

AD HOC COMMITTEE ON SUSTAINABILITY

October 24, 2016

4:00 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

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. **APPROVE Record of Action for August 22, 2016, Ad Hoc Committee on Sustainability Meeting.** This record was prepared pursuant to the Better Government Ordinance 95-6, Article 25-205 (d) of the Contra Costa County Ordinance Code. Any handouts or printed copies of testimony distributed at the meeting will be attached to this meeting record. (Jody London, Department of Conservation and Development)
4. **RECEIVE report from staff highlighting specific aspects of the County's ongoing work on sustainability issues.** (Jody London, Department of Conservation and Development)
5. **RECEIVE update on Climate Action Plan Implementation.** (Jody London, Department of Conservation and Development)
6. **RECEIVE update on funding to support Climate Action Plan implementation.** (Jody London, Department of Conservation and Development)
7. **RECEIVE report on creation of Sustainability Advisory Committee and DIRECT staff regarding next steps.** (Jody London, Department of Conservation and Development)
8. **AUTHORIZE County memberships in the local Government Sustainable Energy Coalition and the Urban Sustainability Directors Network.** (Jody London, Department of Conservation and Development)
9. DETERMINE date of next meeting.
10. ADJOURN to meeting at date to be determined.

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, 10th 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 Additional Information Contact:

Jody London, Committee Staff
phone (925) 674-7871 fax (925) 674-7250
Jody.London@dcd.cccounty.us



Contra Costa County Board of Supervisors

Subcommittee Report

AD HOC COMMITTEE ON SUSTAINABILITY

3.

Meeting Date: 10/24/2016

Subject: APPROVE Record of Action for August 22, 2016, Ad Hoc Committee on Sustainability Meeting.

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

Department: Conservation & Development

Referral No.: N/A

Referral Name: N/A

Presenter: Jody London, DCD

Contact: Jody London (925)674-7871

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 available at the Committee web page, to be announced.

Recommendation(s)/Next Step(s):

Staff recommends approval of the attached Record of Action for the August 22, 2016, Ad Hoc Committee on Sustainability Meeting with any necessary corrections.

Fiscal Impact (if any):

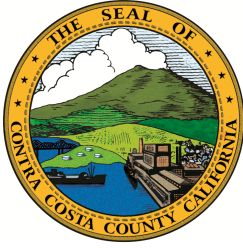
N/A

Attachments

08-22-16 AdHocSusMtg Minutes

Attachment A - BAAQMD

DRAFT



AD HOC COMMITTEE ON SUSTAINABILITY

RECORD OF ACTION FOR
August 22, 2016

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, Supervisor, District I
Federal D. Glover, Supervisor, District V

Staff Present: Jody London, Sustainability Coordinator, Dept of Conservation and Development
John Kopchik, Director, Dept of Conservation and Development
Jason Crapo, Deputy Director, Dept of Conservation and Development
Justin Sullivan, Conservation Planner, Dept of Conservation and Development
Michael Kent, Hazardous Materials Ombudsman, Health Services Department

Attendees: Marti Roach
Emily Hopkins
Jan Warren
Carol Weed
Dave Sammons
Audrey Albrecht
Mara Stangch
Jose Lopez

1. Introductions
2. **Public Comment on any item under the jurisdiction of the Ad Hoc Committee and not on this agenda,**(speakers may be limited to three minutes).

- *The Committee received public comment from the following individuals:*
- *Marti Roach - Ms. Roach expressed support for the Sustainability Committee. She suggested it should be a standing committee of the Board, and believes a Citizens Advisory Committee is also a good step. Ms. Roach described the Citizens Climate Lobby and its mission to pass a federal carbon fee.*
- *Emily Hopkins - Ms. Hopkins believes the Sustainability Committee should be a standing committee of the Board. She likes the establishment of a Citizens Advisory Committee. She asks the Sustainability Committee to endorse the federal carbon fee and seek endorsement for a carbon fee from the full Board.*
- *Jan Warren - Ms. Warren is pleased she will be receiving 100% green energy from MCE starting September 1. She expressed the same support for the Sustainability Committee and a Citizens Advisory Committee.*
- *Carol Weed - Ms. Weed agrees with the prior speakers. She also would like the Board of Supervisors to adopt a resolution urging the Bay Area Air Quality Management District to adopt a Community Worker Alternative. (see attached)*
- *David Sammons - Mr. Sammons supports the other speakers regarding the Committee. Please see attached handout provided by members of the public. (Attachment A: Resolution BAAQMD)*

3. **CONSIDER Administrative items and Take ACTION as appropriate.** (Jody London, DCD)

4. **CONSIDER Staff recommendation to approve the attached Record of Action for the September 14, 2015, Committee Meeting with any necessary corrections.** (Jody London, DCD)

The Committee unanimously approved the Record of Action.

AYE: Supervisor, District I John Gioia, Supervisor, District V Federal D. Glover
Passed

5. **CONSIDER Staff recommended approval of the attached Record of Action for the April 25, 2016, Committee Meeting with any necessary corrections.** (Jody London, DCD)

The Committee unanimously approved the Record of Action. Supervisor Gioia noted the major work accomplished by the County on Sustainability issues in 2015: approval of the Climate Action Plan, authorization of a Property Assessed Clean Energy program, initiation of a study of Community Choice Energy, adoption of an ordinance on electric vehicles, and creation of the Sustainability Coordinator position.

6. **RECEIVE update on activities of the Sustainability Coordinator.** (Jody London, DCD)

The Committee received the update.

7. **PROVIDE direction regarding strategies for pursuing funds to support Climate Action Plan implementation and other sustainability programs and projects.** (Jody London, DCD)

The Committee received the report. The Committee directed staff to do the following:

- *Reconvene the staff team tracking Greenhouse Gas Reduction Funds, and report back on the activities of each department, and funds received.*
- *Educate staff across County departments about how to pursue funding opportunities associated with the Climate Action Plan, using a guide published by the League of California Cities.*
- *Continue to update the list of projects in Contra Costa County funded through Greenhouse Gas Reduction funds. On this matter, Supervisor Gioia noted that projects are valued only on a cost/ton of carbon reduced basis, and should also reflect co-benefits, as listed in AB 32.*

8. **DIRECT Staff to reconvene the interdepartmental Climate Action Plan Working Group and return with a report on progress to date in achieving Climate Action Plan goals and where additional resources would be beneficial.** (Jody London, DCD)

The Committee received the staff report. The Committee directed staff to reconvene the interdepartmental Climate Action Plan Working Group and report back in October. The Committee discussed opportunities for the County to better cooperate with the cities in Contra Costa County on climate action issues. Staff noted that not all cities have a Climate Action Plan.

9. **RECEIVE report from Staff recommending that the Ad Hoc Sustainability Committee recommend to the Board of Supervisors the establishment of a Citizen Advisory Committee on Sustainability.**(Jody London, DCD)

The Committee directed staff to prepare a report to the Board of Supervisors recommending creation of a Citizens Advisory Committee on Sustainability that would report to the Board. The Committee directed staff to recommend the Citizens Advisory Committee follow Option B in the staff report, with the addition of one member who would represent environmental justice interests.

The recommended composition would be: one member appointed by each Supervisor (5); two members representing community groups whose mission includes sustainability and/or environmental issues (2); two members representing commercial groups or organizations whose business focuses on sustainability and/or environmental issues (2); and one member representing environmental justice interests (1).

10. **DISCUSS SB 32, Climate Pollution Reduction Beyond 2020 Healthier Communities And A Stronger Economy, and consider referral to Board of Supervisors to take a position on the bill.** (Jody London, DCD)

The Committee discussed ongoing negotiations in the Legislature regarding SB 32. Given the timing of the legislative session and the Board's meeting schedule, no referral was made.

11. **ADJOURN to next meeting date, if established by the Ad Hoc Committee on Sustainability.**

The Committee agreed to meet again in October. The Committee directed staff to identify a date.

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Jody London, Sustainability Coordinator
Phone (925) 674-7871, Fax (925) 674-7250
Jody.London@dcd.cccouny.us

RESOLUTION: BAAQMD RULE 12 16, COMMUNITY WORKER ALTERNATIVE

WHEREAS, the Bay Area Air Quality Management District (BAAQMD) is charged by the federal and state governments to enforce federal and state air quality laws governing industrial sources, with 24 locally elected representatives from nine Bay Area counties making up its Board of Directors;

WHEREAS, it is the Air District's mission "to create a healthy breathing environment for every Bay Area resident while protecting and improving public health, air quality, and the global climate";

WHEREAS, the American Lung Association, in its 2016 "State of the Air" report, has assigned the Bay Area a grade "D" for air quality, and residents in the Bay Area refinery corridor and other Bay Area communities suffer disproportionately from emissions-related diseases, including cancer, asthma, stroke and autoimmune disorders;

WHEREAS, the five Bay Area oil refineries are seeking to adapt their facilities in order to process dirtier, higher-sulfur crude, including Canadian tar sands, one of the dirtiest crudes on the planet, with the potential to greatly increase dangerous refinery emissions;

WHEREAS, adoption of the Community-Worker proposal for Rule 12-16 of an enforceable numeric cap on each refinery's cumulative greenhouse gas, particulate and toxic emissions will prohibit Bay Area refineries from processing significantly increased amounts of these extreme dirty crudes and will require controls to prevent increased emissions, thereby reducing the harm to Bay Area residents from dangerous emissions and limiting the amount of greenhouse gases that trigger catastrophic climate disruption;

THEREFORE BE IT RESOLVED that as a prudent public health measure and effective climate policy, _____ strongly urges the Board of Directors of the Bay Area Air Quality Management District Board to adopt the Community-Worker Alternative in Rule 12-16, and to instruct BAAQMD Staff to complete such rulemaking, per District Board's commitment, by the end of May 2017.



Contra Costa County Board of Supervisors

Subcommittee Report

AD HOC COMMITTEE ON SUSTAINABILITY

4.

Meeting Date: 10/24/2016

Subject: RECEIVE report highlighting specific aspects of the County's ongoing work on sustainability issues .

