

Attachment 1 : Table 1 - DRAFT Definitions and Solar Matrix – July 6, 2021

Proposed New Definitions to support Solar Policy

The following draft definitions, which are either expansions or clarifications of existing definitions, or are new definitions, are designed to support the new solar policy being drafted by the Solar Subcommittee. These definitions are for words that will appear in the draft Solar Policy, and for which precision in meaning would be necessary to allow the Solar Policy to be as unambiguous as possible.

For the purposes of this Solar Policy, **Adequate Service for the East County** means provision of necessary benefits to the land, people, businesses, and organizations of the East County as that area is defined by the East County Area Plan (including incorporated and unincorporated areas), such that the East County can meet its proportion of the State’s 2045 Renewable Energy Goals.

(The preceding defines and expands upon a term of use found in ECAP and Measure D).

Agricultural activity, operation, or facility, or appurtenances thereof shall include, but not be limited to, the cultivation and tillage of the soil, dairying, the production, cultivation, growing, and harvesting of any agricultural commodity including timber, viticulture, apiculture, or horticulture, the raising of livestock, fur bearing animals, fish, or poultry, and any practices performed by a farmer or on a farm as incident to or in conjunction with those farming operations, including preparation for market, delivery to storage or to market, or delivery to carriers for transportation to market. (from CALIFORNIA CIVIL CODE § 3482.5(e))

Agricultural Land means any land zoned for agricultural uses, upon which the owner, operator or proprietor may be engaged in agricultural uses.

Agricultural Use means use of land, including but not limited to greenhouses, for the purpose of producing an agricultural commodity for commercial purposes. (from GOVERNMENT CODE § 51201)

Agrioltaics SEF (AV) is the colocation of solar PV and agriculture, with operation of the solar PV specifically designed to preserve and enhance agriculture and agricultural lands and to concurrently produce photovoltaic power for electrical grid distribution.

AV Infrastructure means lands, structures and development necessary to the provision of solar-related renewable energy for public services and utilities.

Behind the Meter means solar energy that is produced and stored on a site for use on that site, sized commensurately, with small occasional excess energy that may flow offsite onto local lines.

Commons means the cultural and natural resources beneficial to all members of a society, including natural materials such as air, water, bio-resources, and habitable earth. These resources are held in common, not owned privately, although often assigned as an uncompensated responsibility to private land stewards. Commons can also be understood as natural resources that groups of people (communities, user groups) manage for individual and collective benefit by compensating land stewards for employing conservation strategies. Characteristically, this involves a variety of formal norms and values (social practice and policy) employed for a governance mechanism that encourage sustainable multifunctional agriculture.”

Conservation and Preservation of Agricultural Land means maintaining availability of agricultural land or soils for the purposes of agriculture and agricultural enhancement.

Distributive/Distributed SEF means a solar installation fundamentally designed to generate electricity for use at the local level, i.e. along distribution lines rather than for feed-in to transmission grid lines. May include community-scale generation, solar energy coops, microgrids, etc. A distributive SEF may use either a Power Purchase Agreement or Behind the Meter feed-in.

Microgrid: A localized energy distribution grid that can disconnect from the traditional grid to operate autonomously. Microgrids often include renewable energy and/or energy storage systems.

Prime Farmlands / Soils: Prime agricultural land means any of the following:

- (1) Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated.
- (2) Land which qualifies for rating 80 through 100 in the Storie Index Rating.
- (3) Land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture.
- (4) Land planted with fruit- or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars (\$200) per acre.
- (5) Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than

two hundred dollars (\$200) per acre for three of the previous five years.

Quasi-public use means a use serving the public at large, and operated by a private entity under a franchise or other similar governmental authorization designed to promote the interests of the general public or operated by a recognized civic organization for the benefit of the general public; but does not include a use the nature of which would be considered either commercial or industrial in any other setting, including utilities designed to generate quantities of products such as electricity or manufactured goods for provision to the general public.

To Enhance Agriculture and Agricultural Lands means to implement the East County Area Plan purposes, intents, programs, policies, and ordinance consistently and broadly for agriculture districts and areas (LPA, RM, WM) (North Livermore Intensive Agricultural Area) (SLVAP) to:

- 1) Increase agricultural production indexes including:
 - a. Average gross commodity units produced per crop life cycle of agricultural products for commercial purposes,
 - b. Average gross income produced per crop life cycle from agricultural products or services for commercial purposes;
 - c. square and linear feet of infrastructure necessary for agricultural production, processing, marketing, and services,
 - d. agriculture service businesses, and other resource management businesses, that provide commercial uses or services.
 - e. Acres of land actively managed for the production, use, or marketing of agricultural products,
 - f. Payments for community agroecosystem service programs to allow management of the COMMONS on private land.

2) Increase viable agriculture production features/elements/components including:

- a. maintaining a healthy working landscape for the present and the future (see c),
- b. facilitating a strong agroecology with equitable living and working opportunities,
- c. multigenerational family farms and ranches,
- d. Increase and facilitate the viability and opportunities of the healthy Eastern Alameda County working landscape (agroecosystem plus agroecology) for the present and future (see a).

