

AD HOC COMMITTEE ON SUSTAINABILITY

January 22, 2018 9:00 A.M. 651 Pine Street, Room 101, Martinez

Supervisor John Gioia, Chair Supervisor Federal D. Glover, Vice Chair

Agenda Items:

Items may be taken out of order based on the business of the day and preference of the Committee

- 1. Introductions
- 2. APPROVE Record of Action for November 13, 2018, meeting of the Ad Hoc Committee on Sustainability.
- 3. Public comment on any item under the jurisdiction of the Committee and not on this agenda (speakers may be limited to three minutes).
- 4. RECEIVE information on costs and benefits of enrolling in MCE Deep Green and an evaluation of an alternative course of action to achieve Climate Action Plan goals and PROVIDE DIRECTION regarding next steps.
- 5. RECEIVE report on preparation of an Electric Vehicle Readiness Blueprint.
- 6. RECEIVE report from the Contra Costa County Sustainability Commission Chair.
- 7. RECEIVE update on Renewable Resource Potential Study.
- 8. RECEIVE update from the County's Sustainability Coordinator.
- 9. The next meeting is currently scheduled for Monday, March 26, 2018, 12:30 p.m.
- 10. Adjourn

The Ad Hoc Committee on Sustainability will provide reasonable accommodations for persons with disabilities planning to attend Ad Hoc Committee on Sustainability meetings. Contact the staff person listed below at least 72 hours before the meeting.

Any disclosable public records related to an open session item on a regular meeting agenda and distributed by the County to a majority of members of the Ad Hoc Committee on Sustainability less than 96 hours prior to that meeting are available for public inspection at 651 Pine Street, 1st floor, during normal business hours.

Public comment may be submitted via electronic mail on agenda items at least one full work day prior to the published meeting time. For further questions, contact Jody London, Sustainability Coordinator, Department of Conservation and Development, (925) 674-7871, or email jody.london@dcd.cccounty.us.

Glossary of Acronyms, Abbreviations, and other Terms (in alphabetical order): Contra Costa County

has a policy of making limited use of acronyms, abbreviations, and industry-specific language in meetings of its Board of Supervisors and Committees. Following is a list of commonly used abbreviations that may appear in presentations and written materials at meetings of the Ad Hoc Sustainability Committee:

AB Assembly Bill

ABAG Association of Bay Area Governments ACA Assembly Constitutional Amendment ADA Americans with Disabilities Act of 1990

BAAQMD Bay Area Air Quality Management District

BART Bay Area Rapid Transit District

BCDC Bay Conservation & Development Commission

BDCP Bay-Delta Conservation Plan

BGO Better Government Ordinance (Contra Costa County)

BOS Board of Supervisors

CALTRANS California Department of Transportation CAER Community Awareness Emergency Response CAO County Administrative Officer or Office

CAP Climate Action Plan CCA Community Choice

CCTA Contra Costa Transportation Authority

CCWD Contra Costa Water District

CDBG Community Development Block Grant CEQA California Environmental Quality Act

CFS Cubic Feet per Second (of water)

CSA County Service Area

CSAC California State Association of Counties CTC California Transportation Commission

DCC Delta Counties Coalition

DCD Contra Costa County Dept. of Conservation &

Development

DPC Delta Protection Commission DSC Delta Stewardship Council

DWR California Department of Water Resources EBMUD East Bay Municipal Utility District

EIR Environmental Impact Report (a state requirement)

EIS Environmental Impact Statement (a federal requirement)

FEMA Federal Emergency Management Agency

FTE Full Time Equivalent

FY Fiscal Year

GHG Greenhouse Gas

GGRF Greenhouse Gas Reduction Funds GIS Geographic Information System HOT High-Occupancy/Toll HOV High-Occupancy-Vehicle

HSD Contra Costa County Health Services Department

HUD United States Department of Housing and Urban Development

IPM Integrated Pest Management

JPA/JEPA Joint (Exercise of) Powers Authority or Agreement

Lamorinda Lafayette-Moraga-Orinda Area LAFCo Local Agency Formation Commission

LCC League of California Cities

LTMS Long-Term Management Strategy MAC Municipal Advisory Council MBE Minority Business Enterprise MOA Memorandum of Agreement MOE Maintenance of Effort MOU Memorandum of Understanding

MTC Metropolitan Transportation Commission

NACo National Association of Counties

NEPA National Environmental Protection Act

PDA Priority Development Area

PV Photovoltaicv

PWD Contra Costa County Public Works Department

RDA Redevelopment Agency or Area RFI Request For Information RFP Request For Proposals RFQ Request For Qualifications

SB Senate Bill

SBE Small Business Enterprise SGC Strategic Growth Council SR2S Safe Routes to Schools

SWAT Southwest Area Transportation Committee

TRANSPAC Transportation Partnership & Cooperation (Central) TRANSPLAN Transportation Planning Committee (East County) TWIC Transportation, Water, and Infrastructure Committee U.S. EPA United States Environmental Protection Agency WBE

Women-Owned Business Enterprise

WCCTAC West Contra Costa Transportation Advisory Committee



Contra Costa County Board of Supervisors

Subcommittee Report

AD HOC COMMITTEE ON SUSTAINABILITY

2.

Meeting Date: 01/22/2018

Subject: APPROVE Record of Action for November 13, 2018, meeting of the Ad Hoc

Committee on Sustainability.

Submitted For: Jody London, Sustainability Coordinator

Department: Conservation & Development

Referral No.:
Referral Name:

Presenter: Jody London, Sustainability <u>Contact:</u> Jody London (925)674-7871

Coordinator

Referral History:

County Ordinance (Better Government Ordinance 95-6, Article 25-205 [d]) requires that each County body keep a record of its meetings. Though the record need not be verbatim, it must accurately reflect the agenda and the decisions made in the meeting.

Referral Update:

Any handouts or printed copies of testimony distributed at the meeting will be attached to this meeting record. Links to the agenda and minutes will be made available at the Committee web page, http://www.contracosta.ca.gov/6229/Sustainability

Recommendation(s)/Next Step(s):

Staff recommends approval of the attached Record of Action for the November 13, 2018, meeting of the Ad Hoc Committee on Sustainability with any necessary corrections.

Fiscal Impact (if any):

N/A

Attachments

11-13-17 Meeting Minutes

11-13-17 Handout - BayRen

11-13-17 Handout - MCE Customer Prgms

11-13-17 Handout - MCE Local Workforce



RECORD OF ACTION AD HOC COMMITTEE ON SUSTAINABILITY

November 13, 2017 12:30 P.M. 651 Pine Street, Room 101, Martinez

Supervisor John Gioia, Chair Supervisor Federal D. Glover, Vice Chair

Agenda Items:

Items may be taken out of order based on the business of the day and preference of the Committee

Present: John Gioia, Chair

Absent: Federal D. Glover, Vice Chair

Staff Present: Michael Kent, Hazardous Materials Ombudsman

Jody London, Sustainability Coordinator

Frank DiMassa, Energy Manager

Jason Crapo, Deputy Director, Dept of Conservation and Development

Will Nelson, Principal Planner

John Kopchik, Director, Dept of Conservation and Development

Attendees: Victoria Smith

Meaghan Doran Harry Thurston Alice Stover Jennifer West Gretchen Logue Jenny Berg Jerry Lahr Vijay Kesavan

Jan Warren

- 1. Introductions
- 2. Public comment on any item under the jurisdiction of the Committee and not on this agenda (speakers may be limited to three minutes).
- 3. Staff recommends approval of the attached Record of Action for the September 25, 2017, meeting of the Ad Hoc Committee on Sustainability with any necessary corrections.

The Record of Action was adopted.

Chair John Gioia,

AYE: Chair John Gioia

Other: Vice Chair Federal D. Glover (ABSENT)

Passed

4. RECEIVE report from Contra Costa County Sustainability Commission.

Victoria Smith, Chair of the Sustainability Commission, reported on the work of the Commission since the last meeting of the Ad Hoc Committee on Sustainability. The Commission nominated Gretchen Logue to the seat on the Integrated Pest Management Advisory Board designated for the Sustainability Commission. The Commission has been discussing its annual report for 2017 and workplan and goals for 2018, which it expects to submit to the Board of Supervisors in January 2018. At its October meeting the Commission received a presentation from Deidra Dingman on solid waste issues and Climate Action Plan implementation goals, and discussed the Idle Free Pledge.

5. RECEIVE report on discussion paper "Navigating the Changing Landscape of Energy Efficiency Programs in the East Bay", and PROVIDE DIRECTION as appropriate.