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

Department: Conservation & Development

Referral No.:

Referral Name:

Presenter: Jody London, DCD

Contact: Jody London (925)674-7871

Referral History:

N/A

Referral Update:

BACKGROUND

At each meeting of the Ad Hoc Sustainability Committee, staff will provide an overview of ongoing work that advances one of the goals of the *Climate Action Plan*. The presentation for October 24, 2016 will cover work to increase the energy efficiency of residential and non-residential buildings, and increase energy conservation awareness among County residents and businesses and County employees. Please see attached presentation.

Recommendation(s)/Next Step(s):

N/A

Fiscal Impact (if any):

There is no fiscal impact.

Attachments

Presentation

Contra Costa County

Overview of Energy Efficiency Programs

Demian Hardman, Senior Planner
Department of Conservation & Development



CAP Energy Efficient Programs

▶ BayREN **BAY AREA** Regional Energy Network

▶ EBEW **EAST BAY energy watch**

▶ Energy Efficiency Financing (PACE) **hero**



BayREN

▶ Single Family

- ▶ Home Upgrade
- ▶ Advanced Home Upgrade

▶ Multifamily

- ▶ BAMBE (Bay Area Multifamily Building Enhancement)

▶ Codes & Standards

- ▶ Resources to Local Governments on Energy Code



BAY AREA Regional Energy Network
www.bayren.org

BayREN Single Family Projects 2013-09/16



County	Home Upgrade				Advanced Home Upgrade Assessment Incentive					
	# Reserved (not paid)	\$ Reserved	# Paid	\$ Paid	Total	# Reserved (not paid)	\$ Reserved	# Paid	\$ Paid	Total
Alameda	91	\$209,500.00	540	\$1,231,050.00	\$1,440,550.00	43	\$12,691.90	535	\$150,591.00	\$163,282.90
Contra Costa	286	\$646,350.00	912	\$2,150,650.00	\$2,797,000.00	40	\$12,000.00	393	\$114,853.00	\$126,853.00
Marin	33	\$74,550.00	153	\$333,400.00	\$407,950.00	3	\$900.00	95	\$28,154.00	\$29,054.00
Napa	17	\$36,350.00	126	\$303,400.00	\$339,750.00	0	\$0.00	9	\$2,700.00	\$2,700.00
San Francisco	5	\$9,450.00	19	\$38,200.00	\$47,650.00	27	\$8,100.00	157	\$46,374.00	\$54,474.00
San Mateo	15	\$31,850.00	95	\$211,150.00	\$243,000.00	22	\$6,600.00	145	\$41,389.00	\$47,989.00
Santa Clara	115	\$265,750.00	503	\$1,162,600.00	\$1,428,350.00	26	\$7,800.00	336	\$98,477.50	\$106,277.50
Solano	76	\$188,050.00	537	\$1,319,470.00	\$1,507,520.00	0	\$0.00	18	\$5,399.00	\$5,399.00
Sonoma	117	\$255,100.00	528	\$1,154,300.00	\$1,409,400.00	4	\$1,200.00	83	\$24,775.00	\$25,975.00
TOTAL	755	\$1,716,950.00	3413	\$7,904,220.00	\$9,621,170.00	165	\$49,291.90	1771	\$512,712.50	\$562,004.40

BayREN Multi-Family Projects 2013 - 9/16



County	In TA, to complete in 2017 or later		Reserved or in Reservation Process		Total Completed 2016		Total Completed 2013-2015	
	Units	Projects	Units	Projects	Units	Projects	Units	Projects
Alameda	2,126	63	998	30	0	0	2,812	51
Contra Costa	1,472	32	878	11	7	1	1,609	15
Marin								
Napa	77	3	146	1	0	0	106	2
San Francisco	1,880	30	1,152	10	40	1	4,024	58
San Mateo	2,262	25	210	11	16	2	2,397	29
Santa Clara	2,088	19	912	17	121	8	4,755	72
Solano	704	7	301	3	0	0	20	1
Sonoma	327	8	245	2	0	0	173	7
Total	10,936	187	4,842	85	184	12	15,896	235

Commercial Building Energy Efficiency Programs

- ▶ Commercial Building Energy Efficiency Rebates Administered by PG&E Through 3rd Parties
- ▶ Covers both Alameda and Contra Costa Counties and Cities
- ▶ Provides Energy Efficiency Resources to Local Governments



EAST BAY
energy
watch

Energy Efficiency Financing (PACE)

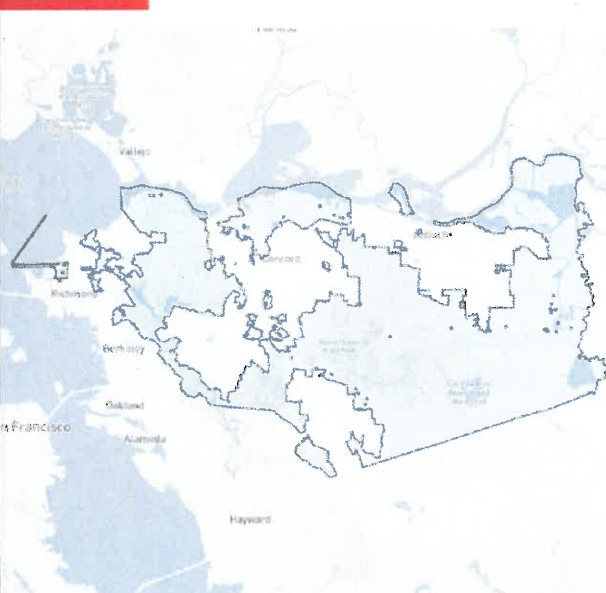
- ▶ Property Assessed Clean Energy Financing
 - ▶ Home Energy Renovation Opportunity (HERO)
 - ▶ CaliforniaFirst
 - ▶ *coming soon



Contra Costa County Unincorporated

50 Homes Improved 06/23/2016 HERO Launch Date 53,816 Housing Count

06/23/2016 - 10/14/2016 Report Range




Improvements

Type	Total Installed	Bill Savings
Energy	74	\$1.17M
Solar	27	\$1.41M
Water	1	\$6,242

Lifetime Impact


Applications Submitted	199
Applications Approved	151
Funded Amount	\$1.36M
Economic Stimulus	\$2.35M
Jobs Created	12
Energy Saved	13.1M kWh
Emissions Reduced	3,130 tons
Water Saved	935K gal

Learn how these numbers are calculated at <https://www.mapinfo.com/>



County CAP Measures & Achievements

Measure	Performance Metric	2015	2020 GHG Target	Current Reductions To-Date	% Complete To-Date
EE 1 Energy efficient retrofits - residential buildings	Cumulative number of single-family homes receiving energy efficiency retrofits since the beginning of 2015	117 Completed	-2140	-70	3%
	Cumulative number of multifamily units receiving energy efficiency retrofits since the beginning of 2015	8 Under construction			
EE 2 Energy efficient retrofits - nonresidential buildings	Cumulative number of businesses receiving energy efficiency retrofits since the beginning of 2005	Not Available Yet - Working with PG&E	-4630	0	?
EE 3 Energy efficiency and conservation awareness	Total number of households participating in energy conservation awareness activities	732 - Gathering more data - likely to be much higher	-430	-96	22%
	Total number of businesses participating in energy conservation awareness activities	Not Available Yet - Working with PG&E			





Contra Costa County Board of Supervisors

Subcommittee Report

AD HOC COMMITTEE ON SUSTAINABILITY

5.

Meeting Date: 10/24/2016

Subject: RECEIVE update on Climate Action Plan Implementation.

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

Department: Conservation & Development

Referral No.:

Referral Name:

Presenter: Jody London, DCD

Contact: Jody London (925)674-7871

Referral History:

At the August 22, 2016 meeting of the Ad Hoc Sustainability Committee, the Committee directed staff to provide an update on work to implement the *Climate Action Plan*.

Referral Update:

I. Overview

In December 2015, the Contra Costa County Board of Supervisors adopted a Climate Action Plan (CAP) that applies to all unincorporated areas of Contra Costa County, as well as County facilities. The CAP establishes goals for reducing emissions of greenhouse gases (GHGs) that originate from sources that are located in the unincorporated area of the County. There are some areas, like cities, and some stationary sources, like large existing industrial facilities, over which the County does not have jurisdiction. Incorporated cities are responsible for preparing and implementing their own climate action plans. Emissions from stationary sources like refineries and power plants are regulated by the Bay Area Air Quality Management District and the Air Resources Board. In some of those situations, there are Climate Action Plan measures calling for collaboration with the appropriate agencies.

The Climate Action Plan includes a GHG emissions inventory, forecast, reduction targets and numerous GHG reduction measures which together comprise the County's strategy for addressing climate change locally. The GHG reduction measures apply to the following six goal areas, around which this report is organized:

1. Energy Efficiency
2. Renewable Energy
3. Mobility and Land Use
4. Waste
5. Water
6. Government Operations

Only some of the CAP measures are expected to provide the means to achieve a portion of the direct GHG reductions needed to reach the County's CAP goals. Other measures are purely supportive and not expected to result in GHG reductions that aid the County in achieving CAP goals. It is also worth noting that only one Government Operations measure in the County's CAP, involving more energy efficient public lighting, is intended to reduce GHG emissions that will count towards the County's CAP goal. Other Government Operations measures will help reduce overall GHG emissions, however in most cases they will directly contribute towards reaching other jurisdictions' CAP goals, like the City of Martinez, because the majority of County facilities are located in incorporated areas.

A number of County departments are responsible for implementing the measures in the Climate Action Plan. This is an initial progress report. Staff is prepared to provide another progress report in six months, if so directed by the Ad Hoc Sustainability Committee.

II. Energy Efficiency

a. Residential Buildings

The Department of Conservation and Development (DCD) has the lead for energy efficiency in residential buildings. Much of this work happens through the Bay Area Regional Energy Network (BayREN), a collaboration of the nine Bay Area counties, facilitated through the Association of Bay Area Governments. Since the program's inception in 2013, in Contra Costa County, the BayREN has provided nearly \$3 million in incentives for nearly 950 projects in homes. This is the most of any County in the Bay Area. The BayREN also has provided energy efficiency upgrades in 1,600 multi-family residential units, with an anticipated 2,000 more through 2017.

b. Non-residential Buildings

The Department of Conservation and Development is the lead for energy efficiency programs that serve the non-residential sector. Much of this work occurs through the East Bay Energy Watch (EBEW), a partnership of cities in Contra Costa and Alameda Counties, the Counties, and PG&E.