(These preceding ideas define and expand upon a term of use found in ECAP and Measure D).

Utility corridor means easements, permits, rights of access, or right by virtue of franchise agreements held by utility companies for the purpose

of conveying water, electricity, natural gas, sewer, rail transport and other transmissions through properties. A utility corridor is fundamentally linear in nature and does not include easements, permits, rights of access, or right by virtue of franchise agreements that are used to provide access to a utility corridor or to a terminal retail client, nor does it primarily include structures or uses intended to produce any quantities of products or services provided by utilities, except as conditionally-permitted accessory uses, nor to store unused equipment.

Utility or Commercial SEF means a solar installation designed to generate electricity for commercial sale to the grid under a Power Purchase Agreement (PPA) and is connected to the transmission grid in such a way so as to deliver energy that may be used outside the local area.

SOLAR POLICY MATRIX – As recommended by the Agricultural Advisory Committee at its meeting of June 22, 2021

OBJECTIVE / GOALS:

This land use policy expresses goals and recommendations consistent with the general plan for onsite community wide distributed and utility scale solar energy production, energy conservation and resilience.

- A. GOAL: To provide new, relevant definitions to support the policies and General Plan
- B. GOAL: To encourage Energy Conservation and Efficiency measures and priorities
- C. GOAL: To encourage Local Solar Energy Production and Storage Systems to meet local needs and values, while minimizing environmental and agricultural impacts.
- D. GOAL: To specify and describe types of allowable Solar Energy Production Facilities and siting guidelines
- E. GOAL: To prescribe necessary Environmental Review, Monitoring and Decommissioning/Restoration Guidelines

Encourage Local Solar Energy Production and Storage Systems	County’s commercial and residential communities will continue to grow in the foreseeable future. Access to dependable and affordable energy sources is critical to maintaining and enhancing the quality of life enjoyed by residents and businesses. As energy	Policy 1: The County shall place the highest priority on implementation of the energy conservation and efficiency measures identified in the County Climate Action Plan and other relevant County documents.
--	---	--

	<p>needs grow, so do the needs to develop new energy sources. The County has a great potential to produce renewable energy including solar and wind energy facilities for local and regional consumption.</p> <p>These policies will encourage local solar energy production to meet local energy demand and support the State’s efforts to fulfill the Renewable Portfolio Standard (RPS). The RPS is a state law mandating increased production of solar electricity by California utilities. Under the targets of California’s RPS, all electricity providers in the state must procure at least 60% of the electricity they sell from eligible solar resources by 2030. California’s RPS is administered jointly by the California Energy Commission (CEC) and the California Public Utilities Commission (CPUC).</p> <p>Alameda County, thirteen of its incorporated cities and the City of Tracy in San Joaquin County have launched a Community Choice Aggregation (CCA) program, formed as East Bay Community Energy (EBCE). EBCE became fully operational in 2018, and now provides a large majority of electrical energy to the electricity consumers of Alameda County. EBCE is currently building a program to procure energy for its members using progressively higher levels of solar and/or low carbon energy at competitive rates compared to the incumbent utility. EBCE is in a position to purchase solar energy from local providers for its customers, which would bring with it other local tax and employment benefits. The EBCE is able to use public programs and public-private partnerships to advance the availability of solar energy in Alameda County. The County and EBCE may wish to work together to facilitate clean energy and local benefits.</p> <p>EBCE encourages and can assist with development of Local Development Business Plans (LDBP). LDBP’s can enable a local utility to incorporate solar to create a utility that meets RPS</p>	<p>Policy 2: The County shall prioritize the development of solar energy capacity, including local, distributed and utility scale solar energy facilities, in the existing and future built environment or with multipurpose planned development in order to minimize environmental impacts and to protect agricultural production potential and the community’s open space values.</p> <p>Policy 3: Encourage local solar energy production to meet local energy demand while allowing excess energy to be sold to the grid primarily for use by consumers in East Bay Community Energy Authority (EBCEA) member communities, recognizing that purchase of locally generated energy may not necessarily define the precise end consumer of the energy generated.</p> <p>Policy 4: The County shall support the State of California’s efforts to fulfill the Renewable Portfolio Standard (RPS).</p> <p>Policy 5: County shall strongly encourage the State of California to remove obstacles and other undue physical or economic burdens on rooftop and distributed solar energy, to take steps to enhance opportunities for behind-the-meter renewable energy and storage for each and every Californian, and to quantitatively INCLUDE behind-the-meter solar development in its renewable portfolio standard and calculations of progress toward meeting State 2045 renewable energy goals.</p> <p>Policy 6: Application of solar energy to any legal rooftop in the unincorporated County is considered allowed by right, provided normal County building permits are obtained.</p>
--	--	---

