the Byron Airport area.
- 3. We do not support solar development within the East County Agricultural Core. Limited behind-the-meter solar applications may be acceptable in farming areas when there is a demonstrated net carbon reduction in the farming operation, and loss of cultivated land is minimal.
- 4. We do not support solar development in wetlands or sensitive wildlife areas, regardless of proposed mitigation.
- 5. We do not support new wind development in East County, particularly in the Delta. We are willing to work with the County and other stakeholders on proposals to repower any existing wind farms where it reduces the impact of wind generation on wildlife.
- 6. We do not support bio-waste generation projects where bio-wastes are transported into the County.

MDAS appreciates your consideration of our input to your efforts to determine and plan for Contra Costa County's Renewable Resource Potential.

Sincerely,

Villiam Chila

Bill Chilson Member, Mount Diablo Board of Directors

CC: Mr. John Kopchik, Department of Conservation and Development Paul Schorr, President, MDAS Kent Fickett, Vice President, MDAS Nancy Wenninger, Conservation Chair, MDAS



November 12, 2018

Jody London Sustainability Coordinator 30 Muir Rd. Martinez, CA 94553

RE: Contra Costa County Renewable Resource Potential Study

Dear Ms. London,

For over 50 years, Greenbelt Alliance has been the champion of the places that make the Bay Area special. We defend natural and agricultural landscapes from sprawl development and help create great cities and neighborhoods to make the Bay Area an even better place to live. Since the 1980s, we have provided an independent validation of outstanding infill development to help ensure that the right development happens in the right place.

Greenbelt Alliance is enthusiastically in favor of Contra Costa County's efforts to pursue renewable energy opportunities, and supports renewable energy as a necessary strategy to reduce carbon emissions that contribute to climate change. Contra Costa County's Renewable Resource Potential Study highlights solar energy as a primary source of potential renewable energy in the county and investigates four primary solar energy production types. We wholeheartedly support policies that support the production of solar energy resources on rooftops, parking lots, and urban land that is unlikely to be developed. We urge caution, however, when pursuing the development of solar energy resources on agricultural land.

In evaluating the solar potential of Contra Costa County, we recommend utilizing the analysis in Renewable Resource Assessment that excludes unique farmland and farmland of local importance. These designations indicate agricultural land of high value that is best used for growing food, not for producing energy. The majority of the county's solar potential can still be realized while protecting its limited supply of viable high-quality farmland.

We are neither supporting or opposing the development of solar resources on other types of agricultural land or the Delta Islands.

We support Contra Costa County's efforts to promote and incentivize renewable energy production within the county on rooftops, parking lots, and urban land not likely to be developed, and commend the efforts of this report to pursue this goal.

Sincerely,

Hayley Currier East Bay Regional Representative <u>hcurrier@greenbelt.org</u> (415) 659-8624



Board of Directors Scott Hein *President*

Amara Morrison *Secretary*

Burt Bassler *Treasurer*

John Gallagher Jim Felton Liz Harvey Claudia Hein Margaret Kruse Frank Martens Bob Marx Sue Ohanian Robert Phelps Malcolm Sproul Jeff Stone *Directors*

Staff Directors

Edward Sortwell Clement Jr. Executive Director

Seth Adams Land Conservation Director

Meredith Hendricks Land Programs Director

Monica E. Oei *Finance & Administration Director*

Marcia Slackman *Development Director*

Founders Arthur Bonwell Mary L. Bowerman

Proud Member of Land Trust Alliance California Council of Land Trusts Bay Area Open Space Council



November 9th, 2018

Jody London Sustainability Coordinator 30 Muir Rd. Martinez, CA 94553

RE: Save Mount Diablo Comments on the Contra Costa County Renewable Resource Assessment

Dear Ms. London,

Save Mount Diablo (SMD) is a non-profit conservation organization founded in 1971 which acquires land for addition to parks on and around Mount Diablo and monitors land use planning which might affect protected lands. We build trails, restore habitat, and are involved in environmental education. In 1971 there was just one park on Mount Diablo totaling 6,778 acres; today there are almost 50 parks and preserves around Mount Diablo totaling 110,000 acres. We include more than 8,000 donors and supporters.