The EBEW programs focus on commercial buildings and provides energy efficiency resources to local governments. DCD is working with PG&E to determine the cumulative number of businesses that have received energy efficiency retrofits through the EBEW since its inception in 2005.

c. Energy Conservation Awareness

As indicated above, the Department of Conservation and Development is building energy conservation awareness through the BayREN and EBEW programs. The Sustainability Coordinator has initiated work with the County's Office of Communications and Media to explore how the County can increase awareness of energy conservation and overall sustainability issues to both the general population and County employees.

The Sustainability Coordinator has initiated introductions with community organizations that focus on the environment and sustainability. The Sustainability Coordinator will present at an October 20 workshop organized by Contra Costa County Climate Leaders on Cities and Businesses Working on Sustainability Goals. The Sustainability Coordinator also will be speaking at an October 27 Sustainable Enterprise Conference being organized by Sustainable Contra Costa.

The Climate Action Plan recognizes the Green Business Program as a vehicle for increasing public awareness of energy and sustainability. On April 19, 2016, the Board of Supervisors recognized new Green Businesses for 2016. The Green Business Program is administered by the Health Services Department. Currently there are 340 certified Green Businesses in Contra Costa County. These businesses agree to comply with all environmental regulations; conserve energy, water, and other natural resources; and reduce or eliminate pollution from any hazardous and solid wastes they generate.

d. Urban Forestry and Paving and Roofing Materials

The CAP calls for encouraging the use of higher-albedo materials, parking lots with vegetation or solar panels, low-impact development and impervious surfaces, and cool roof materials. High albedo materials reduce heat gain in the built environment and can be used on surfaces including roofs, streets, sidewalks, school yards, and exposed parking lot surfaces. DCD is developing strategies for implementing this measure.

DCD also has the lead on supporting programs to plant and maintain trees on private property in urban and rural areas. DCD's role pertains to trees on private property and efforts are limited to landscaping associated with development projects requiring land use entitlement approvals. DCD is working on an update to the current tree ordinance, which can be structured to promote planting and maintaining tree species that will be drought tolerant and create shade.

DCD also has the lead on supporting programs to plant and maintain trees in urban and rural areas. The Department of Public Works responsible for landscaping at parks, County facilities, road maintenance (roads, rights of way), and flood control (creeks and channels) A issue to consider with maintaining trees, as well as other aspects of the built environment, is ongoing maintenance costs. Conventional budgeting policies for capital projects tend to consider only first costs, and not ongoing costs to operate and maintain a public works project.

e. Energy Efficiency Capacity Building

Staff in DCD, Public Works, and Health Services are monitoring grants, and pursuing them where appropriate. The Sustainability Coordinator is initiating contact with the Workforce Development Board and the Contra Costa Community College District to encourage and develop workforce training programs for green jobs. Green workforce development is something the County may also wish to pursue as it considers opportunities with the Northern Waterfront Economic Development Initiative.

f. Energy Efficient New Buildings

Zero net energy buildings are the next wave of green building technology. Outside the design and sustainability industries, there is not yet a high level of awareness or understanding about zero net energy and the benefits this type of construction can provide. The Department of Conservation and Development will be updating the County's General Plan in the next few years. This update provides an opportunity to incorporate zero net energy and other green building and sustainability concepts into County policy. Similarly, the upcoming Capital Improvement Plan being developed by the Department of Public Works provides an opportunity to look at zero net energy for new and retrofitted County buildings.

III. Renewable Energy

a. Alternative Energy Installations

The CAP calls for promoting the installation of alternative energy facilities on homes and businesses. Something that would help staff assess these opportunities is an assessment of renewable energy resource potential in Contra Costa County, and what modifications would be required to current zoning code and ordinances to facilitate greater renewable energy resource deployment. Staff is working to identify potential funding source(s) and technical resources to develop a renewable energy resource potential report. The CAP also directs the development of streamlined standards for ministerial approval of rooftop alternative energy installations on commercial buildings. This is an area that will be the focus of future work.

b. Alternative Energy Facilities

This item is specific to alternative energy facilities on public land. As indicated above, DCD will be examining in the coming year renewable resource potential in Contra Costa County. This study will include recommendations on whether and how land use policies should be modified to facilitate more renewable energy facilities on public lands.

c. Alternative Energy Financing

On June 21, 2016, the Home Energy Renovation Opportunity (HERO) program began operating in the unincorporated areas of the County. HERO is a property assessed clean energy (PACE) program that provides a low-interest financing option that is repaid through property taxes. As of September 30, County residents have used the program to install 63 energy projects, 25 solar projects, and 1 water project. \$1.25 million has been funded through HERO, creating an estimated 11 jobs in the County and reducing emissions by 2.35 tons. See the attached HERO report (Exhibit A) for details.

DCD anticipates another PACE vendor, California First, will soon begin offering PACE financing in the County as well.

IV. Mobility and Land Uses

a. Mobility and Land Uses

We know that the mobility and land use sectors, especially transportation, are critical to achieving our climate action goals. The passage of SB 32 last month and approval of goals that take California to 40% below 1990 emissions levels make transportation even more important. Achieving many of these goals is contingent on entities with whom the County collaborates, including the Contra Costa Transit Authority, County transit providers, and cities.

The Health Department operates the Safe Routes to School program, and coordinates with the cities in this work.

In July, the Board approved an update to the Complete Streets policy. Public Works and DCD will be working to implement this for County projects, and will be coordinating with cities and the Contra Costa Transportation Authority as needed.

Staff is identifying leads for revising County CEQA guidelines to reflect implementation of SB 743 (infill and transit-oriented development) and establishing a 2020 mode share goal for bicycling by resolution of the Board.

b. Increased transportation alternatives and land use improvements

i. Alternative-fuel infrastructure

Public Works and DCD share the lead on increasing the infrastructure in Contra Costa County for alternative fueled vehicles. The departments have partnered to secure funding for additional EV charging stations. Contra Costa County recently was awarded a grant of \$66,000 from the Bay Area Air Quality Management District to install seven electric vehicle charging stations at various County facilities – including the Administration Building and the main office buildings for both DCD and Public Works. The County is providing a 25% funding match for this project.

Some of the waste hauling vehicles in fleets owned and operated by companies that have entered into County franchise agreements use alternative fuels, namely compressed natural gas (CNG). Staff are beginning to explore the extent of the County’s authority to require alternative fuels in contracts with other vehicle fleets. As described below, the County’s own fleet is recognized for its use of alternative fuels.

ii. Off-road vehicles and equipment

Reducing emissions from off-road vehicles and equipment is an area that will be the focus of future CAP implementation work.

c. Reducing Vehicle Miles Traveled

Reducing vehicle miles traveled is critical to reducing greenhouse gas emissions in Contra Costa County, and across California. Many of the measures named in the Climate Action Plan are under the shared jurisdiction of cities in Contra Costa County and other agencies and special districts. DCD is the County’s lead department in collaborating with BART and other transit providers to increase public transit ridership in the County. DCD is also the lead in working with the County’s franchise waste haulers with regular routes serving unincorporated areas to maximize their routing efficiency where possible. DCD is also the lead in promoting with other agencies transportation demand management (TDM) programs, which support increased use of carpooling services, such as rideshare or casual carpool.

The Climate Action Plan identifies voluntary trip reduction programs, including school buses, Rideshare, Spare-the-Air Days, Bike to Work Day, employee shuttles, and alternative work schedules. While DCD is listed as the lead for promoting these programs, within the County, these goals can only be realized in partnership with the County Administrator’s Office. In the private sector, DCD staff will be working with community organizations to promote these goals.

The Climate Action Plan calls for increasing densities within half a mile of BART and Amtrak stations, and within a quarter of a mile of stops for express bus routes. The unincorporated County has five Planned Development Areas (PDAs), including Contra Costa Centre (Pleasant Hill BART), Downtown El Sobrante, North Richmond, Pittsburg/Bay Point BART Station Area, and the WCCTAC San Pablo Avenue Corridor (includes Montalvin Manor and Rodeo). Approximately 13 percent of the anticipated new housing units in the unincorporated County are

within the PDAs. Of the 12 existing or planned BART/eBART and three Amtrak stations in Contra Costa County, only the Contra Costa Centre and Pittsburg/Bay Point BART stations are within one-half mile of areas under the County's land use jurisdiction. The Contra Costa Centre PDA has densities that exceed 80 units per acre. In 2015, a development adjacent to the BART station received approvals to increase from 100 units to 200 units and is expected to begin construction in late 2017. The Pittsburg/Bay Point BART PDA includes a seven acre site on Bailey Road with planned densities of 60 units per acre.

Few, if any, opportunities currently exist to increase densities in areas proximate to express bus routes because existing routes tend to be contained entirely within the cities and/or bypass unincorporated communities.

The Contra Costa Centre PDA includes completed bicycle and pedestrian improvements (overcrossing) that improves access to the Pleasant Hill BART station. Bicycle parking has also been added to the station. A bicycle station is proposed to be located on the private development site adjacent to the station. This project can serve as a model for future work to prioritize alternative mode access to BART and other transit stations.

DCD is working to explore funding transit with development applications and other alternative transportation finance methods. Frontage improvements (curb, gutter and sidewalk) are proposed for new development. Particular attention is being given to installing these improvements in North Richmond job centers, thereby providing employees safe pedestrian access to and from transit stops.

The Climate Action Plan calls for continuing the County's policy of encouraging the establishment of Priority Economic Development Areas. The County is encouraging the Association of Bay Area Governments to establish a Priority Production Areas program (formerly Priority Industrial Areas) in Contra Costa County. The Northern Waterfront Economic Development Initiative, involving nearly 55 miles of Bay shoreline from Hercules to Oakley, has been the focus of collaborative economic development efforts by Contra Costa County and participating cities. Designating Priority Production Areas along the Northern Waterfront would advance efforts to improve the Jobs-Housing balance in the County.

d. Agricultural Land Uses

The Climate Action Plan calls for continuing support for local farmers markets, community gardens, school gardens, and other urban agricultural practices. The County has appropriated Park Dedication funds to the Urban Tilth (urban farm) Project in North Richmond. The project is beginning development in 2016, and can serve as a model for similar projects in other parts of the County. To help combat blight on vacant lots in North Richmond, the County, in partnership with the City of Richmond, continues to jointly fund a number of community garden projects established and maintained by local non-profit organizations.