	<p>reduction goals.</p> <p>As of Year 2020, Alameda County obtains approximately 20% of its energy from local energy sources within Alameda County. Of this percentage, only about 20% is renewable (wind energy). The remainder of locally produced energy is generated by gas or jet fuel fired power plants in the County. The remaining 80% of energy consumed in Alameda County but not generated by local plants is composed of a mixture of renewable and nonrenewable sources from outside Alameda County including wind, solar, geothermal, fossil fuel and nuclear power plants.</p> <p>Various technologies are available to convert solar energy sources into a usable form of energy. Existing technologies and facilities can vary in scale and intensity. The majority of existing <u>renewable</u> energy production in the County occurs at large wind facilities that supply energy for consumption throughout County and region. These new solar policies will encourage the expansion of solar energy such as solar production in appropriate locations within unincorporated areas of the County while minimizing environmental and agricultural impacts.</p> <p>Physically, electrical energy in the form of electron flow along transmission and distribution lines is typically used by consumers closest to the source of the generation. Load bearing entities that purchase energy from distant generators on behalf of their customers are not necessarily the direct beneficiaries of those specific electrons, but benefit from that electricity being placed on the pool of energy known informally as the electrical grid. Renewable energy purchased from a distant source is therefore not used directly by local consumers but is credited to the load bearing entity that purchased the energy.</p> <p>The single greatest benefit of solar energy is its contribution to the environment. Greenhouse gas (GHG) reduction is a local</p>	<p>Policy 7: The County shall encourage and promote economic development and workforce development programs in conjunction with solar energy projects.</p> <p>Policy 8: Promote use of energy storage technologies that are appropriate for the character of the proposed location, with emphasis on siting facilities near the end users and in predominantly urban or suburban settings near existing substations or other electrical connection facilities.</p> <p>Policy 9: Identify and prioritize programs that support cost-effective and universal access to solar energy.</p> <p>Policy 10: Work with the EBCEA to bring increasing levels of solar energy to the County at competitive rates, to match county energy production with county energy demand using EBCEA approved Local Development Business Plans.</p> <p>Policy 11: Support efforts by EBCEA and cities to provide participation incentives to accelerate behind-the-meter production and energy storage facilities in urban, suburban and rural development; and prioritize these efforts before supporting SEFs on open space lands.</p> <p>Policy 12: As a condition of approval of any utility-scale solar energy facility permit and/or as a provision of a cooperation agreement, or at any appropriate time in the course of doing business), a solar energy facility project proponent shall agree to give first-right-of-refusal on any Power Purchase Agreement (PPA), or negotiations thereto, to East Bay Community Energy Authority (EBCEA), and make such offer to the EBCEA prior to negotiations with any other offtaker.</p>
--	---	--

priority and a state mandate. Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006), the California Global Warming Solutions Act of 2006 (AB 32), mandates that California reduce its greenhouse gas emissions to 1990 levels by 2020. By 2050, California's GHG emissions are to be 80 percent lower than 1990 levels.

The State of California has recently set its Renewable Portfolio Standard (RPS) goal to 60% by Year 2030. This goal is for Load Serving Entities (i.e., public and investor owned utilities) such as EBCE or PG&E. Distributed generation (rooftop, parking lot, etc.) can reduce what utilities need to provide. Thus, while the % goal doesn't change, the amount of renewable power needed to reach the goal by load serving entities is reduced by the amount of behind-the-meter and local distribution-grid renewable energy that is produced locally, which up to this point is more expensive than larger scale solar developments. Unless an urbanized area has large parcels of undeveloped land or lands designated for redevelopment, utility-scale solar energy facilities (SEFs) typically are sited on open rural lands.

These policies reflect a combination of insights from best practices, environmental conditions, local values, climate change and economic need while adhering to State mandates and encouraging local solar energy production. It is essential then that the County's regulatory rules be clear and provide guiding principles for current and future technologies to be evaluated and permitted. While regulatory updates will be necessary from time to time, the proposed policy will provide a framework to encourage local solar energy production in a way that is sensitive to the environment and local concerns and priorities.

The Alameda County General Services Agency (GSA) has adopted and implemented policies and programs to place solar development to the extent possible on County facilities in both the East and West Counties.

<p>Utility Solar Energy Facility (SEF) Siting</p>	<p>Utility Scale Solar Energy Facilities (SEF) siting policies seek to ensure reasonable opportunities for development of solar energy in a manner consistent with County priorities expressed in the ECAP. More specifically, regulation of SEF siting is intended to manage land use conflicts; safeguard the environment; protect public health and safety; and facilitate energy development. These intentions are best accomplished through the adoption of siting standards. This is particularly true in the context of ongoing advancements in solar energy technologies that can greatly change their performance, size, installation and impacts. Standards will help ensure that future solar energy development will be suitable for site-specific conditions and compatible with surrounding uses and environmental resources. A Mapping Program designed to identify areas and types of potential conflicts posed by solar development with respect to local and onsite environmental issues prior to siting of any utility scale facilities will help ensure that local and County values are maintained in the siting process.</p>	<p>Policy 13: Stand-alone utility scale SEFs shall not be permitted anywhere on LPA, RM or WM designations except as specifically provided in Policies 15 through 17 below.</p> <p>Policy 14: Distribution scale solar energy facilities and microgrids, which are constrained to the required development envelope and the legal rooftops of agricultural buildings anywhere on the parcel, and which may be either behind the meter or subject to a Power Purchase Agreement (PPA), may be conditionally permitted in any land use designation.</p> <p>Policy 15: Solar energy facilities at any scale are permitted within the existing boundaries of public utility corridors including and limited to surface canals and railroad grades; and are conditionally permitted within the existing boundaries of electric transmission corridor easements as defined by boundaries set forth for those corridors, provided the solar energy facility does not expand the boundaries of the utility corridor, and is located within a distance from an electrical connection point no greater than the width of the corridor or within a utility corridor in which the ground surface is already disturbed.</p> <p>Policy 16: A Solar energy facility at the utility scale may be sited anywhere on agricultural lands provided it is integrated fully with agriculture as an agrivoltaics project more precisely defined below in Policies 23-26 below. Solar energy siting programs (including mapping as described under Policy 18 programs) on agricultural lands shall be developed before any facilities may be sited.</p> <p>Policy 17: The County shall not approve Solar Energy Facilities (SEF) in the Altamont Pass Wind Resource Area</p>
--	--	---