We appreciate the opportunity to comment on the Contra Costa County (County) Renewable Resource Assessment (Report). SMD is strongly in favor of pursuing renewable energy in order to decrease and/or avert the negative impacts of global climate change. We have commented on and been involved in several renewable energy projects, including repowering wind turbines in the Altamont Pass to produce renewable energy while at the same time reducing negative impacts on wildlife. We have also implemented practices on our own properties and activities to reduce greenhouse gas emissions and increase the potential of our properties to absorb carbon from the atmosphere.

Our comments are related to the potential policy implications of the Report's findings, not the technical aspects of the analyses used to produce the Report. Since the vast majority (between 85% and 97%, depending on the assumptions and metric) of overall renewable energy generation potential in the County is from solar, that is where we have focused our comments.

We are very pleased that the County has the potential to meet somewhere between 50% and 83% of its energy needs (per the assumptions and metrics outlined in the Report) with renewable energy. However, we are concerned about the ramifications of potential policies that could encourage the production of industrial-scale solar energy on agricultural land that is currently in production.



Of the four primary solar energy production types outlined in the report, three are not associated with rural or agricultural land: rooftops, parking lots, and urban land unlikely to be developed. Using the values found in Table 1 of the Report, we calculate that by relying on just these three types of solar energy, the County could produce between 70% and 78% of its full (ie, if solar on agricultural lands was included) solar energy production potential. Since producing these types of solar energy would only affect already-developed land and add a productive use without removing one (as opposed to what solar installations on agricultural land would do), we wholeheartedly support the creation of policies and incentives to rapidly develop these three solar energy types in the County.

County staff have done an excellent job of explaining how they used GIS layers to produce different constraint scenarios for siting solar on agricultural lands. With respect to the solar potential of agricultural land analyzed in the Report, two scenarios were presented: one where the only agricultural land available for solar was the least likely to have significant agricultural value, and a second version that loosened criteria and included unique farmland and farmland of local importance (as defined by the State Farmland Mapping and Monitoring Program) as areas where rural solar could be developed. These are illustrated in Figures 1 and 2 below, which were taken from Appendix D of the report.



Fig. 1. First version of the rural ground-mounted solar analysis, where the only agricultural land available for siting solar is that which is least likely to have significant agricultural value. 685 acres (excluding Delta Islands, which we are not commenting on) would be potentially suitable for solar installations after omitting high value agricultural land (which includes unique farmland and farmland of local importance).

CADMUS

Evaluation of constraints for siting solar on agricultural lands



Fig. 2. Second version of the rural ground-mounted solar analysis, where the agricultural land available for siting solar includes certain types of high value agricultural land (ie, unique farmland and farmland of local importance). 2,733 acres (excluding Delta Islands, which we are not commenting on) would be potentially suitable for solar installations.

We see the first version of the analysis (Fig. 1), where the only agricultural land available for siting solar is that which is least likely to have significant agricultural value, as a good balance between solar expansion and farmland preservation. Together with the other three types of solar (rooftops, parking lots and urban land not likely to be developed) analyzed in the Report, the County can realize nearly all of its solar energy potential without sacrificing its productive farmland. We strongly encourage the County to develop policies to encourage solar energy and increase production ASAP, focusing on the three non-agricultural solar types analyzed in the Report and the first version of the rural solar analysis (solar only on agricultural land least likely to have significant agricultural value). Section 4.4 of the Report outlines several existing frameworks that the State and other Bay Area counties use to reduce barriers and facilitate appropriate solar types. The County could use these as starting points to develop its own policies.

Advances in solar technology may increase the frequency of colocation or allow an area of land to concurrently be farmed and produce solar energy without negatively impacting, or perhaps even increasing, crop productivity. However, currently the most likely scenario is that solar development removes land from most or all types of agricultural production for the duration of the lease, which may last several decades. Therefore, County renewable energy policies should not encourage solar development on viable agricultural land.

Regards,

Juan Pablo Galván Land Use Manager

MCE Comments: Contra Costa County Renewable Resource Assessment (1st DRAFT)

As a local government partner committed to advancing renewable energy development, MCE commends Contra Costa County and its participating cities for commissioning the draft Renewable Resource Assessment. In this spirit, MCE respectfully submits the comments below for consideration. All suggested edits and additions are identified in green.

