Contra Costa County Sustainability Commission 2018 Climate Action Plan Progress Report

The Contra Costa County Sustainability Commission's purpose includes advising the Board of Supervisors and staff on successful implementation of the *Climate Action Plan (CAP)*, including suggestions on how that work can be performed more efficiently and effectively. The Commission is interested in reporting on progress in meeting the numeric targets in the 2015 *Climate Action Plan*. This report provides updates on progress in meeting the numeric targets. The attached spreadsheet includes detailed information on progress in meeting the action items identified in the *Climate Action Plan*.

There are several areas where the County has made significant progress in meeting the quantitative *Climate Action Plan* targets. A number of the measures do not have targets and are considered "supportive."

As the County updates the *CAP* in 2019, the Sustainability Commission encourages the County to identify strategies and measures that will better allow the County to demonstrate progress in meeting greenhouse gas (GHG) reduction goals. The Commission also encourages the County to look for approaches that solve for multiple measures, for example reducing Styrofoam and/or plastics and increasing composting, reducing vehicle miles traveled and increasing use of public transportation and alternative transportation such as bicycling or walking.

Energy Efficiency (Measures EE1, EE2, EE3)

GHG Emissions Reductions Target for All EE Measures	Expected by 2020 for All FF	
7200	7528	105%

	Measure	Percent of Completed Projects (Total to date through 2017)	Projected Percent of Completed Projects up to 2020
EE1	Provide opportunities for residential buildings to become more energy efficient.	22%	44%
EE2	Provide opportunities for nonresidential buildings to become more energy efficient.	4%	8%
EE3	Provide education and outreach highlighting the benefits of energy conservation.	589%	1178%

Cool Roofs and Shade Trees (Measure EE4)

The *CAP* calls for 1,790 existing homes and 9 businesses to complete cool roof retrofits by 2020. In 2017, staff reported steady increases of cool roofs on homes, but not at a rate to meet the target.

Residential Cool Roof installations

Year	# Cool Roofs Installed
2010	54
2011	46
2012	31
2013	10
2014	44
2015	73
2016	226
2017	335
Total	819

Commercial Cool Roof installations

Year	# Cool Roofs Installed
2014	2
2016	3
2017	2

The *CAP* calls for 500 new shade trees to be planted in the unincorporated County by 2020. The County typically processes 50-60 tree permits per year. To meet the goal of 500 tress by 2020, the number of trees planted annually would have to be closer to 100. The County issues permits for trees associated with projects that require County approval. It is possible that people are planting trees that the County does not track.

Rooftop Solar (Measure RE 1)

The CAP calls for 50 new homes and 2,500 existing homes to have solar arrays by 2020. The County has far exceeded this goal, issuing on average 1,500 permits for rooftop solar since 2014. Since the County implemented online applications in 2015, about 25% of applications have been issued using that channel. In 2020, the State will require all new residential buildings to install solar.

Summary of Roof Mount PV Permits Issued						
	# of					
Year	# of Roof Mount Solar	Epermits	Notes			
2008	315	NA				

Summary of Roof Mount PV Permits Issued					
Year	Year # of Roof Mount Solar Epermits		Notes		
2012	525	NA			
2014	1,343	NA			
2015	1,630	28	PVR ePermits implemented September 2015		
2016	1,436	333			
2017	1,630	358			
2018	1,337	385	Permit data from 1/1/2018-11/30/2018		
TOTAL	8,216	1,104			

Solar on County Buildings (Measure RE 2)

The County has installed nearly 5 MW of solar photovoltaics (PV) on County facilities to date. The performance target is 1 MW by 2020. The County is working to install solar PV at 11 more sites, many of which are also being considered for energy storage. This next wave of solar PV would result in a doubling of capacity and may include 3 MW of storage capacity. The new County Administration Building includes solar canopies on the parking lot, as well as 14 electric vehicle chargers. The new Emergency Operations Center will continue to take energy from the solar panels that were at the site previously and is being evaluated for the possibility of upgrade to Zero Net Energy with the addition of more solar capacity, as is the new Administration building.

MCE Enrollment (Measure RE 3)

Measure RE 3 is supportive and does not have numeric target. However, this is an area of significant progress. The *CAP* identifies community choice aggregation as a strategy for increasing the amount of renewable energy consumed in the County. The County and nine cities opted to join MCE in May 2017, joining the five cities that had previously joined MCE. Customer accounts transitioned to MCE in April 2018. As can be seen below, across the County nearly 89% of customers are choosing MCE. In the unincorporated County, the largest population, over 90% of customers are choosing MCE. The number of customers enrolling in MCE's Deep Green, 100 % renewable product, is significantly less.