Demian Hardman from the Department of Conservation and Development provided a history and overview of the discussion paper prepared by the East Bay Energy Watch, Navigating the Changing Landscape of Energy Efficiency Programs in the East Bay. Hardman described that both the East Bay Energy Watch (EBEW), a partnership between PG&E and the jurisdictions in Contra Costa and Alameda counties, and the Bay Area Regional Energy Network (BayREN), a collaboration of the nine counties that comprise the San Francisco Bay area, administered by the Association of Bay Area Governments/Metropolitan Transportation Commission, provide funding for County staff to implement energy efficiency programs for residents and businesses in Contra Costa County. As more cities and the County join MCE, which also offers energy efficiency programs, staff want to ensure that the entities that sponsor these programs are coordinating.

Jenny Berg, BayREN Program Manager, provided an overview of the BayREN and the programs it offers. Hardman described the EBEW programs. Alice Stover and Meghan Doran of MCE described the energy efficiency programs that MCE offers. Stover said that as new communities join MCE, MCE must identify funds to provide energy efficiency programs. This can take some time. MCE staff stated that MCE does not want to replace programs being run by local governments currently. MCE is establishing a call center in Pittsburg and is working with Future Build to train 11 people to work at the call center.

Supervisor Gioia expressed interest in how the programs are centralizing outreach, education, and access, noting that people want to go to one, user-friendly place for all the information they need. Staff from the different programs discussed goals and options for streamlining how the public interacts with the opportunities. The groups present agreed they will identify how to better collaborate, and will report back to the Committee.

6. PROVIDE DIRECTION to staff and REFER the issue of access to energy usage data to the Board of Supervisors.

Demian Hardman from the Department of Conservation and Development described the importance of data on energy usage in buildings to determining progress in meeting Climate Action Plan goals. Hardman reported that the data are incomplete, especially in the industrial sector. Without data on energy usage, staff cannot report on greenhouse gas reductions in the commercial and industrial sectors. This is a problem across the State because the investor-owned utilities are not providing the needed data. Staff recommends that the Board of Supervisors authorize staff to work with other local governments and stakeholders to submit formal comments as needed to the California Public Utilities Commission and other entities to obtain accurate and consistent energy usage data, and to identify other, more applicable solutions to this issue. The Committee referred this matter to the Board of Supervisors.

7. DIRECT staff to proceed with developing a solar ordinance reach code for Contra Costa County.

Jason Crapo from the Department of Conservation and Development summarized research that staff has performed since the last meeting of the Committee on developing an ordinance that would require the installation of solar energy panels on new residential structures. This would be based on a model ordinance developed by the Bay Area Regional Collaborative, Bay Area Air Quality Management District, and Bay Area Regional Energy Network. It is widely expected that the 2019 California Building Code will include a requirement for mandatory solar facilities on new residential structures. The Committee directed staff to bring this matter to the full Board.

8. RECEIVE update on amendments to General Plan and zoning code that would allow commercial solar energy facilities in the General Commercial, Light Industrial, and Heavy Industrial zoning districts after issuance of a Land Use Permit.

Will Nelson from the Department of Conservation and Development presented the unanimous recommendation from the County Planning Commission to amend the General Plan and Ordinance Code to allow commercial/distribution scale solar energy projects in certain commercial and industrial areas of the unincorporated County. This item will be forwarded to the Board of Supervisors.

9. RECEIVE update from the County's Sustainability Coordinator and PROVIDE DIRECTION as appropriate.

Jody London, Sustainability Coordinator, referred the Committee to the written report provided in the agenda.

10. The next meeting is currently scheduled for January 22, 2017, 9:00 A.M.

11. Adjourn

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STAFF: Jody London, Coordinator (925) 674-7871. Glossary of Acronyms, Abbreviations, and other Terms (in alphabetical order): Contra Costa County has a policy of making limited use of acronyms, abbreviations, and industry-specific language in meetings of its Board of Supervisors and Committees. Following is a list of commonly used abbreviations that may appear in presentations and written materials at meetings of the Ad Hoc Sustainability Committee:

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BART Bay Area Rapid Transit District	HSD Contra Costa County Health Services Department
BAYREN Bay Area Regional Energy Network	IPM Integrated Pest Management
BGO Better Government Ordinance (Contra Costa County)	JPA/JEPA Joint (Exercise of) Powers Authority or Agreement
BOS Board of Supervisors	LAMORINDA Area of Lafayette-Moraga-Orinda
CALTRANS California Department of Transportation	MAC Municipal Advisory Council
CAO County Administrative Officer or Office	MBE Minority Business Enterprise
CAP Climate Action Plan	MOA Memorandum of Agreement
CARB California Air Resources Board	MOE Maintenance of Effort
CCA Community Choice	MOU Memorandum of Understanding
CCE Community Choice Energy Aggregation	MTC Metropolitan Transportation Commission
CCWD Contra Costa Water District	NACo National Association of Counties
CEC California Energy Commission	NEPA National Environmental Protection Act
CPUC California Public Utilities Commission	PDA Priority Development Area
CEQA California Environmental Quality Act	PV Photovoltaicv
CSA County Service Area	PWD Contra Costa County Public Works Department
CSAC California State Association of Counties	RDA Redevelopment Agency or Area
DCC Delta Counties Coalition	RFP Request For Proposals
DPC Delta Protection Commission	RFQ Request For Qualifications
DWR California Department of Water Resources	SB Senate Bill
DCD Contra Costa County Dept. of Conservation & Development	SGC Strategic Growth Council
EBEW East Bay Energy Watch	SR2S Safe Routes to Schools
EBMUD East Bay Municipal Utility District	TWIC - Transportation, Water, and Infrastructure Committee
EIR Environmental Impact Report (a state requirement)	U.S.EPA United States Environmental Protection Agency
EIS Environmental Impact Statement (a federal requirement)	WBE Women-Owned Business Enterprise



BayREN

is a highly effective and trusted government organization for delivery of targeted, integrated, regional-scale climate solutions, focused on energy, water and resiliency.

BayREN

Government Capacity with training, mentoring and range of resources for local governments in the nine bay area counties; 2. Promoting Healthy and Energy Efficiency Buildings for single family and multifamily residents and soon for small and medium commercial property owners and public buildings; 3. Reducing Carbon Emissions by catalyzing regional activities and connecting them to existing initiatives.



Contra Costa County Impacts

Working with Hard-to-Reach Communities

A critical reason for the development of the BayREN is the historic underserved members of urban communities by efficiency services from utility programs. These communities include moderate income households, minority populations, small businesses, multifamily housing and non-profit and government agencies. To date, CCC residential impacts have been significant.

Multifamily

Upgraded 2,141 units (26 projects); 1,282 (17 projects) are under construction with another 1,098 (18 projects) currently receiving Technical Assistance.

Single Family

Completed 1,548 Home Upgrade projects, representing 29% of all projects region wide. Additionally, there are 21 very active participating contractors in the County, many of whom have found significant success with the program and have added staff.

Climate Change and Resiliency as Drivers

BayREN activities is the creation of a pathway to achieve climate and resiliency goals aligned with state and local government policy. Better coordination of these activities with deep efficiency and distributed energy resources will improve community resilience.

Example - Codes and Standards

Contra Costa County has shown leadership with this program having completed:

- ✓ 24 trainings, with 302 enforcement personnel attending
- Piloted the Regional Plan Check Program, completing 36 projects
- Pilot participant for CodeCyle Demonstration Plan Check
- ✓ One Municipal Building has received ZNE Technical Assistance

10-Year Business Plan

The BayREN has completed a 10-year business plan to expanding their successful programs to serve small and medium commercial property owners, and the public sector even more.





Customer Programs

2018 Distributed Energy Resources (DER) Initiatives mceCleanEnergy.org/energy-savings

ENERGY EFFICIENCY

Multifamily Energy Savings Program

This program provides complimentary walk-through energy assessments and technical assistance to identify energy and water saving opportunities at multifamily properties. In addition, the program provides cash rebates to implement energy upgrades, assists with contractor bid solicitations, educates and trains operations and maintenance staff, and offers a free direct install of energy and water saving equipment.

Low Income Families and Tenants Pilot Program (LIFT)

Multifamily properties with tenants at or below 200% Federal Poverty Guidelines receive a \$1,200 per unit rebate in addition to rebates provided by the Multifamily Energy Savings Program. It also offers electric heat pumps at no cost.

Small Commercial Energy Savings Program

This multi-measure program targets restaurants, retail, office and other non-residential properties to offer technical assistance, cash incentives and turn-key contracting and procurement at low or no cost to customers.

Single-Family Seasonal Savings Program

Seasonal Savings is a software algorithm that offers customers the opportunity to make their cooling and heating schedules more efficient through a series of small adjustments to scheduled temperatures over a three-week period. Customers are offered the program on their thermostat and through a phone app and must opt-in to participate.

OpenEE Metered Savings Analytics

This program tracks and reports energy savings associated with Property Assessed Clean Energy (PACE) loans in Marin County. The platform allows energy implementers to analyze measure impacts and customer usage while informing new MCE programming.