Requests for more information, points of clarification or further discussion are most welcome; please direct these to MCE's Community Development team here: <u>ComDev@mceCleanEnergy.org</u>). Many thanks!

In partnership,

The MCE Team

2. Introduction – p. 8

- <u>Currently</u>: "...In 2017, the County joined MCE to accomplish these objectives. The County also has started the process of updating its Climate Action Plan..."
 - <u>Suggested edit/addition</u>: "...In 2017, the County joined MCE to accomplish these objectives, along with thirteen of its incorporated jurisdictions (five of which had already joined MCE between 2012 and 2015). The County also has started the process of updating its Climate Action Plan..."

2.1 Purpose – p.8

- "What is a Feed-In-Tariff (FiT)?" [Box at right side of page]
 - <u>Currently</u>: "MCE...offers 20-year contracts to Contra Costa County photovoltaic project developers at a guaranteed price level to encourage local solar project development...MCE's current compensation for solar is..."
 - <u>Suggested edit/addition</u>: "MCE...offers 20-year contracts to Contra Costa County renewable energy project developers at a guaranteed price level to encourage local project development of wind, solar, biopower and all resources that comply with California's Renewable Portfolio Standard (RPS) ...MCE's current compensation for solar is..."

2.3.2 MCE in Contra Costa County – p.14-15

- <u>Currently p.14</u>: "MCE, California's first Community Choice Aggregation program, has been active in Contra Costa County since July 2012; the program expanded to include eight more cities and the County's unincorporated communities in 2017..."
 - <u>Suggested edit/addition</u>: <u>Currently</u>: "MCE, California's first Community Choice Aggregation program, has been active in Contra Costa County since July 2012.

The City of Richmond was the first Contra Costa city to join, followed by El Cerrito, San Pablo, Lafayette and Walnut Creek from 2014 to 2015. In 2017, the program expanded to include eight more cities (Concord, Danville, Martinez, Moraga, Oakley, Pinole, Pittsburg, and San Ramon) and the County's unincorporated communities."

- <u>Currently</u> p.15: "MCE currently offers three energy products: a 'light green' option...a 'dark green' option; and..."
 - <u>Suggested edit/addition</u>: "MCE currently offers three energy products: a 'Light Green' option...a 'Deep Green' option; and..."
- <u>Currently p.15</u>: "MCE helps to stimulate **local** renewable generation growth in two ways. First, through its Feed-In Tariff (FIT) program...
 - <u>Suggested edit/addition</u>: "MCE helps to stimulate local renewable generation growth in five ways: 1) through its <u>Feed-In-Tariff</u> (for projects less than 1 MW in size); 2) through its <u>Feed-In-Tariff Plus</u> (for projects of 1-5 MW in size; 3) through its <u>Net Energy Metering (NEM) rates</u>; 4) through <u>bilateral power purchase</u> agreements (PPAs) with developers for local projects, including those built on brownfields; and 5) through its <u>'Local Sol' service option</u>, which allows customers to purchase 100% renewable energy from a specific local project (i.e., Novato's Cooley Quarry 1 MW solar array).

First, through its Feed-In Tariff (FIT) program, MCE provides local, small-scale, renewable energy producers with 20-year contracts that help secure construction financing by providing certainty in revenue streams. The program determines pricing on a schedule based on the number of confirmed participants and the position of any given projects within the program's queue. Five solar facilities within MCE's service area have been built through the FIT program, two of which are located within Contra Costa County (two 1 MW ground-mount arrays at Richmond's Freethy Industrial Park and a 1 MW solar carport at Oakley's RV and Boat Storage). Projects must be less than 1 MW in size to qualify for MCE's FIT.

Second, through its Feed-in Tariff Plus (FIT Plus) program, MCE provides similar incentives and standardized contract terms to developers of local projects between 1-5 MW in size. Both MCE's FIT and FIT Plus pricing terms are available throughout MCE's service area.

Third, MCE offers competitive Net Energy Metering (NEM) rates and benefits to commercial and residential rooftop solar customers within its service area. These include crediting surplus generation at retail rates + \$0.01/kWh; allowing credits to 'roll over' from year to year; and offering an annual 'cash out' in which

customers who generate more than \$100 of surplus NEM credits can elect to receive a check for the credited value.