		<p>(APWRA) unless it can be demonstrated to the satisfaction of the County that the SEF will not adversely affect the avian population and monitoring that is conducted as a condition of approval.</p> <p>Policy 18: PROGRAMS –</p> <p>(a) Employ a Relative Conflict Mapping Exercise and Program to identify least-conflict locations on all unincorporated areas where SEFs should be better located to avoid conflicts based on agricultural productivity, natural habitat values, archaeological sensitivity, aesthetic character and/or other characteristics of value to the community.</p> <p>(b) A solar energy project may be conditionally permitted and located only in locations identified as an acceptable solar development area pursuant to the Relative Conflict Mapping program described herein. (Create overlay zones)</p> <p>(C) This is an adaptive set of policies that will lead to programs intended to implement these policies to include changes in agriculture, technology, climate, water availability, and advances in knowledge of the relationships between all of these characteristics.</p>
<p>Utility Solar Energy Facilities and Measure D</p>	<p>Although there is no specific reference to solar facilities or solar farms in the LPA / RM / WM land use designations, the Planning Department staff and the Planning Commission have determined, as part of the review and approval of another solar energy facility application, that such a use may be allowed in that it would constitute a quasi-public and infrastructure use consistent with “windfarms and related uses, utility corridors and similar uses compatible with agriculture.”</p> <p>Battery storage is certain to become a part of energy facility proposals going forward.</p>	<p>Policy 19: Permitted Utility Scale SEFs can be found to be compatible with the provisions of Measure D, specifically the activity and use of SEFs, including proportionately sized battery storage, as they are considered needed infrastructure, provided they meet the requirements as set forth in Policies 15 – 18.</p> <p>Policy 20: As infrastructure, conditionally permitted Utility Scale SEFs are not limited to a two-acre development envelope.</p>

	<p>Based on the definition of development in the ECAP, the solar devices and battery storage would clearly be included as a type of development, but because development is defined to include “buildings”, that would suggest that there is some development (such as the solar devices) that are not considered buildings or may be considered infrastructure. Because the FAR restriction is written as being applicable to “buildings” rather than “development” generally, the solar devices should not count towards the ECAP’s building intensity requirement. Battery storage could be interpreted as buildings on footprints, and thus subject to both FAR requirements and building envelope requirements, but if they are to be recognized as integral parts of the electrical transmission grid, then it may be useful to think of them, in some instances, as infrastructure and not subject to building intensity requirements.</p> <p>Interpreting ECAP Policy 13, the Agricultural Advisory Committee agrees Solar Energy Facilities and battery storage are quasi-public and infrastructure uses that do not have a growth inducing effect in Alameda County.</p> <p>As such, SEF development is not affected by FAR restrictions. Policy 13 provides SEF infrastructure can be barred if it exceeds production necessary to create adequate service for the East County. Supplying urban energy purchasers outside of Alameda County is an example of excessive production that could be barred by the Supervisors. On agricultural properties, the Purpose, Goals, or Intent described for the agricultural Area or District are to be used to determine compatibility of SEF with agriculture. In the East County area, it is the Purpose that agricultural lands and uses be enhanced, not blanketed by an urban serving use. Battery storage has additional limitations in that it should be specifically designed to function in direct proximity to and coordination with tie-in points to the grid, such as near substations and/or within utility corridors.</p>	<p>Policy 21: In Eastern Alameda County, stand-alone battery storage facilities may only be located in a utility corridor as defined above in Policy 15, on the parcel of an adjacent existing substations; or on a parcel adjacent to an existing substation; or in land use designations defined by the County for light or heavy industry; and shall be subject to mitigation as appropriate for loss of agricultural, open space or biological habitat lands.</p> <p>Policy 22: Stand-alone batteries storage facilities may be considered infrastructure only when located within an existing power transmission corridor OR when located adjacent to an existing substation provided it is appropriately sized to the capacity of the tie-in location, and in which cases may exceed the .01 FAR and 2 acre building envelope.</p>
--	--	--