PILOT PROGRAMS

Residential Demand Response

MCE is exploring a Bring Your Own Technology (BYOT) demand response model employing technologies ranging from batteries to programmable thermostats with the goal of shifting load away from evening peak hours.

Transportation Electrification Initiatives

MCE is currently exploring concepts that support EV adoption with an emphasis on commercial / workplace charging and residential load management. This includes actively facilitating the alignment of publicly available funding sources with companies interested in installing charging stations.

MCE Building Efficiency Optimization (BEO):

This \$1.7 million CEC grant is looking at scaling Distributed Energy Resources (DERs) throughout MCE's service area via a strong data driven siting and targeting approach that can be shared and replicated by other CCAs.

Richmond Advanced Energy Communities (AEC) Grant

MCE is partnering with various stakeholders in Richmond, CA to increase energy resiliency, lower energy costs and open new revenue streams for the community, including aggregating DERs for participation in demand response.

Low Income Solar Rebates

MCE partners with Grid Alternatives to help income-qualified customers adopt rooftop solar. MCE provides an \$800 rebate to offset the cost of installation.



MCE Local Workforce Partners

MCE PARTNER	COMMUNITY INVESTMENT	SOCIAL IMPACT
RichmondBUILD	\$45,000	330 job hours; Solar One jobs scheduled for 2017
Rising Sun	\$140,000	400 multifamily units receive efficiency upgrades; 11 youth trained; 1,369 on the job hours
GRID Alternatives	\$35,000/ \$75,000 distributed	60 free or very low-cost residential solar systems
Marin City Community Development Corporation (MCCDC)	\$240,000	62 people trained, 1,798 on the job hours

RichmondBUILD

RichmondBUILD provides comprehensive training and development for local disadvantaged community members, out-of-work residents, and Richmond-based contractors and suppliers. This program builds important skills to ensure success across a wide range of skill sets, and offers placement services and ongoing support to program participants for a high rate of job placement. RichmondBUILD is also a certified pre-apprenticeship program, helping link emerging job graduates with union apprenticeship programs for lasting employment opportunities.



In 2013, MCE and RichmondBUILD signed a contract for \$45,000 to provide 80-100 local residents with 330+ hours of construction skills training, numeracy and literacy training, job placement, case management, job-site mentoring and preand post-employment counseling. Many of these graduates went on to work on an LED streetlight retrofit project in Richmond.

In 2016, RichmondBUILD provided labor to MCE's most recent solar Feed-in Tariff project. This project, located at the Freethy Industrial Park, supported twenty-three jobs. Through RichmondBUILD, workers gained a new construction skill set, making them eligible for further opportunities to work for local solar installation companies. Three permanent jobs were created by Energy Systems Development to maintain the system for ten years.

Most recently, MCE's Solar One project in the City of Richmond requires a 50% minimum Richmond resident workforce to complete the construction of 10.5 MW of new local renewable energy generation. All subcontractors are encouraged to use RichmondBUILD graduates in order to hopefully exceed this goal when construction starts in 2017.

Rising Sun Energy Center

Rising Sun is a local nonprofit serving communities in Northern California since 2000, focused on green job training, workforce and youth development, and residential energy efficiency.

In 2013, MCE signed a \$56,000 contract with Rising Sun to train and employ local youth as Energy Specialists. These Energy Specialists provided no-cost energy and water assessments and installations for Richmond residents through MCE's Multifamily Energy Savings Program.

In 2016, MCE signed a \$84,000 contract with Rising Sun to deliver a similar program in the cities of El Cerrito and San Pablo, helping generate interest and awareness of MCE's comprehensive energy efficiency programs.



Together, Rising Sun and MCE have served nearly 400 multifamily residents with energy efficiency measures to save our local communities electricity and money.

GRID Alternatives

GRID Alternatives is a nonprofit that manages California's \$162 million Single-family Affordable Solar Homes (SASH) incentive program, the country's first dedicated solar rebate for low-income families. GRID Alternatives provides no- to very-low-cost solar systems for low-income families while providing hands-on installation experience for job seekers and community volunteers.



MCE works with GRID Alternatives to help cover the cost of residential solar for low-income qualified households in member communities. Through this partnership, MCE has contributed over \$35,000 to help finance over 60 systems, totaling almost 170 kW of new rooftop solar to date. The majority of these installations have been in

Richmond. In 2017, an additional \$40,000 will be allocated to growing this program and expanding access to rooftop solar for our low-income customers.

Marin City Community Development Corporation

Marin City Community Development Corporation (MCCDC) has been empowering Marin communities for more than thirty years. With a diverse mix of proven asset development programs, MCCDC has been helping job seekers find and retain employment and build their lives and communities with the savings they earn.

EDC

Marin City Community Development Corporation

In 2012, when MCE's first Feed-in Tariff project was built in San Rafael, MCCDC employed local workers to install 46,000 solar panels for Marin County's largest solar project at the time.

Marin City Community Development Corporatio

Building Sustainable Communities Through

Community and Economic Development

MCE has been contracting with MCCDC since 2013 for approximately \$240,000 to train and employ local disadvantaged populations in Marin County for direct install work, to conduct tenant outreach, and to manage material inventory for MCE's Multifamily Energy Savings Program. This contract has trained 62 people and created a total of 1,798 local job training hours.



Contra Costa County Board of Supervisors

Subcommittee Report

AD HOC COMMITTEE ON SUSTAINABILITY

4.

Meeting Date: 01/22/2018

Subject: RECEIVE information on enrolling in MCE Deep Green and PROVIDE

DIRECTION regarding next steps.

Submitted For: John Kopchik, Director, Conservation & Development Department

Department: Conservation & Development

Referral No.:
Referral Name:

Presenter: Frank DiMassa, Energy Manager **Contact:** Frank DiMassa (916) 313-2188

Referral History:

The Ad Hoc Committee on Sustainability has requested a report detailing the opportunities and considerations of enrolling all County facilities in the MCE Deep Green program.

Referral Update:

Staff members from the Departments of Conservation and Development (DCD) and Public Works have worked independently and with staff at MCE to better understand the costs and benefits of the Deep Green 100% renewable electricity product offering. The Deep Green product offering comes at a cost premium relative to the default MCE Light Green product of around \$0.01/kWh (one cent per kWh). MCE Light Green normally comes in within 1 to 2% either less or more expensive than PG&E's default 33% renewable product offering.

An MCE analysis on Contra Costa County (CCC) load indicates that approximately 40,443,282 kWh would be purchased from MCE per year. The one cent per kWh premium for the Deep Green product would result in an increase in electric utility costs to the County of \$404,433/year. Utility expenses are paid by each occupying department. The additional costs related to the Deep Green product would be primarily funded by County General Fund Building Occupancy, 29%, Employment & Human Services, 14%, and Health Services – Hospital Enterprise Fund, 34%. As can be seen in Figure 1 (attached), MCE's analysis is that the estimated associated GHG emissions reductions would equal 5,228 metric tons of CO2e representing a little less than two percent (<2%) of the County Climate Action Plan goals.

An Alternate Perspective on Green Energy Investing by the County

The Contra Costa County Sustainability Commission is studying the various aspects of the Climate Action Plan; the Chair has indicated that the Commission would like a report on Government Operations at the Feb. 26 meeting. In response to this request for input, the Public Works Department will be presenting a proposed Distributed Energy Resource (DER) Plan to the Subcommittee on February 26th. A key part of the DER plan is the installation of the twelve photovoltaic (PV) systems totaling 5 MW that received Interconnection Agreements at end of calendar year 2017. (Please see Figure 2 attached.) In its meeting of December 19, 2017, the Board of Supervisors approved and authorized the Interim Public Works Director, or designee, to execute PG&E interconnection agreements for net energy metering of solar electric generating facilities of 1,000 kW or less for various County-olwned facilities, Countywide.

The proposed approach for installing these PV systems is through a Power Purchase Agreement (PPA). Figure 3 provides a breakdown of the specifics of conservative estimates of the first year savings from the PPA and first year cost associated with MCE Deep Green and Figure 4 provides the comparative cash flow over the life of the PPA. It can be seen that while a PPA which involves no cash investment from the County saves the County \$412,500 in year one, with no solar MCE Deep Green would cost the County approximately \$402,000.

Recommendation(s)/Next Step(s):

DIRECT staff to proceed to develop a draft 2018 Contra Costa County Distributed Energy Resource Plan, and present the Plan to the Board of Supervisor's Ad Hoc Committee on Sustainability at its March 2018 meeting.

Fiscal Impact (if any):

Developing the Distributed Energy Resource Plan and presenting to the Board and its Committees and Commissions is a part of the Energy Manager's responsibilities and has no fiscal impact.