MCE Enrollment as of November 6, 2018								
	Total				Deep Green	Deep Green		
Jurisdiction	Accounts	MCE Accounts	MCE Partic. %	OPT OUT %	Accounts	% of MCE		
Concord	51,292	47,068	91.76%	8.10%	338	0.72%		
Contra Costa Co.	69,110	62,367	90.24%	9.63%	691	1.11%		
Danville	17,686	15,942	90.14%	9.73%	185	1.16%		
El Cerrito	11,752	10,619	90.36%	9.45%	740	6.97%		
Lafayette	11,060	9,845	89.01%	10.86%	500	5.08%		
Martinez	16,673	15,257	91.51%	8.25%	163	1.07%		
Moraga	6,416	5,741	89.48%	10.36%	75	1.31%		

MCE Enrollment as of November 6, 2018								
	Total				Deep Green	Deep Green		
Jurisdiction	Accounts	MCE Accounts	MCE Partic. %	OPT OUT %	Accounts	% of MCE		
Oakley	13,907	11,394	81.93%	18.02%	43	0.38%		
Pinole	7,883	7,301	92.62%	7.10%	62	0.85%		
Pittsburg	24,717	22,900	92.65%	7.23%	77	0.34%		
Richmond	43,146	34,941	80.98%	18.91%	822	2.35%		
San Pablo	10,552	9,238	87.55%	12.31%	43	0.47%		
San Ramon	31,339	28,564	91.15%	8.73%	166	0.58%		
Walnut Creek	37,124	32,660	87.98%	11.87%	716	2.19%		
TOTAL	352,657	313,837	88.99%	11.01%	4621	1.47%		

Financing Opportunities (Measure RE 3)

The *CAP* calls for improving participation in programs that help finance investments in energy efficiency and renewable energy. Property Assessed Clean Energy (PACE) programs allow property owners to voluntarily join an assessment district and borrow money for the purpose of making energy or water efficiency improvements to their property. In 2018, the County authorized a third PACE provider for property owners in the unincorporated County.

Countywide Bike Trips Per Weekday (Measure LUT 1)

The *CAP* sets a target of 33,630 average countywide bike trips per day. This is not a metric that staff has been tracking due to cost of data collection and the inherent limitations of this data in a discontinuous municipality/geography such as the unincorporated area. Staff has provided data on the action items in the *CAP* for this measure, including infrastructure to support bicyclists and pedestrians, pervious pavement, and grants. Absent bike trip counts, the County tracks data on the development of infrastructure that supports bicycles and pedestrians. Due to the well-established, strong correlation between the installation of new, high quality infrastructure and increases in bike use, the quantity of new infrastructure is used as a proxy bike trips. In 2018, the County added 18,025 feet of bike lanes, 1,360 feet of path/sidewalk, 24 curb ramps, and 2,655 square feet of pervious pavement in the unincorporated County. Improvements to this metric would include tracking the quantity of superior bicycle facilities installed (Class I or Class IV) and advocating for the Metropolitan Transportation Commission or Contra Costa Transportation Authority to track mode split on a countywide basis.

Alternative Fuel Vehicles (Measure LUT 2)

The *CAP* sets various targets related to electric vehicles (EV), including annual vehicle miles traveled (VMT) per public charging station, VMT per EV, electricity use per EV, and households with an EV. These are not metrics that staff tracks currently. The County has an aggressive plan to increase the number of EVs across the County by focusing on charging infrastructure. The County is working with the Contra Costa Transportation Authority to develop an EV Readiness Blueprint that will identify locations for shared mobility charging hubs, best practices for local governments to follow in deploying EV charging

infrastructure, and workforce training in the EV sector. The County is also exploring policy changes to electrify the County's fleet.

Lawnmowers Traded In (Measure LUT 3)

To reduce emissions from off-road vehicles and equipment, the *CAP* sets a target for lawnmowers traded in. This is not a metric that staff tracks, nor is it clear how one would track that data.

Reduce Vehicle Miles Travelled (Measure LUT 4)

This measure establishes targets for BART and bus trips taken by residents of the unincorporated County, and decreases in vehicle miles travelled in high occupancy vehicle lanes. For reasons similar to bike trip data, this is not something staff has been tracking to date. Such an effort would require significant coordination with BART, bus operators, and other agencies to measure. The County is in regular communication with all these agencies through regional coordinating councils and is regularly working with them to increase funding and ridership.

Reduce Water Demand (Measure WE 1)

The *CAP* sets a goal of reducing water demand by 20% by 2020. The County does not have direct governing authority over water use, which falls to water purveyors. The State has set goals for reducing water use.

Reduce Waste (Measure W1)

In the area of reducing solid waste, we have reduced tons by 80,189 which means we have not yet achieved the 2020 Performance Target of 90,850.

Reduce Methane and Other Emissions (Measure W2)

Staff is finding that this goal is a difficult one for which to assess progress because there is no way to measure the goal of tons of reduced GHG emissions being captured, which is the metric specified for this measure. Making certain assumptions about the data and the measurement tools, staff reports the County likely achieved this goal for 2015, but did not achieve this goal for 2016 and 2017.

Streetlights and Traffic Signals (GO 1)

The *CAP* sets a goal of replacing 7,210 lightbulbs in County facilities. All of the streetlights in the County, both those owned by the County (1,800) and those owned by PG&E (5,800), have been converted to LED, as have all traffic signals in the unincorporated County. The County has a regular program to upgrade lighting in County buildings.