DCD's work program for 2017 includes amending the General Plan to include a policy that encourages community gardens in new residential developments. DCD will also begin to explore how to amend the Zoning Code to allow urban agriculture in appropriate areas. It is not clear which County department has take the lead on encouraging partnerships between local food growers and local retailers, as well as local institutions such as schools, hospitals, colleges, and correctional facilities.

DCD continues work to discourage schools from being sited in agricultural areas. The County has actively pursued legislative and administrative fixes with no success. An upcoming California Department of Education update to Title 5 siting regulations provide a new opportunity to pursue this measure.

V. Waste

a. Waste Reduction and Recycling

Aggressive State requirements mandating that cities and counties to reduce landfill disposal continue to be pivotal in helping the County achieve its waste reduction and recycling goals. DCD is the lead department responsible for promoting participation in existing waste diversion and prevention programs; often, this is done in coordination with waste management companies and other public agencies.

DCD and the Environmental Health Division of the Health Services Department have regulatory and permitting authority for privately owned and operated solid waste transfer stations and landfills located in the unincorporated area. Like wastewater treatment facilities, these operations are prime locations to site and establish anaerobic digesters, which are an increasingly popular method of diverting food scraps and certain other organic wastes from landfills, unlike composting. They also offer the co-benefit of generating alternative energy, an area that will hopefully gain momentum in the future.

DCD periodically updates waste diversion programs originally established through the County's Source Reduction and Recycling Element and Household Hazardous Waste Element as circumstances warrant, using the annual reporting system administered by CalRecycle, the state department responsible for overseeing waste management programs and regulations. No additional changes have been identified as necessary to support the waste reduction and recycling measures in the County's CAP.

DCD staff has learned that there is an association of sanitary districts responsible for wastewater treatment in the Bay Area which provides a forum for regular collaboration and communication for the purpose of identifying best management practices, among other things. This includes exploring options that would reduce the amount of sewer sludge and other wastewater treatment byproducts that need to be disposed of in landfills. These types of operations could benefit from partnership with waste management companies in order to secure Cap and Trade funding for building and operating anaerobic digester facilities that can be used to manage waste from wastewater treatment as well as organic wastes, such as food scraps, collected from businesses or residences.

b. Landfill Management

Although DCD and Environmental Health have regulatory oversight of landfills operating in the unincorporated area, it is the Bay Area Air Quality Management District that has the regulatory responsibility and expertise necessary to ensure compliance with landfill methane control measures. DCD's monitoring of the Keller Canyon Landfill provides a means to make the County aware if the landfill fails to submit the required reports that demonstrate landfill methane control measure compliance to the Air District. We expect to be on target for this measure.

There are one closed landfill and two operating landfills in the County which already have on-site

plants that generate energy from landfill gas (primarily methane). The CAP calls for amendments to the General Plan and zoning code to allow renewable energy generation, such as solar and wind, on closed landfill areas. The General Plan and Zoning Code currently allow for utility-scale wind power generation, upon issuance of a land use permit, in areas with agricultural designations only. Closed landfill areas are currently located in other zoning districts, such as P-1 or Heavy Industry, and the applicable General Plan land use designations include Open Space (OS) and Heavy Industry (HI). The County does not have ordinances regulating other types of utility-scale renewable energy projects, so not having ordinances may in some circumstances complicate or prohibit such projects. DCD's work program for 2017 includes studying the County's renewable energy potential and amending the General Plan and Zoning Code as necessary to take advantage of that potential.

The Climate Action Plan calls for marketing renewable energy on closed landfill areas to potential stakeholders. The renewable resource potential study can look at the potential for this opportunity. While DCD can encourage the owners of these properties, the ultimate decision to install renewable energy facilities rests with the property owners. Should the County pursue community choice energy, that could create additional markets for such local renewable energy.

VI. Water

The Climate Action Plan contains measures related to water conservation and alternative water supplies. Staff leads have not yet been identified for the water supply specific measures, but both of these areas are expected to receive attention in the coming year.

VII. Government Operations

a. Public Lighting

All traffic signals in the unincorporated County area have been converted to LED technology, and street light upgrades are nearly complete. The County works in collaboration with PG&E on this, as PG&E owns many of the street lights. This is the one Government Operations measure which will derive GHG reductions that will directly contribute to the County reaching its CAP reduction goals.

b. Promote energy-saving tools and practices

The County is performing facility audits to explore the potential for cost-effective energy reduction projects using Interior LED lighting. A project to replace all exterior lighting at the West County Detention Facility is pending. The County has also been using a State-funded program that uses software and data to mine efficiency gains from HVAC systems in selected facilities.

The County recently completed its latest effort to expand solar-generated electricity to six facilities. These recent installations added 1.74 MW of solar capacity, bringing the total County solar capacity to 5 MW. This recent set of solar sites has generated 2.28 GWh of electricity, thereby avoiding 3.58 million pounds of CO₂ emissions (the most common greenhouse gas) since coming on line. Ongoing efforts include examining use of the RES-BCT tariff as a means to build a central solar facility on County land, and use the power a solar facility would generate to offset electricity consumption in County buildings that are not suitable sites for solar installations. Attached as Exhibits C & D are two aerial photos of County facilities on which solar has been

installed.

The Capital Projects group in Public Works is beginning construction on upgrades to the Heating, Ventilation, and Air Conditioning system at 40 Douglas. This project will include an energy management system. Public Works is designing an 18,000 square foot expansion of the West County Health Center in San Pablo that will be certified as a LEED Silver building. Similarly, new fire stations in Lafayette and San Pablo are proposed to be LEED Silver.

The CAP calls for Public Works to develop policies related to powering off lights and appliances after hours and after dark in County facilities. Some facilities, like DCD's main office, have automatic lighting controls which power off lights when there are periods of inactivity during the day as well as overnight. This is an area that is expected to receive additional focus for 2017.

These facility upgrades have been funded with zero-interest loans from PG&E, low-interest loans from the California Energy Commission, and various incentives and programs funded by the public purpose program surcharge on PG&E bills. The County has funded some energy efficiency projects in the past by taking advantage of grant funding made available by the American Recovery and Reinvestment Act and the Bay Area Air Quality Management District.

The CAP also calls for the County to site facilities that have more than 50 personnel in close proximity to infrastructure and services that support alternative commute modes. This may be something to consider in the upcoming Capital Improvements Plan.

c. Water Conservation

Some County facilities, like DCD's main office, already have water-efficient landscaping. Public Works is identifying opportunities to install additional water-efficient landscaping on County facilities and remove turf. A pilot project is the Pittsburg Health Clinic, where the County is savings millions of gallons of water through planting drought tolerant landscaping and removing turf. Additional funding for turf removal at other locations would offer the County the opportunity to realize similar water savings.

d. Waste Reduction

Public Works operates varying recycling programs in most County facilities. Paper recycling is most prevalent, however recycling of bottles and cans is also relatively widespread. Organic wastes from County buildings do not yet have organics recycling programs in place, due in part to challenges associated with storing, handling and transporting those types of wastes in a safe and cost effective manner. However, there are new state laws in effect which will apply to an increasing number of County facilities as the 2017 and 2019 thresholds take effect, which will mandate implementation of organics recycling programs. This is an area that will require heightened attention in 2017. The Public Works Department will most likely lead this direction, with support from the Sustainability Coordinator and other DCD staff, all bearing in mind the goal of zero waste County operations by 2035.

e. Climate Action Plan Implementation Support

The Board adopted the Environmentally Preferable Purchasing Policy on April 15, 2008. That policy contains specifications that consider source reduction, recycled content, energy and water savings, green building, landscaping, toxics and pollutants, forest conservation, and bio-based

products.

The County's fleet just received a Clean Champion award from the East Bay Clean Cities Coalition. The County was recognized for its use of cleaner fuels and fuel efficient vehicles. Fleet Services expects that the changes the County has made in its fleet will reduce greenhouse gas emissions up to 65%, or 5,000 tons annually, as well as reduction of NOx and particulate matter emissions. The County has been actively changing out its fleet to more efficient vehicles, and is reducing the number of vehicles in its fleet. Specific actions include switching to renewable diesel fuel, compressed natural gas, and plug-in electric and hybrid vehicles; obtaining grants to install electric vehicle chargers; and implementing policies to reduce idling time and save fuel. The County is piloting technology that can assist in these efforts. See attached fact sheet (Exhibit B) for details.

A future work item for DCD and the County Administrator's Office will be to evaluate the target from the 2007 Municipal Climate Action Plan for 30% of employees to telecommute two days a week. The Climate Action Plan states that if this goal has not been achieved, the County will establish policies to further support telecommuting and flexible work hours for employees, and if it has been achieved, the County will consider increasing the target to 40% employee participation.

As indicated above, the Sustainability Coordinator is developing a process for educating the public, as well as employees, on government operations' energy and water use efficiency and conservation measures.

The Climate Action Plan calls for the CAO and DCD to advocate for regional, state, and federal activities that support GHG emissions reduction in the County. The Sustainability Coordinator is providing support in this area, helping staff analyze opportunities to influence the County's legislative agenda, and helping craft written comments on the Air Resources Board's 2030 Scoping Plan Update Concept Paper, the California Energy Commission's research and development grant process, and CalEPA's proposed update to CalEnviroScreen, which defines which areas qualify as "disadvantaged communities".

The forthcoming upcoming update of the County's Capital Improvements Plan provides an opportunity to consider the policies in the Climate Action Plan. Similarly, work to develop new housing for the County's main administrative office and Emergency Operations Center may present opportunities to explore implementation of sustainability principles.

Recommendation(s)/Next Step(s):

VIII. Next Steps

The Climate Action Plan provides a roadmap for Contra Costa County to reduce greenhouse gas emissions in unincorporated areas, and lead by example in County operations. The County is making progress, and there is more we can do. Staff looks forward to reporting back to the Board in six months, if so directed.

Fiscal Impact (if any):

The cost to implement all of the measures in the Climate Action Plan is not known. However, the measures are intended to reduce emissions of greenhouse gases and contribute to increased public health. To the extent that public health improves, there are fewer demands on the health care system and residents have more funds to spend for other purposes that can stimulate other sectors of the economy. Numerous measures offer potential savings opportunities, such as reducing energy use and therefore lowering utility bills for County facilities as a result of making them more energy efficient.