Attachments

Attachments to Staff Report on MCE Deep Green Product

ATTACHMENTS TO MCE DEEP GREEN STAFF REPORT JANUARY 22, 2018 AD HOC COMMITTEE ON SUSTAINABILITY

Estimated Annual Ele	ectricity Consumption			40,443,282
Estimated Annual Pr	\$	404,433		
Estimated Annual Inc	crease of Electricity Cos	t with Deep Green	1	5.50%
# of Contra Costa Co	unty Accounts in MCE S	Service Area		592
Municipal Emissions	s Impact for Contra Cos	sta County with D	eep Green	
Emissions Saved with	h Current Cost (MTCO2)*		5,228
Cost per metric ton r	educed with Deep Gree	en	\$	77.35
*Based on actual usage of	Contra Costa County Municp	al accounts: CY2016		
* MCE Light Green Emission	on Factor of 285 lbs CO2/MWI	h in 2016		
Anticipated Deep G	reen Power Mix			
Power Supplier	Location	MW Capacity	Contract Ex	keuction Year
Shiloh (Wind)	Solano County	25	;	2016
Rising Tree (Wind)	Kern County	99)	2014
(CalarOna (Calar)	Combine Combine Committee	4.4		2045
	Contra Costa County			2015
Cottonwood (Solar)	Marin & Kings County	24	l .	2011

Figure 1: MCE Summary Data on Deep Green Product

SunPower							
Site	1000 WARD ST	30 DOUGLAS DR	50 DOUGLAS DR	30 MUIR RD	1305 MACDONALD AVE	4800 IMHOFF PL	2935 PINOLE VALLEY RE
Energy Consumption (kWh/yr)	2,526,524	2,034,165	985,486	320,993	468,109	315,606	106,516
Energy Cost (\$)	\$ 417,536	\$ 309,944	\$ 216,344	\$ 65,815	\$ 50,244	\$ 48,325	\$ 30,404
Estimated Solar (kWac)	1,313	842	370	149	241	184	66
Main Meter Original Rate	E19S	E19SV	A10SX	HA10SX	NEMS	NEMEXP	HA10SX
_							
Borrego Solar							
Site	597 Center	2530 Arnold	4545 Delta Fair	4549 Delta Fair			
Energy Consumption (kWh/yr)	651,674	1,067,935	753,365	429,169			
Energy Cost (\$)	\$ 143,631	\$ 210,914	\$ 129,798	\$ 92,394		Total New Capacity	
Estimated Solar (kWac)	196	462	396	198		4.417 Mwac	
Main Meter Original Rate	A10SX	NEMEXPM	E19SX	NEMEXPM			
Opterra Energy Services	Awaiting inform	mation from K. Fe	rgusson				
(now Engie Services U.S.)							

Figure 2: County Facilities With Grandfathered Interconnection Agreements

On site PV at designated County facilities	
Portfolio PV Capacity, kWp	5,000
Average portfolio yield, kWh/kWp	1,650
Year 1 PV Production, kWh/Y1	8,250,000
Average Avoided Utility Rate, \$/kWh	0.17
PPA Rate, \$/kWh	0.12
Avoided Rate minus PPA Rate	(0.05)
Year 1 Savings	\$ 412,500
Balance of County kWh from MCE with onsite solar	40,200,000
Premium over Utility kWh for Deep Green	\$ 0.010
MCE Deep Green Costs	\$ (402,000)

Figure 3: Breakdown Of Year One Savings From Solar PPA And Year One Costs With MCE Deep Green

Year	Electricity Cost Premium v MCE LG	Onsite Solar PPA Savings	Residual Non-Solar County Load with MCE Deep Green
1	-\$402,000	\$412,500	-\$319,500
2	-\$414,060	\$424,875	-\$329,085
3	-\$426,482	\$437,621	-\$338,958
4	-\$439,276	\$450,750	-\$349,126
5	-\$452,455	\$464,272	-\$359,600
6	-\$466,028	\$478,201	-\$370,388
7	-\$480,009	\$492,547	-\$381,500
8	-\$494,409	\$507,323	-\$392,945
9	-\$509,242	\$522,543	-\$404,733
10	-\$524,519	\$538,219	-\$416,875
11	-\$540,254	\$554,366	-\$429,381
12	-\$556,462	\$570,996	-\$442,263
13	-\$573,156	\$588,126	-\$455,531
14	-\$590,351	\$605,770	-\$469,197
15	-\$608,061	\$623,943	-\$483,272
16	-\$626,303	\$642,662	-\$497,771
17	-\$645,092	\$661,941	-\$512,704
18	-\$664,445	\$681,800	-\$528,085
19	-\$684,378	\$702,254	-\$543,927
20	-\$704,909	\$723,321	-\$560,245
21	-\$726,057	\$745,021	-\$577,053
22	-\$747,838	\$767,372	-\$594,364
23	-\$770,274	\$790,393	-\$612,195
24	-\$793,382	\$814,104	-\$630,561
25	-\$817,183	\$838,528	-\$649,478
Term	-\$14,656,624	\$15,039,447	-\$11,648,735

Figure 4: Savings Over PPA Term Versus MCE Deep Green Expenditure Over Term



Contra Costa County Board of Supervisors

Subcommittee Report

AD HOC COMMITTEE ON SUSTAINABILITY

5.

Meeting Date: 01/22/2018

Subject: RECEIVE Report on Preparation of an Electric Vehicle Readiness Blueprint.

Submitted For: Jody London, Sustainability Coordinator

Department: Conservation & Development

Referral No.:
Referral Name:

Presenter: Jody London, Sustainability Contact: Jody London (925)

Coordinator 674-7871

Referral History:

The Ad Hoc Committee on Sustainability regularly discusses electric vehicles and strategies for electrifying the transportation sector in Contra Costa County during its deliberations.

Referral Update:

At its July 31, 2017 meeting the Ad Hoc Committee on Sustainability received a report from the County Sustainability Coordinator on electric vehicle (EV) readiness in Contra Costa County. The Committee directed the Directors of the Departments of Public Works and Conservation and Development (DCD), or their designees, to develop a Contra Costa County Electric Vehicle Readiness Plan by February 2018.

Shortly after the July 2017 meeting, DCD staff began collaborating with the Contra Costa Transportation Authority (CCTA), which is also interested in developing an EV Readiness Plan. CCTA is responsible for maintaining and improving the County's transportation system by planning, funding, and delivering critical transportation infrastructure projects and programs. DCD staff are working closely with CCTA staff to develop a need statement and scope of work for an EV Readiness Plan (see attached). CCTA staff have presented on this project to the Planning Directors meeting that CCTA hosts and to the City/County Engineering Advisory Committee, which both responded favorably to the project.

While staff originally believed a Readiness Plan could be prepared in-house, the expanded scope of the project and participation of other agencies makes this a project that will be most successful if developed with the assistance of outside experts. County staff are working with CCTA to identify funding sources.

On December 14, the California Energy Commission (CEC) announced a competitive grant solicitation from the Alternative and Renewable Fuel and Vehicle Technology Program for grants of up to \$200,000 each for communities to develop planning blueprints to identify the actions and milestones needed to proceed towards implementation of an EV ready community. The CEC anticipates awarding three grants in Northern California. Receiving a grant in this first phase makes the applicant team eligible to compete in a Phase 2 solicitation for implementation funds. One of the goals for the grant is to develop EV blueprints that can be easily replicated in other communities. The deadline for this grant is February 9, 2018. CCTA will be the lead on the application; the County anticipates having a supporting role in developing the grant and developing the EV blueprint, should the application be successful.

On January 5, 2018, the California Department of Transportation (CalTrans) announced the 2018-2019 Sustainable Communities, Strategic Partnerships grant. This grant will fund local and regional multimodal transportation and land use projects that further a region's regional transportation plan sustainable communities strategy and help achieve California's greenhouse gas reduction targets. The deadline for this grant is February 23. Staff will collaborate with CCTA in developing this grant application and supporting the work, should the application be successful. Staff is considering pursuing this funding opportunity for two other projects, the Marsh Creek Multiuse Corridor Feasibility Study and the Accessible Transit Feasibility Study (also being prepared in collaboration with CCTA).

Recommendation(s)/Next Step(s):

RECEIVE report on preparation of an Electric Vehicle Readiness Blueprint.

Fiscal Impact (if any):

Staff time associated with grant development.