Fourth, MCE expands local renewable energy development through bilateral, long term power purchase agreements (PPAs) with developers. In so doing, MCE can help repurposing brownfields and other underutilized local resources. For example, MCE completed construction of its Solar One facility in April 2018, a 10.5 MW, 60-acre production facility. Constructed in partnership with Chevron and <u>RichmondBUILD</u>—a public/private partnership that supports clean energy job training and placement—the project supported 341 jobs. Meanwhile, MCE's Solar One project sought to maximize local economic benefits by requiring a 50% local resident workforce and utilizing Contra Costa-based contractors and suppliers, particularly those partnering with building trades unions.

MCE's recent expansion into the County presents an opportunity for the County to expand renewable generation. MCE's projected demand increase (paired with long-term purchasing contracts it offers through the FIT and other programs), means the County could negotiate to expand generation on County property. Richmond's experience demonstrates that the County can negotiate with MCE to provide workforce training partnerships and local employment, and to identify projects that benefit underserved communities. Currently, the MCE FIT and FIT plus programs have 30 MW remaining in their queues (10 MW & 20 MW respectively).

Lastly, MCE's Local Sol service option allows a limited number of self-selecting customers to purchase 100% renewable energy from a specific local renewable energy facility. MCE's current Local Sol option sources its energy from the 1 MW solar array built in Novato's Cooley Quarry. Once the current Local Sol option is fully subscribed (at approximately 300 customers), MCE may create a second, similar option sourced from another renewable energy facility built within its service area. This second facility could potentially be located within Contra Costa County.

3.6.1 Breakout of Potential in Specific Location Types within the County: MCE Eligible Solar and Wind Resource Potential – p.68

- <u>Currently</u> p.68: "...Rooftop solar and parking lot solar was assumed not to use the FIT as they would be net metered."
 - Just FYI: Some of MCE's existing FIT projects have been built on rooftops (in San Rafael and Larkspur), and over parking lots (in Oakley).

4.4.4 Action for Consideration: Accelerating Development of Parking Lot Arrays and Arrays on 'Urban Land Unlikely to be Developed' – p. 79-80

• <u>Currently</u>: - p.80: "...5. Work with MCE to explore incentives: The County could consider a collaboration to explore whether it would be possible to preferentially encourage the

development of solar on parking lots or urban land unlikely to be developed for other uses through potential future versions of the MCE FIT program.

 <u>Suggested edit/addition</u>: Add the following: "Several completed projects within MCE's service area provide instructive examples for utilizing these types of locations, including MCE's Solar One (built on a remediated brownfield); Novato's Cooley Quarry (built in a closed quarry), and Oakley's RV and Boat Storage (a solar carport)."

Jody London

From: Sent: To: Cc: Subject: william.love@yahoo.com Tuesday, November 06, 2018 9:37 AM Jody London William Love Renewable Resource Potential Study - Nov. 12 comment submittal

Hi Jody,

It was good seeing you at the meeting last week. I think the report is really taking shape nicely and reflects a lot of thought and effort. I only have three comments that you and Camus may want to consider adding to the report:

1. Rooftop: I think the report does a good job tamping down expectation about a solar on rooftop building boom and does note that the County has taken significant strides in reducing soft costs. That is all good to note but I would take it one step further by noting the following: The private sector has a very robust, multi-million dollar advertising/marketing campaign to convince people to go solar with very compelling economics and in some cases, no money down scenarios. We have all seen the ads.... This, and word of mouth, I would have to believe is the primary driver in getting the approximately 1500 installations (I think that was the permit number) done in Contra Costa County. I doubt, short of undertaking its own expensive advertising campaign offering cash incentives or promoting PACE financing, the County will be able to significantly increase the adoption rate by homeowners/small businesses then currently exists given what private companies are already doing. The County, as I see it, has really done all is can by making solar so easy to install from a permitting standpoint. Bottom line is the County could spur additional rooftop development though its actions.

2. The report does note that it is now permitted to develop larger scale solar in commercial and industrial zones. I would add, though, what percentage of County land that represents. It is very small and given the attractive zoning classification, the highest and best use for those sites would only rarely be solar. How many applications has the County received since allowing development in these zones? I bet not many/any. I mention this as I think it is important to let the Supervisors not have an inflated expectation on how much will be built on those sites as I don't think it will be much.