<p>Agrivoltaics</p>	<p>Agrivoltaics (AV) is co-developing the same area of land for both solar photovoltaic power along with agriculture.</p> <p>Agriculture production technology changes rapidly. Agrivoltaics is an evolving technology that may be designed to support and enhance agricultural production and cultivation. It may be designed and used to foster soil moisture retention and manage shade that support crops when designed to do so.</p> <p>The future of water available for irrigation is uncertain. Agriculturalists' interests and opportunities in business ventures are also uncertain. Agrivoltaics can possibly assist in helping to resolve both of these issues.</p> <p>Alameda County recognizes that agrivoltaics may be desired by project proponents, and removal of some barriers to agrivoltaic energy production that supports viable agriculture will be permitted/ encouraged by these policies.</p> <p>The purpose is not necessarily or explicitly Utility Scale Energy Production, but multi-use energy production for the SEF and agriculture.</p>	<p>Policy 23: Agrivoltaics may be conditionally permitted at any scale on agricultural lands and are compatible with the provisions of Measure D, provided they meet the requirements as set forth in Policies 24, 25 and 26 below. Solar energy siting programs (including mapping) on agricultural lands shall be developed before any facilities may be sited.</p> <p>Policy 24: Agrivoltaics projects must enhance agriculture and agricultural land uses by creating microclimates, managing soil moisture, directing and collecting water resources, and/or limiting solar wavelength penetration; agrivoltaics may also create other benefits for production of agricultural commodities for commercial purposes.</p> <p>Policy 25: An agrivoltaics project proposal shall submit, as part of its application and proposal, an onsite business, agriculture and land / natural resource management plan, to enhance agriculture and agricultural land as defined. Enhancement shall increase one or more agricultural production indexes including either (a) average gross commodity units produced per crop life cycle of agricultural products for commercial purposes, AND/OR (b) average gross income produced per crop life cycle from agricultural products or services for commercial purposes.</p> <p>The plans shall be peer reviewed by the Agricultural Advisory Committee upon certification of the application as complete, which demonstrates to the County decisionmaking body and Agricultural Advisory Committee that agriculture would be enhanced onsite and that viable agricultural activity and production will continue integrated on 100% of the permitted property (not including roadways, buildings or building site, electrical conduits) in conjunction with the solar energy facility for the life</p>
----------------------------	--	--

		<p>of the facility; and each agrivoltaics approval shall be subject to periodic 5-year reviews in order to determine success or failure of the project under its management plan and whether it may be allowed to continue.</p> <p>Policy 26: The County may permit the integrated use of SEFs and agricultural uses as agrivoltaics on the same parcel to the extent the agricultural use remains viable and the SEF does not degrade the present or future suitability of the land for agricultural purposes, or convert the site to a non-agricultural use.</p>
<p>Solar Energy Facilities on Agricultural Land</p>	<p>Agriculture provides multiple ecosystem services, particularly food and beverage, fiber, natural resource and open space and watershed stewardship. Agriculture traditionally is land-based, which is finite. In Alameda County, most of the highest quality soils, found in the Livermore-Amador Valley, have been removed from agriculture by urbanization. Agriculture enterprises change, or may be lost for many cultural and economic reasons; however, the loss of additional agricultural land is a threat to many community values.</p> <p>Alameda County has a Mediterranean Climate that offers unique characteristics, challenges and opportunities for agriculture.</p> <p>Eastern Alameda County is adjacent to the metropolitan consumer base.</p> <p>In November 2000, the Alameda County electorate approved the Save Agriculture and Open Space Lands Initiative (Measure D). The Initiative amended portions of the County General Plan, including the East County Area Plan (ECAP). The purposes of this Initiative are to preserve and enhance agriculture and agricultural lands, and to protect the natural qualities, the wildlife habitats, the watersheds and the open space of Alameda County from excessive, poorly located and harmful development.</p>	<p>Policy 27: In cases where SEFs that are not Agrivoltaics are located on Important Farmlands, which include lands designated as Prime, Farmlands of State-wide Importance, or Unique Farmlands, the County shall address the permanent loss of any such lands by requiring mitigation to be determined at the time of project approval. The mitigation shall be commensurate with the identified impact and bear a nexus to the general concept of preserving agriculture on important farmlands.</p> <p>Mitigation can include placing farmland of equivalent quality (either on-site or off-site within Alameda County) under permanent easement at a ratio to be identified at the time of project approval, payment of in-lieu fees programmable for the long-range preservation of agricultural land uses, or other mitigation and/or community benefit as may be identified by the County.</p> <p>Any land under easement serving as mitigation shall be maintained for the duration of the project until the project land is returned to a comparable state that is of equivalent (or better) productivity prior to the land development.</p>