Attachments

EV Readiness Need Statement Fact Sheet



CONTRA COSTA COUNTY

ELECTRIC VEHICLE SHARED MOBILITY READINESS PLAN OCTOBER 20, 2017



Keeping Contra Costa Moving

GOALS:

- Position Contra Costa County for current and upcoming funding opportunities
- Develop readiness plan for electric vehicle shared mobility in Contra Costa County
 - Current location of EV charging facilities
 - o Current personal use EV penetration
 - o Current land use which will demonstrate opportunities for EV Charging installation
 - Best practices for EV station port turnover (pricing strategies, parking policies, enforcement, etc.) as well as developer requirements/ordinances
 - Countywide demand for electricity for EV charging and weaknesses, if any, in the distribution grid
 - Potential locations for shared mobility centers that could host electric vehicle fueling centers
 - Transit demand for electricity storage and charging to ensure supply at both bus storage facilities and en route through an inductive charge network.
 - o Operation and maintenance models and cost estimate for the network

POLICY DRIVERS FOR EV SHARED MOBILITY READINESS PLAN:

- 2015 Climate Action Plan
- State policies regarding smart growth, active transportation
- County complete streets policy
- Local transit operators are moving towards electric buses

POSITIONING CONTRA COSTA COUNTY FOR COMING FUNDS:

There are several known sources of funds for electric vehicles and infrastructure currently and in the future. These include:

- Bay Area Air Quality Management District
- PG&E:
 - \$130 million approved to install EV infrastructure 7,500 chargers -- for personal vehicles, with emphasis on multi-family sector
 - Application being reviewed by California Public Utilities Commission to spend additional \$654 million on 25,000 more chargers, with emphasis on mediumand heavy-duty vehicles and 10% of chargers in "disadvantaged" communities
- Volkswagen Settlement. \$800 million to California, with direction from California Air Resources Board to install in "disadvantaged" communities



CONTACT:

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Matt Kelly, Transportation Planner Contra Costa Transportation Authority 925.256.4730 · mkelly@ccta.net



Contra Costa County Board of Supervisors

Subcommittee Report

AD HOC COMMITTEE ON SUSTAINABILITY

6.

Meeting Date: 01/22/2018

Subject: RECEIVE Report from Sustainability Commission Chair.

Submitted For: Jody London, Sustainability Coordinator

Department: Conservation & Development

Referral No.:
Referral Name:

Presenter: Victoria Smith, Sustainability Chair **Contact:** Jody London (925)674-7871

Referral History:

The Ad Hoc Committee on Sustainability has requested a regular update from the Contra Costa County Sustainability Commission.

Referral Update:

On June 18, 2002, the Board of Supervisors adopted Resolution No. 2002/377, which requires that each regular and ongoing board, commission, or committee report annually to the Board of Supervisors. The Sustainability Commission approved the attached annual report and work plan on December 4, 2017. The Board of Supervisors accepted the report and work plan on January 9, 2018.

The annual report provides an overview of the membership of the Sustainability Commission and the work of the Commission since it commenced operation in June 2017. The primary focus of the Sustainability Commission to date has been setting up its administrative procedures, including electing officer and adopting bylaws, and educating itself on the many topics in the County Climate Action Plan and work of County staff to achieve Climate Action Plan goals. In 2018, the Sustainability Commission will complete its study of issue areas in the Climate Action Plan and identify topics of specific interest, with the goal of advising the Board of Supervisors on options for creating healthier and safer communities in Contra Costa County. The work plan provides a list of anticipated projects and initiatives.

Attached to the annual report is a table that tracks progress on each of the 22 measures identified in the Climate Action Plan. The Sustainability Commission intends to work with staff to update this report on an annual basis. The report shows that the County is making progress in achieving goals related to community choice energy, energy efficiency, financing, deployment of rooftop solar energy systems, solid waste, and green businesses.

For several Climate Action Plan measures, progress requires collaboration with entities outside For several Climate Action Plan measures, progress requires collaboration with entities outside County government, for example land use and transportation and water. A measure that does not seem to have a staff lead is LUT 5, Provide Opportunities to Grow, Sell, and Purchase Local Food. There are no performance targets associated with this measure. The Board of Supervisors will consider on February 6 an amendment to zoning code to allow urban agriculture in appropriate areas, however there does not appear to be staff in any department assigned to this topic.

Recommendation(s)/Next Step(s):

RECEIVE report from the Contra Costa County Sustainability Commission Chair.

Fiscal Impact (if any):

None.

Attachments

2017 Sustainability Commission Annual Report Implementation Goals w Lead Staff



CONTRA COSTA COUNTY SUSTAINABILITY COMMISSION

2017 ANNUAL REPORT AND 2018 WORK PLAN

PURPOSE

The Contra Costa County Sustainability Commission was created to:

- A. Advise the Board of Supervisors and staff on successful implementation of the *Climate*Action Plan, including suggestions on how that work can be performed more efficiently and effectively.
- B. Advise the Board of Supervisors on opportunities to realize equity and fairness across the diverse communities of Contra Costa County in sustainability programs that support the *Climate Action Plan*.
- C. Advise the Board of Supervisors and staff on how to better engage Contra Costa County residents and businesses on sustainability issues and implementation of the *Climate Action Plan*.

2017 ANNUAL REPORT

In March and April 2017, the Board of Supervisors appointed the members of the Sustainability Commission.

AT-LARGE APPOINTMENTS

Community Group (2 Seats)	Business (2 Seats)	Environmental Justice (1 Seat)	Education or Research Institution (1 Seat)	
Howdy Goudey	Kathy Cutting	Doria Robinson	Scott Warfe	
El Cerrito Environmental Quality	Cal State East Bay	Urban Tilth	Los Medanos	
Cmte, El Cerrito Community			Community College	
Network, Earthcare Now				
Harry Thurston	Nicholas Snyder			
Contra Costa Clean Energy Alliance	Tierra Resource			
	Consultants			

SUPERVISORIAL APPOINTMENTS

	District 1	District 2	District 3	District 4	District 5
Member	Nick Despota	Victoria Smith	John Sierra	Wes Sullens	Charles Davidson
Alternate	Vacant	Reid Edwards	Gretchen Logue	Travis Curran	Mark Thomson

The Commission met in June, August, October, and December. At its August meeting, the Commission elected Victoria Smith as Chair and John Sierra as Vice Chair. The Commission also at its August meeting adopted Bylaws, which were approved by the Board of Supervisors in September.

The Commission received briefings from County staff on various aspects of the climate action plan. Below is a summary of the accomplishments at each meeting.

Meeting Date	Accomplishments
June 26, 2017	• Introductions
	Overview of Commission role, purpose, and County <i>Climate</i>
	Action Plan
August 28, 2017	Adopted Bylaws
	Elected Officers
	• Received presentation on transportation and <i>Climate Action Plan</i>
October 23, 2017	• Received presentation on solid waste and <i>Climate Action Plan</i>
	Received presentation on Idle Free Pledge
	Appointed Gretchen Logue to be representative to the Integrated
	Pest Management Advisory Board
	 Discussed work plan and options for creating more time and
	space for collaboration and action by Commission members and
	alternates
December 4, 2017	 Discussed work plan and annual report
	• Received report on energy issues and Climate Action Plan.

2018 WORK PLAN

The Commission will spend the first part of 2018 completing its study of issue areas in the *Climate Action Plan*. It will also identify topics of specific interest on which it will focus, with the goal of advising the Board of Supervisors on options for creating healthier and safer communities in Contra Costa County.

Projects and initiatives related to the *Climate Action Plan* on which the Commission anticipates it will advise the Board of Supervisors and staff include:

- Advocacy on issues related to the Climate Action Plan
- Potential health impacts of climate change
- Outreach and education on sustainability to Contra Costa County residents and businesses
- Resiliency, including the Adapting to Rising Tides studies for Eastern Contra Costa County and the Bay Area region
- Issues related to water conservation and drought
- Land use and public transportation
- Energy Efficiency & Renewable Energy
- Electric Vehicle readiness and bicycle access
- Recycling, particularly the lack of facilities to process recycled materials
- The update to the County General Plan

The Commission will continue to report to the Ad Hoc Committee on Sustainability, as well as to the full Board.