3. I didn't see anywhere in the report mention of the Investment Tax Credit (ITC). As you probably know, it is currently slated to step down/end in coming years. That will significantly effect the financial viability of many of these envisioned renewable energy projects. The Supervisors really need to know they have little time to waste in opening things up to development if they are serious about facilitating adoption of renewable energy within the County.

So that is my two cents for what it is worth. Please feel free to call or email me with any questions. Thanks!

Bill Love

415.990.9411

Jody London

From:	Marisa Mitchell <marisa@intersectpower.com></marisa@intersectpower.com>	
Sent:	Tuesday, November 13, 2018 12:53 PM	
То:	Jody London	
Cc:	philip.kreycik@cadmusgroup.com	
Subject:	Re: Comments on Renewable Energy Potential Study	

Please see minor (but important) comments on pages 21, 44, 78, and 80. Thanks for the opportunity to comment.

Marisa Mitchell Principal INTERSECT POWER 415.846.0730 (e) marisa@intersectpower.com www.linkedin.com/in/marisa-mitchell-ab320a10

On Tue, Nov 13, 2018 at 11:21 AM Marisa Mitchell <<u>marisa@intersectpower.com</u>> wrote: Jody, I'm planning to deliver comments today. Sorry for the delay.

Marisa Mitchell Principal INTERSECT POWER 415.846.0730 (e) marisa@intersectpower.com www.linkedin.com/in/marisa-mitchell-ab320a10

On Mon, Oct 29, 2018 at 3:27 PM Jody London < Jody.London@dcd.cccounty.us> wrote:

Great! Thanks.

Jody London

Sustainability Coordinator

Contra Costa County, Department of Conservation and Development

30 Muir Road

Martinez, CA 94553

DRAFT

Note: Comments from Intersect are on p. 21, 44, 78, and 80.

Contra Costa County Renewable Resource

ssessment

October 25, 2018

Prepared for: Contra Costa County Department of Conservation and Development 30 Muir Road Martinez, CA 94553

CADMUS

- From renewables industry representatives:
 - Plowed agricultural land often can be developed for wholesale renewables more easily and less expensively than urban land. Therefore, the County should not omit such lands in calculating its technical renewable potential.
 - Emerging solar and wind technologies may be compatible with multiple uses on site, and any regulations should account for these diverse technologies.
 - Renewable energy developers appreciate clarity and predictability related to values that the County finds most important to protect through land-use policy.

3.2. Solar Methodology and Results

As noted, this study focused on solar due to current market trends in California, the County's large solar potential relative to other new renewable generation sources, stakeholder interests, and the need to evaluate tradeoffs associated with land used for solar (when it could otherwise be used for other values).

Due to large-scale solar farms' land-intensive nature, the Contra sought to understand the magnitude of available renewable resources and the typical costs for these resources, in light of multiple types of solar. These range across the following:

- Solar with negligible impacts on future land use (e.g., rooftop solar)
- Solar unlikely to impact on future land use (e.g., solar on parking lots not expected to be redeveloped into other community assets, or solar on land deemed unlikely to be developed for other purposes within the ULL)
- Solar that could present land-use tradeoffs with agricultural preservation, development goals, and/or environmental/habitat protection (e.g., solar outside of the ULL)

For each of these resource types, the County sought to understand typical costs and the likelihood of resource development.



Pittsburg Unified School District (PUSD) is piloting innovative new technologies to co-locate solar with other technologies. PUSD is putting Agro Energy Solar Panels above a bioswale, where the AP Biology classes will be planting crops and measuring the impact of the solar panels on plant productivity.³¹

Accordingly, the study organizes solar research

according to those types, and the report's following sections present solar results in order from the least potential for tradeoffs and constraints to the highest potential for tradeoffs and constraints.

