

The background of the slide features a large, faint, circular seal of Contra Costa County. The seal contains a landscape with a sun, mountains, and a bay, surrounded by the text "CONTRA COSTA COUNTY" and "1850".

Department of Conservation and Development Climate Action Plan Implementation

May 22, 2017

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Director

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Contra Costa County

Today's Presentation

- Climate Action Plan Framework
- Update on DCD activities to implement 2015 Climate Action Plan
 - Accomplishments
 - Future Work/Opportunities To Do More
- Highlight Potential Areas for Board Guidance and/or Funding

Key Takeaways

- We are making good progress on energy efficiency programs, community choice energy, energy financing programs, and solid waste diversion.
- For transportation goals, given the network and connected attributes, it is critical for success to have active partners – County departments, cities, Contra Costa Transportation Authority, State.
- There are several areas where direction from the Board would be useful:
 - Potential updates to ordinances: with Board direction, DCD will examine these opportunities further and seek to identify staffing and resources.
 - Electric Vehicle Master Plan: having a Countywide plan that includes cities, community colleges, and PG&E will better position the County for funding opportunities.

Climate Action Plan Framework

- Energy Efficiency 

- Renewable Energy 
Renewable energy

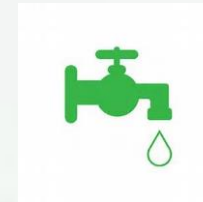
- Land Use and Mobility



- Waste



- Water



Where the work happens:

- Government operations
- Industrial
- Commercial
- Residential

Energy Efficient Buildings

Accomplishments

Energy Efficiency Single-Family Projects Completed 2013-2016	
Community	Projects Completed
Alamo	62
Bay Point	10
Blackhawk	1
Byron	1
Crockett	2
Discovery Bay	16
El Sobrante	25
Pacheco	4
Rodeo	4
Total	125

Opportunities to do more

- Greater collaboration with Green Business program

Low Income Energy Efficiency

June 1, 2015 to December 31, 2016: Served 488 Unduplicated Households

Program – Households	Total Direct Services by Program
Dept Of Energy Weatherization Assistance Program – 43	\$ 81,788
Low Income Home Energy Assistance Program – 417	\$659,577
Emergency Cooling and Heating Services – 148	\$254,823
Low Income Weatherization Program – 222	\$343,902
Grand Total of Direct Services	\$996,188

Energy Efficient New Buildings

Accomplishments

- Through East Bay Energy Watch and BayREN, County has good outreach capacity

Opportunities to do more

- Incorporate zero net energy into messaging
- Once the State indicates how ZNE will be reflected in code, the County can identify how to accelerate progress in this area
- Explore updates to ordinances

Property Assessed Clean Energy (PACE) Financing

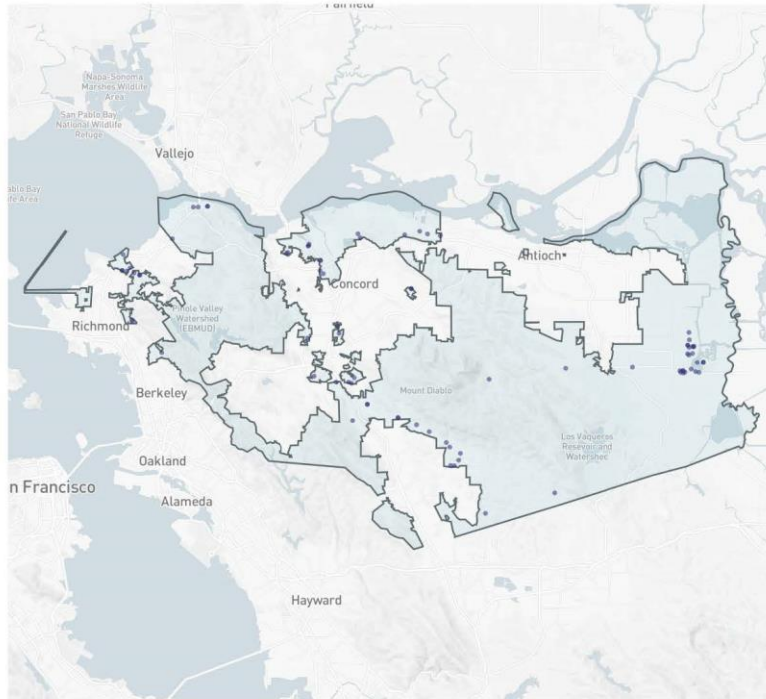
Contra Costa County Unincorporated

91 Homes Improved

06/21/2016
HERO Launch Date

53,820
Housing Count

06/01/2016 - 12/31/2016
Report Range



Improvements

Type	Total Installed	Bill Savings
Energy	116	\$1.64M
Solar	70	\$3.68M
Water	7	\$42.0K

Lifetime Impact

Applications Submitted	282
Applications Approved	212
Funded Amount	\$2.74M
Economic Stimulus	\$4.74M
Jobs Created	23
Energy Saved	21.4M kWh
Emissions Reduced	5,411 tons
Water Saved	4.91M gal