Attachments

Presentation

Exhibit A: HERO Financing

Exhibit B: Fleet Awards

Exhibit C: Aerial Photo 1 of solar on County facilities

Exhibit D: Aerial Photo 2 of solar on County facilities

Contra Costa County's Climate Action Plan: Implementation Status

October 24, 2016

Jody London

Sustainability Coordinator

Department of Conservation and Planning

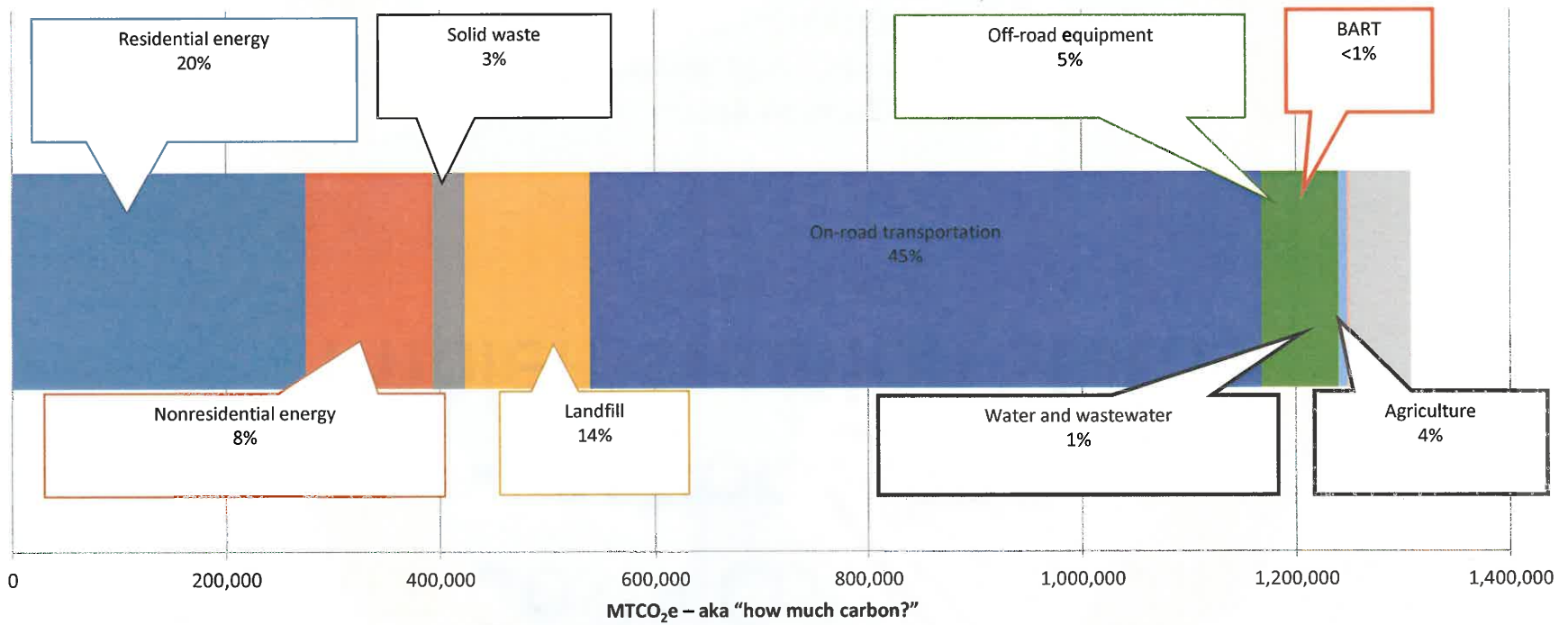
Contra Costa County

925-674-7871 · Jody.London@dcd.cccounty.us

Countywide Emissions

2005 GHG Emissions by Sector:

Source: Michael Baker International 2015



Emissions from County Operations (2008 Report)

The County completed its GHG emissions inventory in August of 2007 and revised this inventory in June of 2008. The results of the municipal inventory are illustrated below.

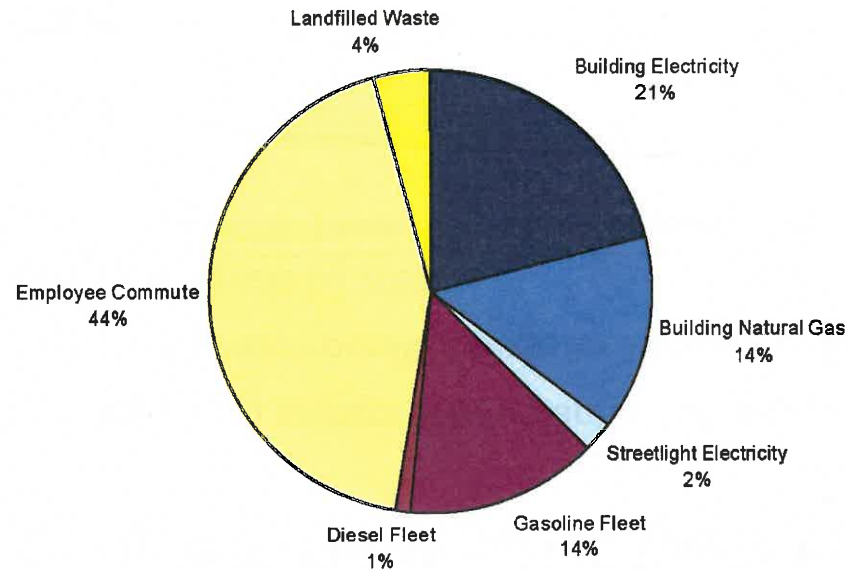


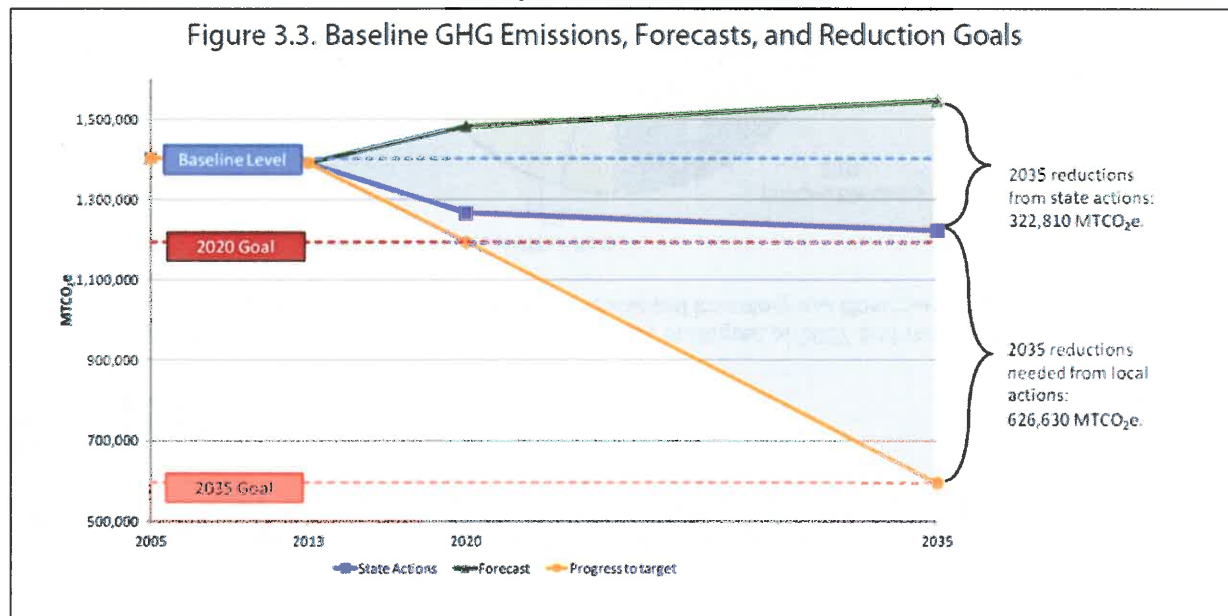
Figure 2.1 Municipal GHG emissions by source in 2006

Contra Costa County's 2015 Climate Action Plan: What are the Emissions Reduction Goals?

Overall Goals:

- Reduce community-wide emissions in unincorporated areas 15% below 2005 levels by 2020
- Trajectory to reduce emissions in unincorporated areas to 50% below 1990 levels by 2035

Note: SB 32 goal is 80% below 1990 levels by 2050



Where Will the Reductions Come From?

- Energy Efficiency



- Renewable Energy



- Land Use and Mobility



- Waste



- Water



- Government Operations



Energy Efficiency



- Residential Buildings: **BAY AREA** Regional Energy Network
- Non-residential Buildings: **EAST BAY energy watch**
- Energy Conservation Awareness: work in progress
- Urban Forestry and Paving and Roofing Resources: high-albedo, vegetation or solar, low-impact, pervious surfaces, etc.
- Energy Efficiency Capacity Building: grants, workforce
- Energy Efficient New Buildings: getting to zero net energy

Renewable Energy



- Install more renewable energy on homes and businesses
 - County is looking to assess renewable energy resource potential in Contra Costa County next year
 - Study will also identify needed modifications to zoning code and ordinances to facilitate renewable deployment
- Cite more renewable energy on public lands
- Northern Waterfront Economic Development Initiative may yield opportunities for renewable energy, both installation and related businesses

Renewable Energy



- Financing – Property Assessed Clean Energy now available in unincorporated County

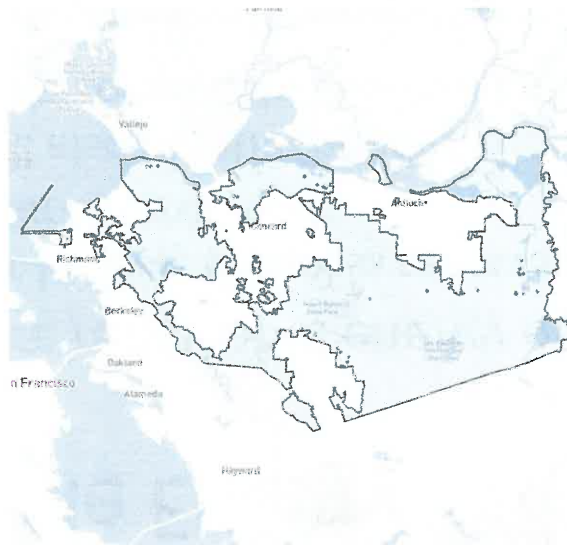
Contra Costa County Unincorporated

45 Homes Improved

06/21/2016
HERO Launch Date

53,815
Housing Count

01/01/2011 - 09/30/2016
Report Range



Improvements

Type	Total Installed	Bill Savings
Energy	63	\$1.02M
Solar	25	\$1.36M
Water	1	\$6,242