	<p>The County has an established a Land Conservation (Williamson) Act Program that enables the County to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive reduced property tax assessments.</p> <p>Since 1965, Williamson Act contracted lands have been traditionally utilized for agriculture in order to produce food and fiber. With the increase need for solar energy sources, the State has enabled local jurisdictions to expand the allowed uses on contracted lands for solar land uses. Solar photovoltaic energy could be considered a compatible use related to the agriculture use of the land. Also, the Williamson Act contract could be cancelled if the Public Interest or Consistency findings are made by the Board of Supervisors that favor solar energy.</p> <p>The Solar panels may be compatible with the primary agricultural operation by demonstrating consistency with the Principles of Compatibility Alameda County Uniform Rules and Procedures Governing Agricultural Preserves and Williamson Act Contracts. However, coverage of parcels under contract is limited to 10% or 10 acres, whichever is less. Providing for combined use of solar and agriculture on the same parcel as agrivoltaics is a developing concept and something the County could support, and could also be permitted on Williamson Act contracted lands if it can be shown that the intent of the Act, that is to preserve agricultural activities and productivity of the land, is met.</p> <p>The Board of Supervisors may grant tentative approval for cancellation of a Williamson Act contract only if it makes either Public Interest or Consistency findings. The Department of Conservation has stated that a cancellation of a contract is appropriate given public benefit from solar energy. If the required findings are met, the landowner is required to pay a</p>	<p>Policy 28: The County shall require AVs on property under Williamson Act contract to comply with Uniform Rule 1, Section II. C. 1 of the Alameda County Uniform Rules and Procedures Governing Agricultural Preserves and Williamson Act Contract; an AV that complies with this Rule and Section may be conditionally permitted when the AV project includes a Decommissioning and Restoration Plan as described in Policy (38).</p> <p>OR:</p> <p>Policy 29: County shall require all SEFs on property under Williamson Act contract to comply with Uniform Rule 2, Section II. E. 3 of the Alameda County Uniform Rules and Procedures Governing Agricultural Preserves and Williamson Act Contracts, or otherwise demonstrate consistency with the Principles of Compatibility found in Uniform Rule 2, Section I. A.</p> <p>Policy 30: Any AV proposal for a land contracted under Williamson Act that exceeds the allowances for compatible uses under the Uniform Rules shall be required to apply for Contract Cancellation before building permits are approved and Cancellation shall be approved before construction begins.</p> <p>Policy 31: The County shall limit the development of SEFs in the South Livermore Valley Area to building mounted structures or ground mounted facilities over existing impervious surfaces within the designated building envelope or along fences and roadways. The removal of vineyards for the installation of solar panels shall not be permitted.</p> <p>Policy 71 – Proposed Modification (<u>new language underlined</u>): The County shall conserve <u>and preserve</u> prime soils (Class I and Class II,</p>
--	--	--

	<p>cancellation fee equal to 12.5 percent of the cancellation valuation (unrestricted fair market value) of the property.</p> <p>If agricultural land is converted or displaced, farmland of equivalent quality either on-site or off-site within Alameda County should be placed under permanent easement at a 1:1 ratio of farmland used for solar installation. The land under easement shall be maintained in perpetuity in a state of equivalent (or better) productivity compared to the land developed. This mitigation measure ratio can be altered by the decision makers prior to adoption of the policy proposal, but should mitigate for the loss of farmland.</p>	<p>as defined by the USDA Soil Conservation Service Land Capability Classification) and Farmland of Statewide Importance and Unique Farmland (as defined by the California Department of Conservation Farmland Mapping and Monitoring Program) outside the Urban Growth Boundary; <u>photovoltaic SEF development shall be considered as conserving and preserving of the prime soils when approved as an agrivoltaics project along with a Decommissioning and Restoration Plan as described in Policy (38).</u></p> <p>Policy 72 – Proposed Modification (<u>new language underlined</u>): The County shall <u>conserve and preserve the soils and lands of the Mountain House area for intensive agricultural use; photovoltaic SEF development shall be considered as conserving and preserving of the land and its soils for intensive agricultural use when approved as an agrivoltaics project along with a Decommissioning and Restoration Plan as described in Policy (38).</u></p>
<p>Natural Resources and Environmental Review</p>	<p>Although solar energy provides a path to a clean energy future, solar energy facilities have the potential to cause unintended negative effects on sensitive biological species and habitat, visual resources, cultural resources, and nearby communities. To achieve a clean energy future that minimizes negative effects consistent with local values, the County has considered how to reduce energy use through energy efficiency and conservation measures, and identified solar energy facility standards that concentrate on community-oriented solar energy facilities that produce electricity for local consumption.</p> <p>A major element of permitting for new infrastructure is an environmental review. The California Environmental Quality Act (CEQA) identifies the environmental review process and requirements for all projects within the state. An initial study serves as a preliminary analysis to determine whether an environmental impact report (EIR) or a negative declaration (ND) must be prepared or to identify the significant environmental</p>	<p>Policy 32: The County shall utilize the East Alameda County Conservation Strategy (EACCS), RCIS and CNDDDB, or their successors at both the local and State level, to guide and determine appropriate Solar Energy Facilities (SEF) siting and biological mitigation.</p> <p>Policy 33: Apply standards to the design, siting, and operation of all solar energy facilities that protect the environment, including sensitive biological resources, air quality, water supply and quality, cultural, archaeological, paleontological and scenic resources. <u>(Include Wildlife protection measures as Programs)</u></p> <p>Policy 34: Require siting, construction and screening of SEFs to avoid, minimize or mitigate significant changes to the visual environment including minimizing light and glare.</p>