Measures	Policy Language	2020 GHG Reductions (MTCO ₂ e)	20:	20 Performance Targets	Responsible Agencies	Lead Staff	Time Frame	Action Items Identified in CAP	Progress to Date
			2,900	Participating homes	Conservation & Development	Justin Sullivan		Engage with PG&E to provide multilingual and culturally relevant educational material to residents and business	•Through the East Bay Energy Watch the County engages with PG&E on educational materials. The
EE 3	Provide education and outreach highlighting the benefits of energy conservation.	430	60	Participating businesses	Health Services	Susan Psara	2018)	,	 Work with the Bay Area Green Business Program to highlight examples of energy-efficient local business Near-Term (by County also has initiated collaboration with MCE on outreach materials. As of November 2017, there are 329 certified green businesses in Contra Costa Green Business Program
			1,790	Existing homes completing cool roof retrofits				To increase use of higher-albedo materials Encourage developments with parking lot areas to shade	All applications for building permits must meet current building code requirements.
			9	Existing businesses completing cool roof retrofits	Public Works			these with vegetation or solar panels Promote the use of low-impact development (LID) strategy	Residential Cool Roof installations by year: 2010-54,
EE 4	Reduce urban heat islands through vegetation management and cool surfaces.	20	500	New shade trees	Conservation & Development	Aruna Bhat	Near-Term (by 2018)	 and reduction in impervious surface area of new developme Increase use of cool roof materials on new and existing buildings Support programs to plant and maintain trees. 	2012-31, 2013-10, 2014-44, 2015-73, 2016-226, 2017-335 to date. Commercial Cool Roof installations by date: 2014-2, 2016-3, and 2017-2 to date.
RE 2	Promote installation of alternative energy facilities on public land.	270	1	MW of solar installed at public facilities in the unincorporated area	·	Brian Balhae	Near-Term (by 2018)	Continue to install alternative energy facilities on public buildings and land in unincorporated county Continue to participate in Regional Renewable Energy Procurement Project or similar bulk purchasing programs Work with East Bay Municipal Utilities District and other wastewater processors to install cogeneration infrastructure treatment facilities	 Current installed capacity on County facilities is 4.38 MW. Not aware that the County has participated in regional bulk purchases for renewable energy. Some wastewater processors and solid waste haulers are pursuing cogeneration projects.
LUT 3	Reduce emissions from off-road vehicles and equipment.	10	50	Lawnmowers traded in	Agriculture Conservation & Development	Matthew Slattengren Judi Kallerman	Near-Term (by 2018)	Work with BAAQMD to incentivize use of battery-powered lawn and garden equipment Provide support for the BAAQMD's voluntary exchange program for lawn mowers Work with BAAQMD to increase the use of alternatively fueled equipment in agricultural operations Consider an amendment to County Building Code to prohibit unnecessary idling of off-road and heavy equipment	The Agriculture Department has authority only over the use of pesticides, not the equipment in use. Prohibiting idling of off-road and heavy equipment right now occurs on a case-by-case basis.
GO 1	Save energy used for public lighting.	580	7,210	Number of lightbulbs replaced with LED bulbs	Public Works	Joe Yee	Near-Term (by 2018)	Complete LED upgrade of traffic signals, street lighting, and other public lighting located in the unincorporated area of the County.	The County owns 1,800 streetlights, all of which have been converted to LED. PG&E owns 5,800 street lights in the unincorporated County, all of which have been converted to LED. All traffic signals in the unincorporated County have been converted to LED.

Measures	Policy Language	2020 GHG Reductions (MTCO ₂ e)	20:	20 Performance Targets	Responsible Agencies	Lead Staff	Time Frame	Action Items Identified in CAP	Progress to Date
GO 3	Conserve water.	Supportive of Overall GHG Reductions	Supportive	n/a	Public Works	Joe Yee		owned facilities.	The County installed drought tolerant landscaping at the Pittsburg health clinic a couple of years ago. Based on the success of that project, the Board of Supervisors recently approved a contract for additional landscaping projects that will remove turf and replace it with drought tolerant landscapes.
EE 1	Provide opportunities for residential buildings to become more energy efficient.	2,140	3000 210 700 150	Single-family homes receiving basic retrofits Single-family homes receiving advanced retrofits Multi-family homes receiving retrofits Single-family homes receiving pool pump upgrades	Conservation & Development	Justin Sullivan Demian Hardman	Mid-Term (by		 Total GHG reductions to date = 1,211 MTCO. 298 in 2015, 344 in 2016, 458 to date in 2017. Coordinated and implemented annual Single-Family homeowner workshop with an average attendance of 50-70 homeowners to provide information regarding home energy efficiency rebate programs. Distribute quarterly mailers to multi-family property owners regarding available energy efficiency rebate programs. Through Hazardous Materials Ombudsman, launching pilot program to enlist nurses who work with low
	energy emolerit.		2,010	Homes receiving appliance upgrades					income seniors to provide information on weatherization opportunities. Two PACE providers are operating currently in unincorporated County. Staff will ask Board for
			240 120	Businesses receiving retrocommissioning Businesses receiving standard retrofits	Conservation & Development	Demian Hardman	emian Hardman Mid-Term (by 2020)	Continue to expand participation in energy efficiency and financing programs Provide focused outreach to local business Develop outreach materials explaining financing	 Data on GHG reductions is not yet available; County staff is working with PG&E to obtain this information. 2000 mailers were sent to unincorporated businesses throughout the County in 2016 to educate business
	Provide opportunities for nonresidential		30	Businesses receiving deep retrofits				opportunities Identify staffing and revenue stream to develop shared landlord-tenant program Inform nonresidential business owners about savings potential from retrocommissioning, retrofits and deep retrofits Inform business community of monetary benefits with energy efficient appliances; collaborate with 4CL and PG&E to develop and implement outreach.	owners of available energy efficiency program rebates. Coordinated with Sustainable Contra Costa (non-
EE 2	buildings to become more energy efficient.	4,630	300	Businesses receiving appliance upgrades					profit) to implement a targeted door-to-door marketing campaign in specific areas requested by PG&E throughout the County.
EE 5	Increase Contra Costa County's capacity for energy efficiency through financing opportunities and workforce training.	Supportive of Overall GHG Reductions	Supportive	n/a	Conservation & Development Health Services Public Works ; additional departments, depending on grant resources	Jody London		Work with Contra Costa Community College District and Contra Costa Workforce Development Board to develop workforce training programs for green jobs	Regarding financing, staff continues to monitor and pursue Cap & Trade and other funding opportunites. Opportunites from Cap and Trade have not been as robust to date anticipated. Given the recent success of the Cap and Trade auction, we expect this could change. We have received grants from other sources that allow us to pursue transportation, green infrastructure, and renewable energy projects that support the Climate Action Plan. Staff has not commenced developing a framework for revenues from Cap and Trade or other sources. Staff is developing relationships with Community College District and Workforce Development Board.
			30 3		Conservation & Development	Jason Crapo		Identify and remove barriers to zero net energy Work with developers, property owners, and financial donors construct and publishes example zero not control both.	Staff is developing a draft ordinance that would require solar to be installed on most new residential

Measures	Policy Language	2020 GHG Reductions (MTCO ₂ e)	20	20 Performance Targets	Responsible Agencies	Lead Staff	Time Frame	Action Items Identified in CAP	Progress to Date
	Support the		12	Retrofitted ZNE homes	Public Works	Brian Balbas		to construct and publicize example zero het energy nome prior to adoption	Supervisors in Q1 2018.
EE 6	statewide transition to net zero energy construction for new residential buildings by 2020 and new nonresidential buildings by 2030.	290	1	Retrofitted ZNE businesses			Mid-Term (by	Provide information about zero net energy buildings at public events, on County website and in development review process, including cost effectiveness Explore making new and significantly retrofitted County buildings zero net energy	
			50	New homes with solar arrays		Will Nelson			See EE6 re residential solar ordinance.
			2,500	Existing homes with solar arrays		Jason Crapo		alternative energy and energy storage installations not	The Board's approval of community choice energy and decision to join MCE provides added incentive for
			10	New businesses with solar arrays		Abed Chowdhury		Train planning staff to provide guidance and information on	property owners to install solar resulting from MCE's more attractive net metering program.
	Promote		60	Existing businesses with solar				the streamlined process and available incentives • Develop standards for ministerial approval of rooftop energy	DCD continues to issue large numbers of building permits for rooftop solar on the order of 1,500 per year.
RE 1 installalternations alternations on horizontal installalternations are not below the control of the contro	installation of alternative energy facilities on homes and businesses.	8,820	3,740	arrays kW supplied by PG&E Green Tariff program	Conservation & Development		Mid-Term (b 2020	∙ Encourage participation in PG&E's green tariff program	ell exceeding the target established in the CAP. Planning Commission is recommending to Board of upervisors a requirement for conditional use permits r larger solar systems on commercial buildings and arehouses that would sell excess energy ommercially. Utility green tariff programs are not well subscribed in alifornia, irrespective of County actions.
RE 3	Lower barriers to entry for the installation of alternative energy systems.	Supportive of Overall GHG Reductions	Supportive	n/a	Conservation & Development	??	Term (by 2020)	Connect low-income homeowners with renewable energy rebate and financing programs Work with local government and neighboring areas to participate in solar bulk-buying program Connect business owners to finance and rebate programs Work with PG&E to identify insufficient grid capacity areas Continue exploring options for implementing Community Choice Aggregation within the unincorporated area of the County	 As indicated above there are two PACE programs in the unincorporated County, with a third potentially coming on board in 2018. The County is about to begin a study of renewable resource potential, and recommended changes to zoning that would facilitate installation of more renewable energy. The study will identify grid capacity constraints. The County and nine cities in 2017 decided to join the five Contra Costa cities that had already joined MCE. The new communities are expected to switch over to MCE in April and May 2018.