³¹ Source: Interview with Krista Rigsbee, Constructive Systems, Inc. Graphic Source: <u>https://commons.wikimedia.org/wiki/File:Pittsburg_Unified_School_District_Office_-panoramio.jpg</u>

CADMUS

Figure 19. Solar Technical Potential Areas in Contra Costa County (ground mounted only – rooftop potential not included in this figure)

Land considered potentially suitable for ground mounted solar installations



4.4.3. Options to Reduce Barriers and Facilitate Appropriate Solar Through Planning and Zoning Action

As discussed, planning and zoning actions could possibly have significant impacts on ground-mounted solar development within the County. A review of the zoning codes, general plans, and other planning documents of neighboring counties resulted in identifying several policy options for implementation, as described in Table 26.

	Category	More Protective of Uses in Potential Conflict with Solar (and Example County)	More Permissive/Encouraging of Solar (and Example County)
	Geographies	Only allowed in defined zones	Allowed except in certain zones (e.g., mapped
	allowed	(many counties)	Important Farmlands) (Sonoma County)
Alameda County ha prescriptive GP & Z Ordinance than CC(they conditionally al except where it is pr	s a less oning C, and low solar ophibited	 Accessory ground mount: Ground-mounted solar is not defined or permitted in code (Alameda County) 	 Accessory ground mount: Administrative permit for almost any district as long as <15% of the parcel, up to 10 acres (CCPDA model ordinance)
What is the example for this restriction?	Permit requirements	 Primary ground mount: Not allowed in any Prime, Statewide, or Unique farmland Not allowed on Williamson Act sites 	 Primary ground mount: Minor solar (up to eight acres) is subject to architecture and site approval (and sometimes a use permit) in specified farmlands (Santa Clara County)
	Other required studies	Glare study required and proof of no glare directed at occupied structures, recreation areas, roads, and airport flight paths (Sonoma County)	Glare study not required, except if required by FAA (NREL best practice)
	Goals	None	Solar goal for deployment on a percentage of commercial buildings, industrial buildings, and parking lots (Alameda County)
	Requirement to install renewable energy	None	New commercial parking lots with over 200 spaces required to mitigate heat gain through shade trees, solar arrays, or cool pavement (Alameda County)
	Actions to directly facilitate renewable development	None	Regional collaboration with the utility to identify locations where interconnection would not trigger extensive upgrades (Philadelphia)
			County-led technical assistance and coordination between property owners and solar developers (Alameda County) Work with local lenders to reduce the financing costs
			for community-shared solar via loan-loss reserves, credit enhancement, or other provisions

Table 26. Range of Planning and Zoning Options for Ground-Mounted and Parking Lot Solar

CADMUS

- 3. Offering County-owned land. Lease County-owned land to renewable energy developers at a lease rate that would enable project development. The County also could serve as the off-taker for electricity generated and could even agree to above-market PPA rates for the electricity, provided the developer used sites that the County deemed preferable for solar development.
- 4. **Coordinated studies**. Consider using identified least-constraint solar areas (e.g., parking lots, urban land unlikely to be developed) to convene potential solar developers and PG&E, and could conduct area-wide interconnection studies to reduce timelines and costs for each prospective developer (compared to approaching PG&E in an uncoordinated manner).
- 5. Work with MCE to explore incentives. The County could consider a collaboration to explore whether it would be possible to preferentially encourage the development of solar on parking lots or urban land unlikely to be developed for other uses through potential future versions of the MCE FIT program.
- 6. **Consider expedited permitting in limited cases**. Consider whether to further refine zoning policies in industrial and commercial areas to enable certain solar projects in areas with little other potential use and little or no impacts to be constructed without a land use permit.

Enabling Development of Ground-Mounted Solar in Other Locations



- Amend the zoning code to define specified additional areas where commercial groundmounted solar may apply for a land use permit. This change would establish that primaryuse solar may be allowed in certain Contra Costa County zoning districts, while still providing flexibility for the County to address the desirability of each proposed solar farm, based on its own merits and tradeoffs.
- 2. Continue to update and revise the opportunity and constraints analysis for solar in rural areas as additional data and technologies become available.
- 3. Consider methods to deal with emerging co-location opportunities (such as "agrophotovoltaics," described above).
- 4. **Include requirements for developers to hold monetary reserves** for end-of-useful-life decommissioning.
- 5. **Consider identifying and implementing strategies to streamline permitting**, such as an umbrella approach to complying with the California Environmental Quality Act, mitigation, and/or other permitting needs.