	<p>effects to be analyzed in an EIR. Typically an EIR, or equivalent document, is prepared for electricity infrastructure projects unless the project is very small (for example, a 1 MW solar PV project). In that case, a ND or mitigated negative declaration (MND) may be prepared instead.</p> <p>The solar energy policy would allow the use of open space for the harvest of a natural resource and its conversion to a form usable by the community. However, the policy shall protect sensitive viewsheds and biological resources and uphold current ECAP policies. Programs will be developed to minimize effects on biology and mitigate impacts from solar development.</p> <p>A project can adversely affect visual character or visual quality by creating contrast with the form, line, color, texture, or spatial arrangement of the existing setting; by introducing a dominant element to a view; by blocking a scenic view; or by causing light or glare. Energy facilities can produce glare (if reflective materials like solar panels or mirrors are used) that can shine on surrounding areas. Nighttime lighting can be directly visible or can illuminate the sky. Utility-scale solar energy facilities can occupy very large tracts of land and may be inconsistent with the existing scenic qualities of the landscape.</p>	<p>Policy 35: A project shall use reasonable measures not to affect the visual character of the existing setting.</p> <p>Policy 36: All electric lines being added as part of an SEF shall be required to be underground as a condition of approval.</p> <p>Policy 37: Place and maintain land of equivalent quality either on-site or off-site within Alameda County under permanent easement for any natural habitat displaced.</p>
<p>Decommissioning and Restoration Plan</p>	<p>The County shall require Solar Energy Facilities (SEF) developers to provide and implement a decommissioning, restoration and reclamation plan that provides for reclamation of the site to a condition at least as good as that which existed before the lands were disturbed or another appropriate end use that is stable (i.e. with interim vegetative cover), prevents nuisance, and is readily adaptable for alternative land uses suitable for the district in which they are located.</p>	<p>Policy 38: The County shall require SEF developers to provide and implement a decommissioning and restoration plan that provides for reclamation of the site to a condition at least as good as that which existed before the lands were disturbed or another appropriate end use that is stable (i.e. with interim vegetative cover), prevents nuisance, and is readily adaptable for alternative land uses. The restoration plan shall be approved by the decision-making body at the time of permit approval and should include the following at a minimum:</p>

		<ul style="list-style-type: none"> a) The County shall require a decommissioning and restoration plan with financial assurances for every utility-scaled SEF for the purpose of providing a financial assurance to guarantee completion of decommissioning and restoration. b) A plan and timeframe for removal of all equipment and components when they are no longer in use and all material reused or recycled to the greatest extent possible; c) Removal of graveled areas and access roads and restoration of the surface grade and placement of topsoil after removal of all structures and equipment including grading, revegetation and erosion control plans to return the site to an appropriate end use; d) Revegetation of disturbed areas that will not be used for cultivated agriculture with native seed mixes and plant species consistent with local ecotypes; e) A cost estimate for all restoration activities; f) Assurance that handling and disposal of waste resulting from the removal of equipment will comply with all applicable federal, state and county regulations and standards; and g) A statement signed by the owner/operator that they take full responsibility for restoring the site in accordance with the Decommissioning and Restoration Plan upon cessation of use. h) Provide for an inspection after all decommissioning and site restoration work to ensure that the work has been completed to the standards required by the County, prior to release of the decommissioning and restoration bond. <p>Policy 39: The decommissioning and reclamation / restoration plan shall be approved by the decision-making body at the time of permit approval.</p> <p>Policy 40: Prior to the issuance of a Building Permit for construction of the solar facility, a Financial</p>
--	--	---

		<p>Assurance or security in a form and amount acceptable to the County should be required to secure the expense of dismantling and removing the Solar Energy Facilities (SEF) and restoring the site. A SEF that ceases to produce electricity on a continuous basis for twelve months should be considered abandoned and the owner/operator would be required to complete the requirements in the restoration plan.</p>
<p>Monitoring and Inspection</p>	<p>The expertise and involvement of the trustee/responsible agency are an essential part of a successful mitigation monitoring program. Experts and/or County officials provide the means to ensure that implementation of the mitigation measures is adequate and timely. Monitoring of site activity can be accomplished using periodic reports from the developer and onsite inspections.</p>	<p>Policy 41: The County will impose permit fees for Solar Energy Facilities (SEF) that will be used to defray the cost of permit processing, inspection and enforcement.</p> <p>Policy 42: Annual reports shall be required of the operator of a utility scale SEF, to be delivered to the County director of community development on the anniversary date of the start of construction. The annual report shall include a statement describing compliance with each condition of approval, with a statement describing the quantity of electrical energy generated and delivered to the electrical transmission grid in the previous 12 month period. If a SEF is an agrivoltaics project, the operator shall also provide a quantitative assessment of agricultural enhancement pursuant to, and in comparison with, the agricultural management plan for the project site; and an appropriate assessment of natural resource progress pursuant to the natural resources plan. If requested, a copy of any supporting documentation shall also be provided to the director of community development by the operator.</p> <p>Policy 43: The community development agency shall arrange for inspection of a utility scale SEF within six months of receipt of the annual report required by this chapter, to determine whether the SEF is in compliance with the approved permit and/or</p>