Measure	s Policy Language	2020 GHG Reductions (MTCO ₂ e)	20	20 Performance Targets	Responsible Agencies	Lead Staff	Time Frame	Action Items Identified in CAP	Progress to Date
LUT 1	Maintain and expand access to goods, services, and other destinations through increased transportation alternatives (mobility improvements) and improved proximity (land use improvements).	910	33,630	Average countywide bike trips per weekday	Conservation & Development Health Services Public Works	John Cunningham ?? Steve Kowalewski	Mid-Term (by 2020)	nonprofits and other stakeholders to expand bicycle, pedestrian and existing public transportation • Assist with Safe Routes to School implementation • Work with local agencies to encourage bicycle safety classes in all schools • Update County road standards to accommodate all modes of transportation • Identify periodic updates through the Contra Costa Transportation Authority's Countywide Bicycle and Pedestrian Plan (CBPP) and work with adjoining jurisdictions to update and implement • Revise the County CEQA guidelines to reflect implementation of Senate Bill 743 • Establish a 2020 mode share goal for bicycling by Board of Supervisors resolution, identify actions to reach goal, integrate into future General Plan updates and appeal other agencies to adopt same goal • Identify funding sources to support increased walking and bicycling activity	 Collaboration is an ongoing activity pursuant to our participation in the Contra Costa Transportation Authority's Regional Transportation Planning Committees. Specifically, we have requested (and received) a grant to study the use of the Iron Horse Corridor as a "Bicycle Superhighway" and for the use with autonomous shared vehicles. Bicycle safety is done on a subregional level in cooperation with the Regional Transportation Planning Councils. A countywide proposal was proposed (by the County) during the Measure X Transportation Expenditure Plan development and received no interest. Road standards update was removed from the Board of Supervisors' Transportation, Water, and Infrasturcutre Committee referrals and interdepartmental working group scope of work due to the limited return on investment of the effort. CCTA is updating the CBPP right now, County staff is engaged in the process. We are awaiting final guidance from the state on SB 743; final guidelines are about a year overdue. We have, and we will continue to, encourage CCTA to include such a metric in their policies. This in an ongoing activity and we regularly apply for grant funds to meet this goal and conduct legislative advocacy to increase funding for this mode.
			4700 14,220 4,830	station VMT per EV	additional departments, depending on grant resources	Joe Yee		fleets • Support development of alternative-fuel and electric vehicle (EV) charging stations, including amending parking design and layout section (82-16-404) of the County Zoning Code	One waste hauler has voluntarily converted fleet to compressed natural gas. Other franchise agreements will be up for renegotation in about five years, at which time requirements for alternative fuel vehicles can be explored if haulers have not made that change already. EV provisions are located in County Code Sections 74-4.006(j) and 82-16-404(e). The County was awarded a \$21,000 "Chargel" grant.

Measure	Policy Language	2020 GHG Reductions (MTCO ₂ e)	20	20 Performance Targets	Responsible Agencies	Lead Staff	Time Frame	Action Items Identified in CAP	Progress to Date
LUT 2	Expand the use of alternative fuels in vehicle travel.	7,630	1,790	Households with an EV			Mid-Term (by 2020)		in July 2016 to install EV charging stations at certain County facilities (30 Muir Rd and 255 Glacier Dr.). Staff is currently working on implementation. Staff is in discussions with the Bay Area Air Quality Management District and may apply for another EV "Charge!" grant. • County staff is working with staff from the Contra Costa Transportation Authority on an EV shared mobility readiness plan. As of November 2017, staff is looking for funding to develop the plan, developing a scope for the plan, and introducing the concept to city planners, managers, and other stakeholders. • Public Works is pursuing grant funding and related to installing public EV chargers as follows: 1. Initiated discussions with PG&E pertaining to the EV Charge Network program. The program requires an easement and a ten year agreement. 2. Public Works has identified California Air Resources Board Low Carbon Fuel Standard Program (LCFS) as a source of continuing cash flow for EV chargers.
LUT 5	Provide opportunities to grow, sell, and purchase local food.	Supportive of Overall GHG Reductions	Supportive	n/a	Agriculture Conservation & Development County Administrator's Office	Slattengren Stan	Mid-Term (by 2020)	Continue to support local farmers markets, community gardens, school gardens and urban agricultural practices Amend Zoning Code to allow urban agriculture in appropriate areas Amend General Plan to add policy to encourage community gardens in new residential developments Encourage partnerships between local food growers and local food retailers Encourage partnerships between local food growers and local schools, hospitals, colleges and correctional facilities Continue to discourage schools being sited in agricultural areas	It is not clear who in the County has lead on supporting farmers markets, school gardens. Completed. The County Code allows "crop and tree farming" in all residential districts. Scope and approach for General Plan update will go to Board of Supervisors for approval in December 2017. It is not clear who has lead for encouraging partnerships between local food growers and retail and institutional organizations. The County continues to advocate and educate about the importance of siting schools within the urban limit line.

Measures	Policy Language	2020 GHG Reductions (MTCO ₂ e)	20	020 Performance Targets	Responsible Agencies	Lead Staff	Time Frame	Action Items Identified in CAP	Progress to Date
W 1	Develop a waste reduction strategy to increase recycling and reuse of materials.	25,780	90,850	Tons of waste reduced	Conservation & Development	Deidra Dingman	Mid-Term (by 2020)	waste diversion and prevention programs: backyard composting, grass-cycling, low-maintenance gardening programs, Bay Area Regional Outreach Campaign, Environmental Action Program for Schools Work with owners and operators of solid waste transfer stations and landfills to establish anaerobic digesters Update County's Source Reduction and Recycling Element, Household Hazardous Waste Element and other components to support CAP Identify best practices to reduce waste water sludge (biosolids).	submitted to CalRecycle to demonstrate compliance with the diversion requirements in the Integrated Waste Management Act, the amount of unincorporated area waste reported to have been disposed of in landfills in 2016 equates to a diversion rate of 68%. 2. Organic waste collection services are offered to residents in all four County franchise areas (one of which includes acceptance of food waste). Organic waste collection services are offered to businesses in three of the four County franchise areas (not yet offered in Crockett, Port Costa & Tormey area).
W 2	Reduce fugitive methane emissions and other greenhouse gas emissions from solid waste landfills.	29,500	29,500	Increase in captured landfilled gas (MTCO ₂ e)	Conservation & Development Health Services	Deidra Dingman		1.Annually verify compliance with California Air Resource Board's landfill methane control measures 2.Request landfill operators consider additional reduction actions: reduce materials with high methane-generation potential, reduce idling time for diesel equipment, encourage adequate maintenance of rolling stock, establish standards beyond the required for landfill gas collection system leak detection and prevention, and excluding the use of green waste as a material for alternative daily cover (ADC), consistent with AB 1594 3. Amend General Plan and Zoning Code to allow renewable energy generation, such as solar and wind, on closed landfill areas	1. Ongoing. 2. Provisions requiring that source-separated organics waste collected by haulers providing services pursuant to two of the County's franchises be composted and no longer used as ADC have been added by way of amendments approved in 2015 and 2017. Additionally, the Board approved changes to one of the Conditions of Approval in the County issued LUP governing the Keller Canyon Landfill that requires the operator to proactively seek to ensure adequate composting capacity is available by 2020 to manage green waste currently used as ADC. 3. County Board of Supervisors expected to provide staff with direction in December about updating the General Plan.