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



855-HERO-411

gov@heroprogram.com

Urban Forestry and Paving and Roofing Materials

Accomplishments

- Tree Ordinance requires trees and planter islands when a development has more than 70 parking spaces
- Solar energy systems are allowed on or over parking areas

Opportunities to do more

- Could explore updating ordinances to encourage:
 - Pervious paving materials
 - Bioswales
 - More high-albedo materials that reflect heat
 - Trees in smaller projects

Alternative Energy Installations in County

Accomplishments

- County's process with cities for streamlined, online solar permitting, developed in 2011, was model for subsequent State legislation.
- Staff received grant from Strategic Growth Council to study renewable resource potential and needed zoning changes to deploy more renewables.

Opportunities to do more

- Explore opportunities to install renewable resources at brownfield sites.
- Work with MCE to site renewable energy projects.

Alternative Energy Installations in County

The number of permits for residential rooftop solar in unincorporated County has climbed since Contra Costa County streamlined the permitting process in 2011.

Year	# Permits Approved
2012	550
2013	1108
2014	1396
2015	1689
2016	1458
2017 (as of March)	257
Grand Total	6458

Community Choice Energy

Accomplishments

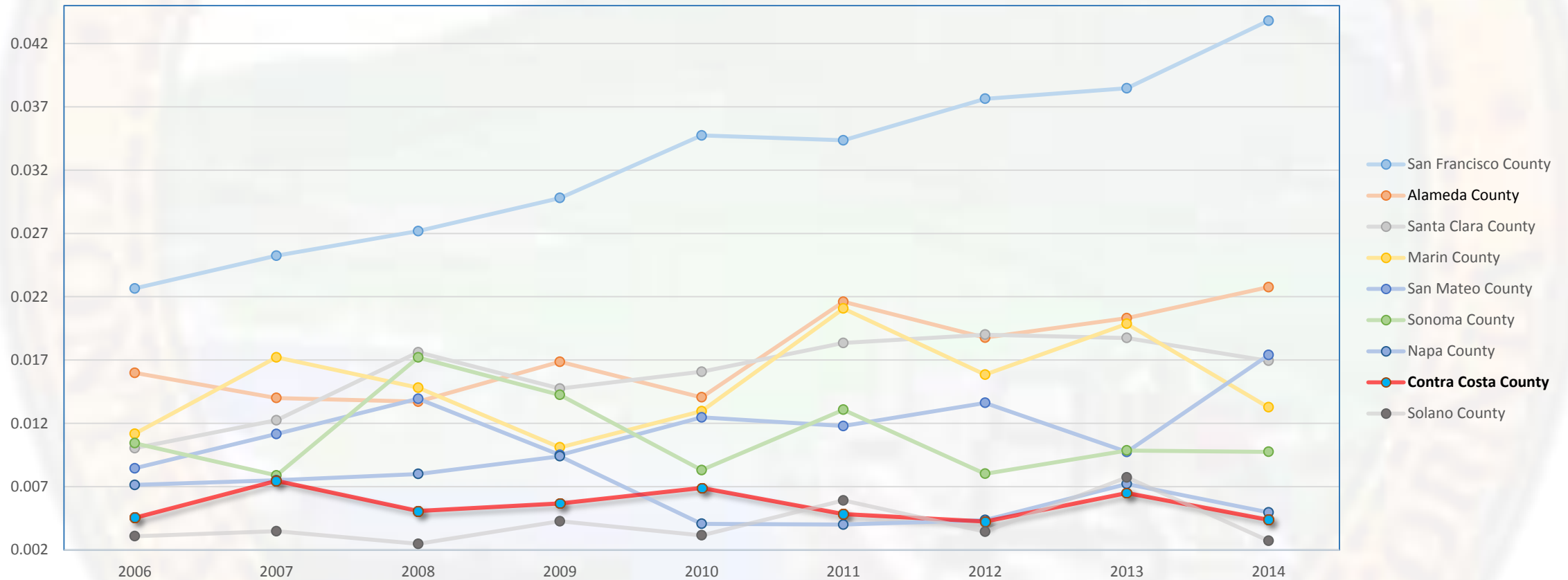
- Final Technical Study published March 13, 2017
- Board voted May 2 to join MCE
- Several cities have also voted to join MCE
- Outreach to community and cities is ongoing

Opportunities to do more

- When final CCE decisions are made by County and cities, staff can engage with the CCE on renewable energy opportunities in Contra Costa County.

ALTERNATIVE TRANSPORTATION: Nowhere To Go But Up

Bicycling in Bay Area Counties



Expanded Pedestrian, Bicycle, and Transit

Accomplishments

- DCD works with Contra Costa Transportation Authority and Public Works on growth management program, Priority Development area guideline development, and County Transportation Plan and Transportation Expenditure development
- County consistently applies for transportation funds for priority development areas in unincorporated County

Opportunities to do more

- Networks of bike trails and BART stations are foundation for much higher bicycle usage, with a strategic investment in facilities and support across the County.
- Pending release of SB 743 guidelines (vehicle miles traveled replacing level of service) will promote alternative modes.
- An improved walk/bike to school rate is possible with strategic investments. New State curriculum on bike and pedestrian safety, local surveys indicate that driver behavior/unsafe driving/speeding is a barrier.