		<p>reclamation plan and approved financial assurances. In the case of an agrivoltaics SEF, the inspection shall also verify compliance with the agricultural management plan and natural resources plan. In no event shall less than one inspection be conducted in any calendar year.</p> <p>Said inspections may be made by County Staff and, for AV projects, qualified experts who have experience in agriculture, agronomy, or soil science and natural resources and who have not been employed by the SEF in any capacity during the previous twelve (12) months, or other qualified specialists, as selected by the director of community development or the deputy director designee. The operator shall be solely responsible for the reasonable cost of such inspection.</p> <p>Policy 44: SEF permits and approved reclamation/restoration plans, and for AV SEFs consistency with agricultural management plans and natural resource plans, shall be reviewed by the East County Board of Zoning Adjustments, in accordance with the schedule adopted at the time of approval to consider new or changed circumstances that should be accommodated by the permit or plan. The review shall include public hearings before the AAC for recommendation and EBZA. At the conclusion of the public hearing, the EBZA may modify the permit or reclamation/ restoration plan to conform to with this chapter, and such modified permit or plan shall be binding upon the operation. Any fees for periodic reviews shall be borne by the SEF operator.</p>

*Large Parcel Agriculture requires a minimum parcel size of 100 acres, except as provided in Programs 40 and 41. The maximum building intensity for non-

residential buildings shall be .01 FAR (floor area ratio) but not less than 20,000 square feet. Where permitted, greenhouses shall have a maximum intensity

of .025. One single family home per parcel is allowed provided that all other County standards are met for adequate road access, sewer and water facilities, building envelope location, visual protection, and public services. Residential and residential accessory buildings shall have a maximum floor space of 12,000 square feet. Additional residential units may be allowed if they are occupied by farm employees required to reside on-site. Apart from infrastructure under Policy 13, all buildings shall be located on a contiguous development envelope not to exceed 2 acres except they may be located outside the envelope if necessary for security reasons or, if structures for agricultural use, necessary for agricultural use. Subject to the provisions of the Initiative, this designation permits agricultural uses, agricultural processing facilities (for example wineries, olive presses), limited agricultural support service uses (for example animal feed facilities, silos, stables, and feed stores), secondary residential units, visitor-serving commercial facilities (by way of illustration, tasting rooms, fruit stands, bed and breakfast inns), recreational uses, public and quasi-public uses, solid waste landfills and related waste management facilities, quarries, windfarms and related facilities, utility corridors, and similar uses compatible with agriculture. Different provisions may apply in the South Livermore Valley Plan Area, or in the North Livermore Intensive Agriculture Area.

*Resource Management requires a minimum parcel size of 100 acres and a maximum building intensity for non-residential uses of .01 FAR but not less than 20,000 square feet. One single family home per parcel is allowed provided that all other County standards are met for adequate road access, sewer and water facilities, building envelope location, visual protection, and public services. Residential and residential accessory buildings shall have a maximum floor space of 12,000 square feet. Apart from infrastructure under Policy 13, all buildings shall be located on a contiguous development envelope not to exceed 2 acres, except they may be located outside the envelope if necessary for security reasons or, if structures for agricultural use, necessary for agricultural use. Subject to the provisions of the Initiative, this designation permits agricultural uses, recreational uses, habitat protection, watershed management, public and quasipublic uses, areas typically unsuitable for human occupation due to public health and safety hazards such as earthquake faults, floodways, unstable soils, or areas containing

wildlife habitat and other environmentally sensitive features, secondary residential units, active sand and gravel and other quarries, reclaimed quarry lakes, and similar and compatible uses. Sand and gravel quarries allow a range of uses including sand and gravel processing, associated manufacturing and recycling uses requiring proximity to quarries, reclamation pits, and public use areas. This designation is intended mainly for land designated for long-term preservation as open space but may include low intensity agriculture, grazing, and very low density residential use.

*Water Management Lands allows for a minimum parcel size of 100 acres and a maximum building intensity of .01 FAR. One single family home per parcel is allowed provided that all other County standards Land Use 48 East County Area Plan (Revised by Initiative Nov. 2000) are met for adequate road access, sewer and water facilities, building location, visual protection, and public services. Residential and residential accessory buildings shall have a maximum floor space of 12,000 square feet. Apart from infrastructure under Policy 13, all buildings shall be located on a contiguous development envelope not to exceed 2 acres, except they may be located outside the envelope if necessary for security reasons or, if structures for agricultural use, necessary for agricultural use. Subject to the provisions of the Initiative, this designation provides for sand and gravel quarries, reclaimed quarry lakes, watershed lands, arroyos, and similar and compatible uses. Sand and gravel quarries allow a range of uses including sand and gravel processing, associated manufacturing and recycling uses requiring proximity to quarries, reclamation pits, and public use areas.