Measures	Policy Language	2020 GHG Reductions (MTCO ₂ e)	20	20 Performance Targets	Responsible Agencies	Lead Staff	Time Frame	Action Items Identified in CAP	Progress to Date
WE 1	Reduce water demand.	1,210	20%	Reduction from 2013 water use	Conservation & Development	Ryan Hernandez	Mid-Term (by	Continue to enforce water conservation requirements in new developments per the State Model Water Efficient Landscape Ordinance.	(1) The County does not provide potable water service and has an indirect role (no governing authority) to reduce potable water use by 20% in existing development. The County could consider establishing new development criteria that may allow a 20% reduction in future development. The County could encourage the existing water purveyors (EBMUD, CCWD, Diablo, Town of Discovery Bay and various cities) to continue programs like turf replacement and limiting outdoor water use to specified days of the week. We could also consider how to support the State's "water conservation is a way of life" campaign. (2) New development (i.e. from single family homes to subdivisions) are subject to the updated State Model Water Efficient Landscape Ordinance. The County administers this Ordinance on new development through our Planning and Building divisions.
WE 2	Provide alternative water resources for irrigation in residential and nonresidential areas.	Supportive of Measure WE 1	Supportive	n/a	Conservation & Development	Ryan Hernandez	Mid-Term (by	Update the Dual Water Systems Ordinance to allow the use of recycled water for irrigation in residential and nonresidential areas	(1) The County continues to seek cost effective ways to promote rainwater collection for irrigation purposes but has not identified a clear path forward. It seems the scope of this measure may be better suited for collection and irrigation of rainwater in residential land uses and may not make a good business case to apply to larger agriculture uses. (2) The County's Dual Water Systems Ordinance, Chapter 82-30, allows for the use of recycled water in designated dual water system areas.
GO 2	Promote energy- saving tools and practices.	Supportive of Overall GHG Reductions	Supportive	n/a	County Administrator's Office Public Works	Brian Balbas	Mid-Term (by 2020)	facilities, prioritize improvements, and upgrade facilities to save energy • Increase solar electricity use for County and agency operations • Develop policies related to powering off lights and appliances after hours • Site facilities that have more than 50 personnel in close proximity to infrastructure and services that support alternative commute modes	Public Works is has been working with County Counsel to resolve issues pertaining to PG&E's On-Bill Financing program, which provides up to \$4,000,000/year of funding to municipalities to perform cost effective energy efficiency work in their facilities. It appears that a solution has been identified through the use of a performance contractor who will guarantee the savings of the project. Audits of existing and recently acquired facilities, the prioritization of improvements and upgrade of facilities to save energy will be accomplished by the abovementioned performance contractor.

	Measures	Policy Language	2020 GHG Reductions (MTCO ₂ e)	20	20 Performance Targets	Responsible Agencies	Lead Staff	Time Frame	Action Items Identified in CAP	Progress to Date
•	GO 5	Establish budgeting and administration practices to support the Climate Action Plan.	Supportive of Overall GHG Reductions	Supportive	n/a	County Administrator's Office Public Works	Eric Angstadt Brian Balbas		industrial entities, adopt language in the County's State and	Purchasing specfications updated in 2010 that address source reduction, recycled content, energy and water savings, green buildings, landscaping, toxics and pollutants, forest conservation, and bio-based products. In 2015, 231 out of 1,587 vehicles (14.5%) were alternative fueled. In 2016, 303 out of 1533 vehicles (21%) were alternative fueled. The County fleet uses renewable diesel fuel. In 2016, the County's fleet was recognized by the East Bay Clean Cities Coalition as a Clean Air Champion for our fleet operations.
				54,400	BART extension trips taken by unincorporated County residents				ridership • Partner with waste haulers and other fleets to reduce	Ongoing planning activity; currently we are participating in the "North Concord to Antioch BART Access Study" and the CBPP update.
				32,740,820	New bus ridership miles taken by unincorporated county residents				Support and increase the use of carpooling services Continue to promote voluntary trip reduction programs	The County is not currently working on reducing frequency of routes. This sector of the transportation system is undergoing.
ı	LUT 4	Reduce vehicle miles traveled.	4,080	1,202,980	New BART ridership miles taken by unincorporated county residents	Conservation & Development	John Cunningham			substantial change due to microtransit and transportation network companies (Uber, Lyft, etc.) CCTA is conducting a Countywide transportation to demand management study in which the County will participate. The County is pursuing and affordable housing project across from the Bay Point BART station, Orbosonia Heights. • This in an ongoing activity. We are participating in the North Concord to Antioch BART Access Study, the CBPP update, and we are nearing completion on the Treat Blvd/CC Centre BART Access Study. • The County's T-1 Funding Program continues to fund critical transit service in the Tassajara Valley and when appropriate, we urge our city partners to adopt similar mechanisms with development applications. This approach is an uncommon way to fund transit operations but may become more attractive when SB743 comes in to effect. • I'm not sure where this comes from or what a PED in a residential community would look likethis language may need to be updated. Maybe this language predates the sustainable communities strategy. The

Measures	Policy Language	2020 GHG Reductions (MTCO ₂ e)	20	20 Performance Targets	Responsible Agencies	Lead Staff	Time Frame	Action Items Identified in CAP	Progress to Date
			1,170,070	Estimated decrease in VMT from HOV lanes					current tools that reflect this are: Priority Development Areas (PDA), Priority Conservation Areas (PCA), and the emerging Priority Production Areas (PPA). The County has complied with requirements relative to PDAs and PCAs. The County advocated for the creation of a PPA program and will monitor the development of this tool and corresponding funding programs and need to change policies.
GO 4	Reduce waste.	Supportive of Overall GHG Reductions	Supportive	n/a	Public Works	Brian Balbas	Long-Term (by 2035)	facilities Educate and train staff to recycle and compost Develop interim waste diversion/reduction goals	Most County facilities have recycling. The Department of Conservation and Development is piloting a composting program. There is opportunity to develop waste diversion and reduction goals.



Contra Costa County Board of Supervisors

Subcommittee Report

AD HOC COMMITTEE ON SUSTAINABILITY

7.

Meeting Date: 01/22/2018

Subject: RECEIVE update on Renewable Resource Potential Study.

Submitted For: John Kopchik, Director, Conservation & Development Department

Department: Conservation & Development

Referral No.:
Referral Name:

Presenter: Jody London, Sustainability **Contact:** Jody London (925)

Coordinator 674-7871

Referral History:

The Board of Supervisors on May 15, 2017, accepted a grant from the California Strategic Growth Council and Governor's Office of Planning and Research to perform a Renewable Resource Potential Study.

Referral Update:

The County accepted a grant of \$49,989 from the California Department of Conservation, acting as the agent for the California Strategic Growth Council and Governor's Office of Planning and Research, to perform a Renewable Resource Potential Study. The primary product of the study will be an analysis of opportunities and constraints for expanding use of energy from solar, biogas, biomass, and wind in the unincorporated areas of the County, and on County facilities. The study will identify the potential to deploy community energy projects in the communities of Bay Point, Rodeo, and North Richmond; staff will work with those communities to explore interest in viable opportunities.

Staff released a Request for Proposals (RFP) in August 2017 to perform the study. The County received five bids in September. Staff reviewed proposals, and in October 2017 interviewed three teams for the project. Staff has accepted the bid of Meister Consultants Group, a Cadmus Company. Staff is in the final stages of negotiating the contract for the project and hopes to begin work next month.

When the County issued its RFP, staff asked bidders to provide costs to extend the assessment of resource potential to interested cities in the County. Five cities have indicated they will take advantage of this opportunity: Lafayette, Walnut Creek, Pinole, Pleasant Hill, Oakley, Martinez.

Recommendation(s)/Next Step(s): RECEIVE update on Renewable Resource Potential Study.

Fiscal Impact (if any):

The grant will cover a portion of staff time spent developing the Renewable Resource Potential Study.

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Contra Costa County Board of Supervisors

Subcommittee Report

AD HOC COMMITTEE ON SUSTAINABILITY

8.

Meeting Date: 01/22/2018

Subject: RECEIVE update from County's Sustainability Coordinator.

Submitted For: John Kopchik, Director, Conservation & Development Department

Department: Conservation & Development

Referral No.:
Referral Name:

Presenter: Jody London, Sustainability **Contact:** Jody London (925)674-7871

Coordinator

Referral History:

The Chair of the Ad Hoc Committee on Sustainability has requested a report at each meeting on the activities of the Sustainability Coordinator.

Referral Update:

This report provides an update to the Ad Hoc Sustainability Committee on the work of the County's Sustainability Coordinator since the Committee last met in November 2017. Key activities during this period are listed below.

- Coordinated negotiations with Meister Consultants for the Renewable Resource Potential Study.
- Supported the Sustainability Commission by: preparing the annual report and work plan; researching options for creating more time for Commission members and alternates to collaborate; coordinating with the Commission Chair, Vice-Chair, and members; developing and publishing the agenda for the Commission's October meeting.
- Led ongoing coordination with MCE staff on process regarding transition of Contra Costa jurisdictions to MCE and coordination of energy efficiency programs.
- Continued working with County staff and staff of the Contra Costa Transportation Authority to develop a scope and strategy for developing an Electric Vehicle Shared Mobility Blueprint.
- Convened quarterly meeting of the Sustainability Exchange, a venue for
- Coordinated with staff of the Bay Conservation and Development Commission (BCDC) on the Adapting to Rising Tides Eastern Contra Costa study.
- Presented at the Contra Costa County Office of Education meeting for facilities managers on MCE transition and electric vehicle blueprint.
- Collaborated with County staff working on topics including land use and transportation, hazardous materials, green business program, integrated pest management, Planning Integration Team for Community Health (PITCH), codes, solid waste, energy.
- Participated in regional activities, including exploratory meeting for a Bay Area Adaptation

RECEIVE update from the County's Sustainability Coordinator.					
Fiscal Impact (if any):					
None.					
	Attachments				
No file(s) attached.					

Network.

Recommendation(s)/Next Step(s):