Lifetime Impact

Applications Submitted	188
Applications Approved	138
Funded Amount	\$1.25M
Economic Stimulus	\$2.17M
Jobs Created	11
Energy Saved	11.8M kWh
Emissions Reduced	2,835 tons
Water Saved	935K gal

Learn how these numbers are calculated at <https://www.herogov.com/faq>



855-HERO-411

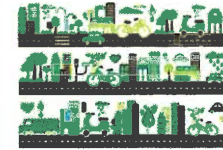
gov@heroprogram.com

Land Use and Transportation



- Majority of emissions come from transportation
- Increasing County focus on infill, transit-oriented development, complete streets, and related policies
 - Contra Costa Centre (Pleasant Hill BART) as a model
- County fleet is winning awards and recognition
- How to reach private fleets?
- County collaborates with transit agencies
- Northern Waterfront Economic Development Initiative as opportunity to bring jobs closer to housing

Land Use and Transportation



- Climate Action Plan calls for continued support for local farmers markets, community gardens, school gardens, and other urban agricultural practices
- 2017 work will include amending General Plan to encourage community gardens in new residential developments
- Siting of new schools is important

Waste



- State mandates to reduce landfill disposal are pivotal for achieving waste reduction and recycling goals
- Interest in generating energy from methane created at landfills, waste water and sewage treatment facilities
- Authorizing Community Choice Energy could create market opportunities for renewable energy generated in Contra Costa County

Water



- Water conservation in homes and businesses falls to EBMUD and Contra Costa Water
- County may update conservation requirements for new developments
- County should begin to promote rainwater collection for irrigation, and allow use of recycled water for irrigation

Government Operations



Lead by Example!

- All traffic signals in unincorporated County are using LED, and street light upgrades are nearly complete
- Ongoing energy efficiency audits and retrofits
- 5 MW solar
- Water efficient landscaping
- Opportunities to improve recycling, composting

Government Operations



- County fleet just received Clean Champion Award from East Bay Clean Cities
- Opportunities with:
 - Upcoming update of Capital Improvements Plan
 - Potential new County Administrative office
 - Potential new Emergency Operations Center

Contra Costa County Unincorporated

45 Homes Improved

06/21/2016

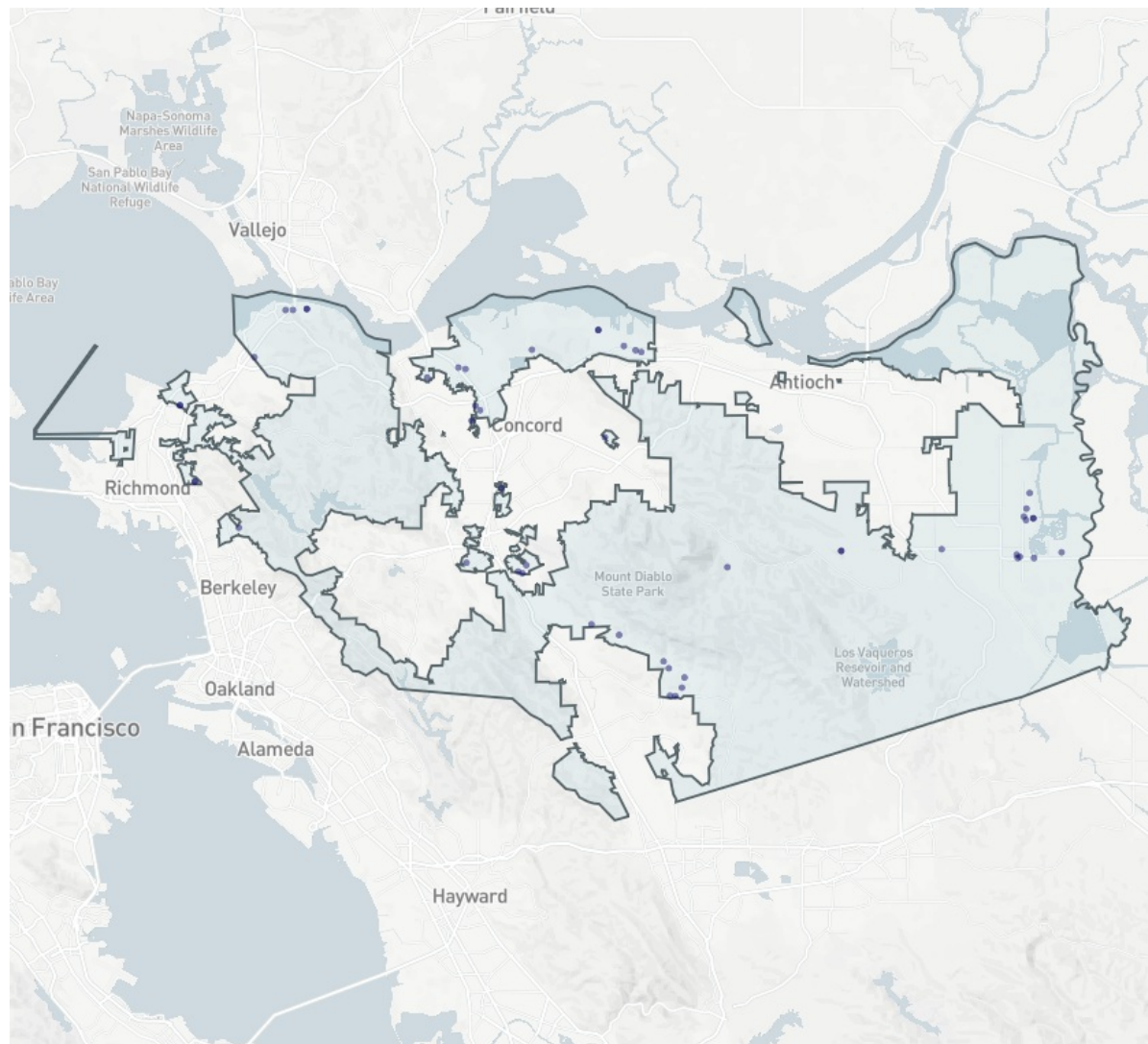
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County of Contra Costa – Public Works Department, Fleet Services Division Fleet Achievement: Clean Champion Awards 2016

Contra Costa County Fleet Services Divisions strong commitment to mitigating climate change began in May 2005, when the Board of Supervisors convened department heads in a Climate Change Working Group (CCWG) to identify existing County activities and policies that potentially reduced GHG emissions. To most effectively reduce its GHG emissions, the County focused its efforts on its largest emissions sources. The County's strategies and multipronged approach are aimed to reduce emissions across all sources utilizing the following goals:

Utilize cleaner fuels, and fuel efficient vehicles:

Switched from biodiesel to R99 renewable diesel to fuel many of its heavy-duty diesel vehicles, including more than 220 diesel-powered municipal public works trucks, heavy-duty diesel powered specialty vehicles, and equipment. In making the switch, the county expects to reduce greenhouse gas (GHG) emissions by up to 65% and an estimated 5,000 tons annually. Other benefits include a reduction of NOX and a 33% reduction of particulate matter PM 2.5.

Continuation of Benefits:

- R99 Renewable Diesel introduced June 2016, Diesel per year average 90,851.94
- CNG average per year use 6164 Therms a year
- Continue to purchase and add CNG vehicles Total 34 total. Propane 10 units
- Purchase 3 Hino Truck 195 Hybrid units utilizing *CARB Credits 23K per unit 30% fuel reduction
- Continue to purchase and add Hybrid (50 units added FY-15) units to the Fleet 184 Total
- Triple the purchase of electric vehicles from 2 to 15, 41 total electric vehicles and equipment
- Expand electric vehicle level 2 charging stations infrastructure*internal from 6 to 10
- Bay Area Air Quality Management District Grant Fund Awarded **Charge!** 3, dual level*external level 2 Public access electric vehicle charging stations
- Doubling EV infrastructure to 16 EV level 2 stations internal and public access

Employee commute: reduce vehicle miles traveled by County employees

Measured by metric tons of carbon dioxide equivalent (*1,412 MTCO_{2e} or 8%*) – In 1991, the Board of Supervisors authorized all County Departments to implement flexible work schedules, including compressed work weeks, flextime, and staggered work schedules. GHG emissions are reduced when employees work more hours per day but fewer days per week, thereby eliminating commute trips. Alternative work schedule helps to reduce overall traffic density and shorten commute times. 4/10 schedules eliminates 20% of employee commute vehicle emissions which is one of the largest components of the County's carbon footprint. These flexible work schedules continue through today.

PURCHASING POLICY:

County policy mandates the purchase of fuel-efficient mileage/alternative fueled vehicles through Admin 508.5

508.5 Mandates Fleet Services to purchase fuel efficient or alternate fueled vehicles whenever possible to replace less efficient units. F. S purchases an assortment of alternative fueled be they E-85, Compressed Natural Gas, Hybrid, Hybrid Electric, or full Electric equipped vehicles to aid in the cleaning of our air quality, environment and to reduce our dependency on fossil fuels.

FUEL SAVING POLICIES & PROCEDURES:

Policies or procedures implemented (and enforced) to reduce vehicle usage and fuel consumption.

- Anti-Idling policy.
- An anti-idling policy is in place, limiting idling to no more than 5 minutes and is monitored by F.S. personnel and the supervision of the using Departments.
- Underutilized Use Policy / Using Verizon Tele tracking to detect hard starts, excessive Idling and vehicle locations and mileage.
- This is detected by periodically performing a vehicle use report to determine if a vehicle is used less than 3000 miles per year.
- Reducing the weight of the vehicle through the removal and storage of unnecessary equipment.
- Whenever possible F.S. works with its customers to reduce the overall weight of their vehicles by using lighter weight materials such as aluminum and composites in their construction and impressing upon them the need to store rarely used items in a central location.