Alternative Fuel Infrastructure

Accomplishments

- DCD and Public Works received grant to install 7 electric vehicle chargers; two were slated for 651 Pine and will be returned.
- County adopted new electric vehicle ordinance in 2015 that exceeds State requirements for electric vehicle charger readiness in residential and commercial facilities.

Opportunities to do more

- Electric Vehicle Master Plan for network of charging facilities across the County. Be well-positioned for:
 - BAAQMD grant programs.
 - PG&E awarded \$130 million to install electric vehicles across its service territory.
 - VW settlement for \$800 million investment in zero emission vehicles and infrastructure over 10 years.

Agricultural Land Use

Accomplishments

- The General Plan has been amended to allow for urban farming in North Richmond only.
- Voter-approved urban limit line protects agricultural lands and open space from urban development.

Opportunities to do more

- The General Plan update provides an opportunity to expand and refine policies encouraging urban agriculture and community gardens.

Fleet Vehicles and Equipment

Accomplishments

- Some waste haulers voluntarily use compressed natural gas

Opportunities to do more

- Investigate other County contracts that maintain fleets (i.e., street sweeping)
- Work with waste haulers to minimize vehicle miles travelled without compromising need to expand the composting of green waste.

Reducing Vehicle Miles Traveled

Accomplishments

- County is developing housing near BART stations in unincorporated areas, including advocating for an increase in density for Block C of Contra Costa Centre
- County is establishing priority development areas in communities with access to express bus routes
- ABAG is considering creating a Priority Economic Development designation; several areas of the Northern Waterfront and North Richmond would be ideal for such a designation.

Opportunities to do more

- State requirements to charge for parking at rail stations could encourage more bicycling
- Continue pursuing transportation funds for priority development areas

Waste Reduction

Accomplishments

- Amount of unincorporated area waste reported to have been disposed of in landfills in 2015 equates to a diversion rate of 69%.
- Ongoing public outreach.
- Mandatory annual reporting to State helps update and track waste management program.

Opportunities to do more

Public-private partnership formed by East County wastewater agency and waste management company to divert more organic waste from landfills. They are collectively pursuing cap and trade grant funding to plan and build two proposed projects that would increase organic waste diversion capacity at the Transfer Station that serves East County:

1. Develop processing capacity at the Transfer Station site to extract and pre-process organic component of solid waste stream so it can be sent via existing pipeline to the nearby Sanitary District's anaerobic digester that has excess operating capacity which will increase the amount of energy that the District produces.
2. Develop conversion facility at the Transfer Station site to generate energy from a combination of wastewater treatment biosolids generated at the nearby Sanitary District and wood waste, which is much tougher to divert from landfills now that there is no longer a wood recycling market.

Landfill Management

Accomplishments

- Ongoing verification of compliance with State methane control measures
- Two of the County's franchises were amended in 2015 and 2017 to require source-separated organics waste collected by haulers be composted and no longer used as cover.
- 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.

Opportunities to do more

- Level of GHG emissions reductions projected in the CAP associated with this measure may need to be cut in half based on recent documentation released by the Air Resources Board related to the State's Landfill Methane Rule.

[Projected reduction based on increasing methane capture rate from 75% to 80% rather than up to 85%.].

Conserve Water

Accomplishments

- Data from nine water purveyors within Contra Costa County indicates, on average, a 20% reduction as compared to potable water use in 2013. This is a direct consequence of the Governor's Executive Orders on Drought.
- Sustainable Groundwater Management Act.
 - On April 25, 2017, Board proceeded with creating a groundwater sustainability agency for eastern County.
- The County, through the Current Planning Section of DCD, is administering the State's Model Water Efficient Landscape Ordinance for new and existing construction projects. For development applications seeking building permits, Current Planning verifies new projects through a "Compliance Review" application and requires self-certification for "over the counter" permits.

Opportunities to do more

(including identifying staffing and other resources)

- Explore opportunities for the following:
 - Develop dual water system ordinance (see next slide)
 - Coordinate with water districts
 - Improve online resources for water conservation, including landscaping modifications

Alternative Water Supplies

Accomplishments

- The drought California has experienced, is experiencing, has heightened awareness of alternative water supplies. The County has benefited from the State's informational material found on their website and via email blasts.

Opportunities to do more

(including identifying staffing and other resources)

- Explore writing, implementing, and administering a Dual Water Systems Ordinance. To date the County has permitted less than ten of these systems.

The background of the slide features a large, faded seal of the County of San Diego. The seal is circular and contains a landscape with mountains, a river, and a building. The text "COUNTY OF SAN DIEGO" is visible around the perimeter of the seal.

Thank you!