LOAN POOLS:

Fleet Services employs loan pools or commercial flex cars to reduce the size of the fleet and increase efficiency.

F.S. utilizes a pool of loan vehicles so that our customer's vehicles may be maintained on a regular basis to achieve optimum performance and reduce emissions. We have in place an agreement with a local rental agency for long-term use vehicles, in case of an accident, which has allowed us to reduce the number of pool vehicles kept in service. F.S. also has a number of large pool vehicles for short-term use.

CAR SHARE/RIDE SHARE

ZIP CAR/LOCAL MOTION PILOT – The Public Works Department has recently implemented a pilot of 3 internal hubs of pool cars (ZIP CAR) to be shared throughout the Public Works Department as the internal divisions work to consolidate their trips and to carpool whenever possible. Units are reserved via ID Badge RFIDs and are easily reserved with an easy "TAP and GO", sensor on the windshield, web online reservations or mobile device. Currently the pilot is being tested by the Public Works Department only, if successful the Tap and Go system will be offered to all Departments countywide.

OUTREACH PROGRAMS

Active outreach program to inform other departments within organizations of the following information/programs:

- Availability of new green fleet technologies to meet their requirements.
- Meetings are held every other month with Departments to determine their fleet needs, at these meetings they are offered the following, downsized vehicles and hybrid or CNG, EV powered vehicles based on their needs.
- Tips on saving fuel – Check tire pressure, Anti-idling policy, etc.
- In these meeting Departments are reminded of ways to reduce fuel usage, idling time and whenever possible to consolidate trips and to carpool.

Waste – Recycling reduce generation of waste and increase diversion

Paper recycling program (*520 MTCO₂e or 3%*) – The County’s paper recycling program currently operates in about 200 County facilities. The program was developed in an effort to reduce waste sent to the County’s landfills, thereby reducing the County’s impact on natural resources and also generating revenue. The early program was designed for white paper only, but the current program accepts a wider range of paper types and other materials sorts by grade to maximize return.

Other material recycled. FY-2015

- Tires2,318
- Truck Tires156
- Paint220 Gallons
- Antifreeze Gal210 Gallons
- Used Oil4,445 Gallons
- Automotive Batteries237
- Cell Phones.....250
- Used Oil Filters2,450 lbs. 1 Ton

- Bailed Office Pack1,253,626
- Loose Office Pack.....304,115
- Junk Mix.....62,483
- News Print.....224,943
- Sorted White Ledger Paper509,725
- Total Paper.....2,354,892 = 1177 Tons
- Bailed Cardboard7,819,868 = 390 Tons

- Books (Pounds)119,787 = 60 Tons
- Laser Cartridges.....5,115
- Computers Value\$11,940.85
- Batteries (Non-Automotive)20,882 = 10 Tons
- Misc. Steel.....\$34,621.93 unknown tonnage
- Wood (lbs.)96,000 = 48 Tons
- Florescent Tubes (lbs.).....6,520 = 3 Tons
- Paint400 Gallons

Buildings – reduce energy consumption and utilize renewable energy County fleet

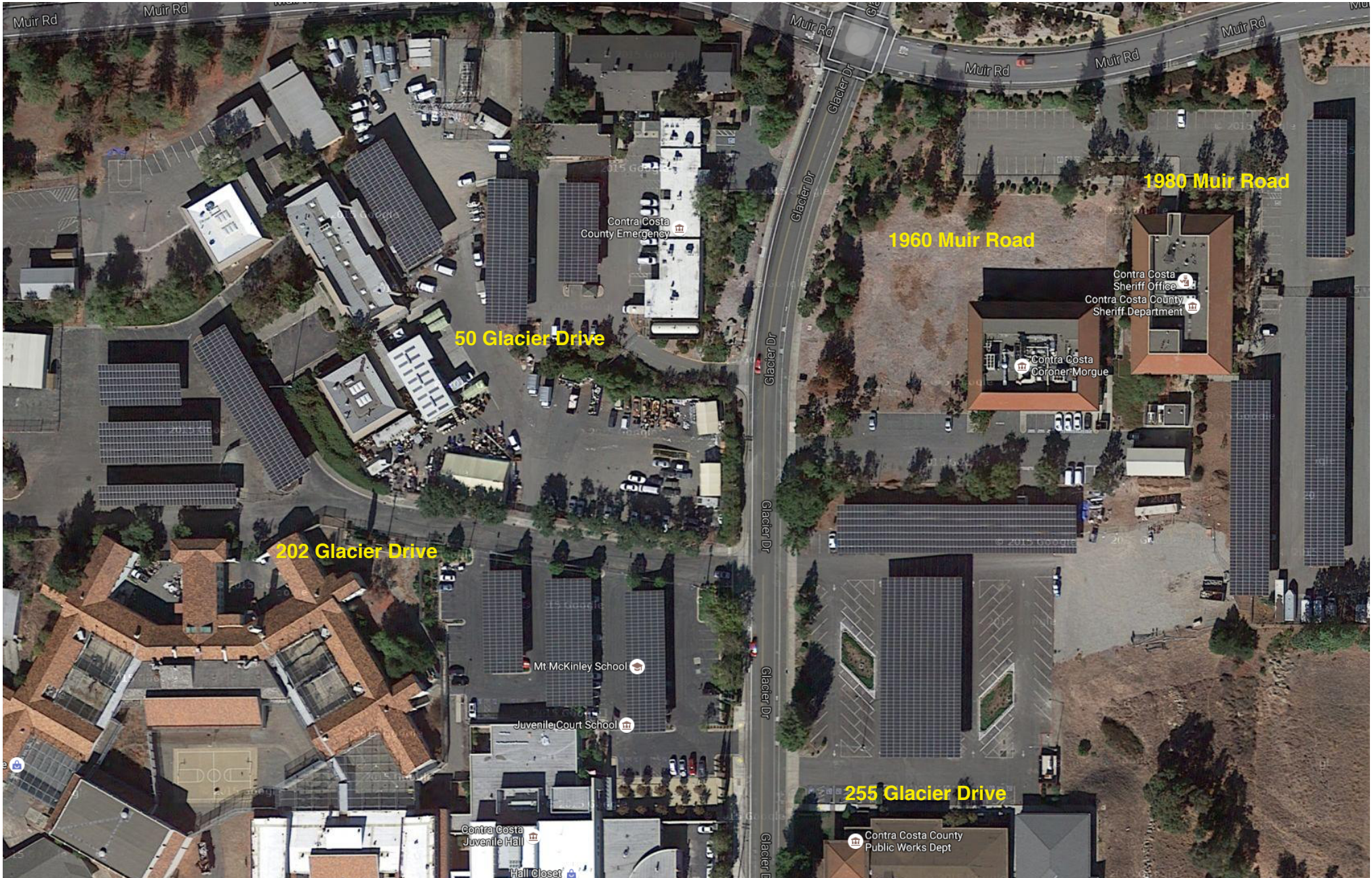
Contra Costa County has recently installed six new bio-retention solar parking lots. The parking lot solar panels power on average about 82% of the electrical needs for several of our buildings and at our administrative facility. The six sites installed at various County facilities have a total of 1.75 mega-watts of solar capacity and will generate 2.7 million kWh's per year and will save approximately \$27,000 a year in energy costs for our administration building alone (approximately \$430,000 a year for the six sites). The power generated annually by the six sites is enough to power 386 average California homes. We will be reducing Greenhouse Gas emissions by 855 Metric Tons of Carbon Dioxide a year, which is the equivalent of about 181 cars, 97,000 gallons of gas or about 2 million miles driven.

Streetlights – reduce electricity use with energy efficient technologies

LED traffic signals (*558 MTCO₂e or 3%*) – LED traffic lights are 85-percent more efficient than those with incandescent lamps. Ten and 25-watt LEDs replace 69 and 150-watt incandescent lamps and last five times longer, thereby reducing replacement costs as well as maintenance labor. This project was implemented as a maintenance project funded through the maintenance program.

The mission of the County and Fleet Services is to do our part to comply and go beyond Governor Brown's Executive Order to have 1.5 million zero-emission vehicles on California's roadways by 2025. One of the ways in which we are on course to accomplish this goal is by proactively taking full advantage of any and all incentives, credits or grants such as the grants available from the Bay Area Air Quality Management District and the Transportation Fund for Clean Air Act just to name a few. The achievement of moving from fossil powered vehicles in the County fleet of over 1600 vehicles and equipment to alternative fueled vehicles whenever possible demonstrates the County's strong continued commitment to reduce greenhouse gases and lower our carbon footprint in our local communities, region and on our planet.







Contra Costa County Board of Supervisors

Subcommittee Report

AD HOC COMMITTEE ON SUSTAINABILITY

6.

Meeting Date: 10/24/2016

Subject: RECEIVE update on funding to support Climate Action Plan implementation.

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

Department: Conservation & Development

Referral No.:

Referral Name:

Presenter: Jody London, DCD

Contact: Jody London (925)674-7871

Referral History:

On August 22, 2016, the Ad Hoc Sustainability Committee received a report on funding opportunities associated with the County's *Climate Action Plan* and sustainability. The Committee asked staff to reconvene the staff team tracking Greenhouse Gas Reduction Funds, and report back on the activities of each department, and funds received.

Referral Update:

Assembly Bill 32 (2006) and subsequent legislation and rulemakings created a Cap and Trade program whereby regulated entities, including stationary sources of pollution and mobile sources of pollution, buy and sell credits for the reduction of greenhouse gas emissions. The proceeds from the Cap and Trade program are placed in the Greenhouse Gas Reduction Fund, which is then disbursed by State agencies according to rules each agency developed, under the general direction of the California Air Resources Board.

Contra Costa County staff have been pursuing Greenhouse Gas Reduction Funds, and other funding sources, for many years. A summary of all funds that have come to the County and its cities, special districts, and residents and businesses was provided on August 22.

Below we provide an overview of staff activities to draw more Greenhouse Gas Reduction Funds to projects and programs in Contra Costa County.

Greenhouse Gas Reduction Fund Program County Activities

Low Carbon Transit Operations Program

- The County has collaborated with other entities, including the Contra Costa Transportation Authority, on a number of grants to state and regional agencies. In the case of the Low Carbon Transit Operations Program, the County delegates responsibilities to numerous joint powers agencies, including transit agencies. In 2015-2016, transit agencies in Contra Costa County received \$1.1 million for various service improvements and equipment upgrades.

- The County continues to sponsor the Safe Routes to School program, through Health Services, which is funded through State, local, and other grant programs.
- An important source of funding for low carbon transit and school buses is the mitigation fees collected through the community service area in Tassajara Valley.
- A potential source of additional funding for public transit and school buses are county service area revenues (CSA) such as those collected in Alamo Creek with CSA T-1.
- The decrease statewide in gasoline tax revenue has reduced County budgets for low transit programs / funding for transit districts. State legislation that will assess taxes based on vehicle miles travelled may address the volatility and decreasing revenue (due to electric and fuel efficient vehicles) associated with the gas tax.

Affordable Housing and Sustainable Communities

- The County has been twice denied funding for this program, most recently on September 30, 2016.
- The next round of AHSC funding has not been released.
- The Legislature created a new program, Transformative Climate Communities, which has been funded at \$140 million. Draft guidance from the Strategic Growth Council would direct 50% of these funds to the City of Los Angeles, 25% to the City of Fresno, and the remainder to a community to be determined. This is based on the high proportion of “disadvantaged” census tracts in those cities.

Low Carbon Transportation

- The County has received funding to build out infrastructure for electric vehicles.

Weatherization Upgrades/Renewable Energy

- The County has continued to administer weatherization funds that are administered by the California Department of Community Services and Development. This is an important source of funding for improvements for low income households in our County.

Energy Efficiency in Public Buildings

- The County continues to identify opportunities appropriate for funding energy efficiency in public buildings. The upcoming work to develop a new Capital Improvement Plan, and consideration of a new Administration Building and Emergency Operation Center all provide opportunities for the County to demonstrate its commitment to sustainable building design and operation.

Agricultural Energy and Operational Efficiency

- This has not been an area of focus to date.

Water Action Plan - Wetlands and Watershed Restoration

- The County is monitoring grant opportunities for wetlands and watershed restoration.
- The County has worked with the East Contra Costa County Habitat Conservancy to provide feedback on grant Requests for Proposals through the Sustainable Lands Conservation Program

(SALC) on land acquisition funding.

- Brentwood Agricultural Trust successfully competed for funds from the SALC program and was awarded \$10 million to conserve land east of Discovery Bay.
- County staff continues to monitor funding opportunities related to wetlands and watershed restoration and protection.

Sustainable Forests

- This has not been an area of focus to date.

Waste Diversion

- The County routinely administers grants for waste diversion. These are not necessarily from the Greenhouse Gas Reduction Funds. Staff continues to look for opportunities with Greenhouse Gas Reduction Funds, including with a recent announcement.

An emerging concern for staff regarding the County’s ability to access Greenhouse Gas Reduction Funds is the draft methodology released in early September by the California Environmental Protection Agency. Under the proposed CalEnviroScreen, fewer communities in the Contra Costa County would qualify as “disadvantaged communities,” limiting our ability to pursue certain funding sources. For example, the CSD (define acronym) disburses funds for low income weatherization only to disadvantaged communities. Staff has been working to understand and help craft policy recommendations that would direct funds from large stationary sources that participate in the Cap and Trade program to the communities where those sources are located.

Recommendation(s)/Next Step(s):

RECEIVE staff report on funding activities related to Greenhouse Gas Reduction Funds.

Fiscal Impact (if any):

Any Greenhouse Gas Reduction Funds the County has received means the County has additional resources for climate related programs and projects.

Attachments

No file(s) attached.



Contra Costa County Board of Supervisors

Subcommittee Report

AD HOC COMMITTEE ON SUSTAINABILITY

7.

Meeting Date: 10/24/2016

Subject: RECEIVE report on creation of Sustainability Advisory Committee and DIRECT staff regarding next steps.

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

Department: Conservation & Development

Referral No.:

Referral Name:

Presenter: Jody London, DCD

Contact: Jody London (925)674-7871

Referral History:

The Ad Hoc Sustainability Committee at its August 22, 2016 meeting discussed the creation of a Sustainability Advisory Committee, and asked staff to develop a recommendation for consideration by the Board of Supervisors. The Internal Operations Committee discussed creation of a Sustainability Advisory Committee on September 26, 2016, and asked staff from the Department of Conservation and Development and Health Services to coordinate to ensure that a Sustainability Advisory Committee's mission include relevant issues previously addressed by the Public and Environmental Health Advisory Board. That coordination has occurred.

Referral Update:

BACKGROUND

In December 2015, the Board of Supervisors adopted the County's Climate Action Plan (CAP). The CAP establishes goals for reducing greenhouse gas emissions in Contra Costa County by 2020 and 2035. These emission reduction goals are in six sectors: energy efficiency, renewable energy, land use and transportation, waste, water, and government operations. The goals encompass the unincorporated areas of the County government operations.

Contra Costa County residents, community groups, and businesses have deep interest, expertise, and experience in sustainability issues. Some gravitate more to specific aspects of sustainability and the CAP, and/or work on these issues in a region of the County. As the County deepens its work on sustainability, it should take advantage of the human resources within the County that can advise on successful implementation of the CAP, including suggestions on how that work can be performed more efficiently and effectively.

Staff notes that the recommendation to establish a Sustainability Advisory Committee is unrelated to any other recommendations the Board may be considering regarding other Advisory Committees. In particular, the Internal Operations Committee has discussed the future of the

Public and Environmental Health Advisory Board (PEHAB). It is not intended that the Sustainability Advisory Committee would substitute for PEHAB, which has a different mission. Matters related to climate change would come to the Sustainability Advisory Committee¹. The Public Health Director has indicated interest in having a group that can advise the County on public health accreditation and matters concerning public health.

Below are details on the recommended function, composition, and other operating protocols for the Sustainability Advisory Committee.

Function:

The function of the Sustainability Advisory Committee would be to provide advice on successful implementation of the Climate Action Plan, including suggestions on how that work can be performed more efficiently and effectively.

Sunset Date: None.

Reports To: Board of Supervisors.

Membership: Ten members, selected as follows:

- One appointed by each Supervisor (5);
- Two representing community groups whose mission includes sustainability &/or environmental issues (2);
- Two representing commercial groups or organizations whose business focuses on sustainability &/or environmental issues (2); and
- One representing environmental justice issues (1).

Committee meetings operate under the County's Better Government Ordinance and are open to the public.

Office Term: Two years, with initial terms being staggered in order to maintain continuity of committee deliberations.

Term Limits: None.

Meeting Time: To be determined.

Compensation: None.

1 - The PEHAB mission, established in 1986 is: 1. Anticipate emerging health needs and initiate prevention programs; 2. Focus public health interventions in communities with greatest needs; 3. Balance available resources with growing needs; and 4. Advocate for increased County action to improve community health.

Recommendation(s)/Next Step(s):

ACCEPT recommendation for the Board of Supervisors establish a Sustainability Advisory Committee, and **RECOMMEND** to the Board of Supervisors the creation of a Sustainability Advisory Committee that would advise the Board on issues related to the County's Climate Action Plan.

Fiscal Impact (if any):

The fiscal impact of establishing a Sustainability Advisory Committee will consist of in-kind time and resources from the County to select and staff the citizen advisory committee. These services will be provided by the Sustainability Coordinator, who is based in the Department of Conservation and Development (DCD).

Attachments

No file(s) attached.



Contra Costa County Board of Supervisors

Subcommittee Report

AD HOC COMMITTEE ON SUSTAINABILITY

8.

Meeting Date: 10/24/2016

Subject: AUTHORIZE County memberships in the local Government Sustainable Energy Coalition and the Urban Sustainability Directors Network.

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

Department: Conservation & Development

Referral No.:

Referral Name:

Presenter: Jody London, DCD

Contact: Jody London (925)674-7871

Referral History:

N/A

Referral Update:

BACKGROUND

As the County expands its work on sustainability and implementing the Climate Action Plan, it is important for the County to have access to the most current information about what is working at the local level for other government entities, and be able to advise the Board of Supervisors of activities by State agencies that may impact County policies and programs.

Urban Sustainability Directors Network

The Urban Sustainability Directors Network (USDN) brings together sustainability directors from local governments in the U.S. and Canada. USDN provides a peer-to-peer information sharing network, with emphasis on what has worked for other jurisdictions, and what has not worked. The focus is on fostering collaboration. USDN provides weekly e-news updates, and hosts 20 user groups that meet every other month by phone for an hour. Members can participate in as many user groups as they wish.

USDN was initially designed for cities, so counties are included as associate members and pay reduced dues of \$400/year. Membership in USDN may increase our chances of receiving a Partners for Places grant, which is designed to foster collaboration between local governments and place-based foundations on sustainability issues. USDN has been cited by local government sustainability coordinators as one of the best resources for their jobs.

Local Government Sustainable Energy Coalition

The Local Government Sustainable Energy Coalition (LGSEC) is a statewide group for local governments, with a focus on advocacy before State energy regulators and peer-to-peer networking. The LGSEC is the only statewide group representing local governments at the point where implementation decisions are made about State energy programs. Two key energy efficiency programs for Contra Costa County funded by PG&E, the East Bay Energy Watch and the Bay Area Regional Energy Network, can trace their origins to advocacy by the LGSEC before the California Public Utilities Commission.

The LGSEC hosts quarterly networking meetings that are always informative and allow us to learn what our peers are doing in other parts of the State. The LGSEC also puts out a newsletter every 5-8 weeks. Annual dues are \$2,500 for a basic membership, \$10,000 if one wishes to serve on the Board and have a more direct impact on the organization’s policy positions and direction. The organization historically has covered funding for one person from a member entity to travel to the quarterly meetings if they are in a part of the State that requires air travel (i.e., they would reimburse us for one of our staff to travel to a meeting in LA or San Diego).

Recommendation(s)/Next Step(s):

AUTHORIZE County memberships in the local Government Sustainable Energy Coalition and the Urban Sustainability Directors Network.

Fiscal Impact (if any):

Total impact is expected to be \$3000. Staff has identified funds to cover these dues.

Attachments

No file(s) attached.
