



County of Santa Cruz Board of Supervisors

Agenda Item Submittal

From: Planning: Sustainability and Special Projects
(831) 454-2580

Subject: Climate Action Strategy Annual Report

Meeting Date: April 28, 2020

Recommended Action(s):

Accept and file the Climate Action Strategy (CAS) Annual Report.

Executive Summary

Each year a CAS Annual Report is presented in April to the Board of Supervisors. Implementation of the Climate Action Strategy (CAS) involves a wide variety of activities by multiple County departments that are addressing the issues of greenhouse gas emissions reduction and preparation for the anticipated impacts of climate change. Periodic evaluation of greenhouse gas emissions has shown these efforts are resulting in measurable emissions reductions at major County government facilities and in the residential and commercial sectors of the community.

Background

On February 26, 2013 the Board of Supervisors adopted a resolution approving the CAS. The Board also directed the Planning Department to oversee implementation of the CAS and to report on implementation of the CAS in April of each year. This effort is led by the Sustainability and Special Projects division of the Planning Department.

The CAS lists a number of specific actions to implement each emissions reduction strategy, and a set of possible adaptation actions, or strategies, for each of the climate change vulnerabilities and impacts that have been recognized and evaluated. Previous annual reports highlight the activities of County departments to address greenhouse gas emissions reduction and prepare for the anticipated impacts of climate change. The following is a summary list of recent accomplishments and current initiatives by the County and partners to achieve the twin goals of emissions reduction and climate change adaptation.

- The General Services Department continues to implement projects at County facilities to improve energy efficiency of buildings, including the heating, ventilation and air conditioning systems. Solar power installations were completed in 2018 at seven County facilities.
- In 2018 the County of Santa Cruz received Beacon Awards from the Institute for Local Government recognize the County for sustainability best practices and greenhouse gas emissions reductions.
- The County was the leader in establishing Monterey Bay Community Power (MBCP) which launched in March 2018. In addition to providing carbon free power MBCP is implementing complementary energy programs to further reduce greenhouse gas

emission including an electric vehicle incentive program, solar for low-income housing, and community electrification strategies.

- The Climate Action Strategy identifies reducing vehicle miles traveled (VMT) as a key strategy to reduce greenhouse gas emissions in the transportation sector. Jurisdictions are required to utilize VMT when analyzing transportation impacts under CEQA by July 1, 2020. In advance of this deadline, the Planning Department is implementing this strategy by changing how CEQA project analysis of transportation impacts is conducted by using a VMT metric, based on a goal of reducing GHG emissions related to new projects by 15% below existing per capita VMT, which is consistent with the goal of the CAS and statewide goals for the transportation sector. The department is also leading a multi-jurisdictional effort to define jurisdiction-specific thresholds and develop a VMT tool that maps areas according to average VMT to help planners and developers in each jurisdiction approve projects and determine needed mitigation measures to offset impacts.
- The General Services Department annually participates in a grant program administered by the Monterey Bay Air Resources District to help with the purchase of electric vehicles for the County fleet.
- HSA and the Department of Public Works in partnership with Ecology Action recently completed the Complete Streets to Schools Plan using grant funds from Caltrans in the amount of \$366,504.
- Working with Ecology Action, DPW and HSA also received a Sustainable Transportation Planning grant of \$450,000 in 2019 from Caltrans to initiate an Active Transportation Plan, which will inventory non-motorized transportation facilities and identify gaps in the system where additional facilities are needed.
- The Planning Department is implementing the Sustainability Policy and Regulatory Update with preparation of an Environmental Impact Report. The project will address strategies for reducing land use and transportation related greenhouse gas emissions.
- The Department of Public Works continues to work on a variety of projects intended to reduce waste which produces emissions of landfill methane, a powerful greenhouse gas. The County maintains methane capture systems and burns captured methane at the Buena Vista landfill in engine generators to produce electricity. The County has been very successful implementing award-winning waste reduction programs and Zero Waste Plan.
- The Planning Department is in the process of updating the County's Local Hazard Mitigation Plan and General Plan Safety Element to address vulnerability to a range of climate change related hazards such as fire, flood, drought, and sea level rise.
- The Department of Public Works is making significant progress on the Pajaro River flood control improvement project advancing to the design phase of the project including the preparation of an Environmental Impact Report.
- Ongoing efforts to prevent and reduce fire hazards in the community include collaboration between fire agencies, the Resource Conservation District, local Fire Safe Councils and the Planning Department to complete inspections, advise property owners, and complete fuel reduction projects in high fire hazard areas.
- For both groundwater and water supply in general, the County, through the Water Resources Manager, is participating in efforts to address groundwater supply and conjunctive use among groundwater management agencies and water districts. The Mid-County Groundwater Agency adopted their Groundwater Sustainability Plan

(GSP) in 2019. The Santa Margarita Groundwater Agency is in the process of developing their GSP.

- Public Works is working on multiple fronts to improve storm water management including overall system planning, drainage improvement projects, and review of private development projects.
- Planning Department staff serves on a technical advisory committee that is part of a collaborative initiative led by the City of Santa Cruz to develop a vision for resilient coastal management along city's coast to address sea level rise and its associated hazards.

This summary demonstrates the County's commitment to a wide variety of actions to reduce energy use and emissions in the community and from county operations, and to prepare for the impacts of climate change. Many of the programs and projects included in the CAS were not conceived specifically to implement the CAS, they are the result of longstanding County policies addressing green purchasing, fuel efficiency, and energy conservation, including a Green IT policy, for the purpose of reducing reliance on fossil fuel and reducing emissions of greenhouse gases as well as County costs. These policies in some cases go all the way back to the late 1970s. However, they address various aspects of emissions reduction and climate change adaptation and are also reflected in the CAS.

Previous annual reports highlight the activities of County departments to address greenhouse gas emissions reduction and prepare for the anticipated impacts of climate change. In the past several years annual reports have included updated emissions inventories of greenhouse gas emissions. Those updates in 2015 and 2016 documented measurable emissions reductions at County facilities and throughout the community. The results show that overall the County has reduced emissions from major facilities by 18 percent in 2016 compared to the baseline year of 2005, and that overall community emissions have also decreased by 18 percent in 2015 compared to the baseline year of 2005.

The County Operational Plan includes the objective to achieve a 20 percent reduction in carbon emissions from County operations by June 2020 compared to 2015. Further analysis and projections by Planning Department staff indicate the County has already met and even surpassed this objective largely based on the implementation of Monterey Bay Community Power which has been providing carbon-free electricity since 2018. The ongoing efforts by General Services to identify and pursue opportunities for energy efficiency upgrades, battery storage, and renewable energy projects has also contributed to meeting this objective. More specific calculations of greenhouse gas reduction will occur in next year's CAS Annual Report.

Analysis

While our success in reducing current emissions from major County facilities is a critically important part of addressing climate change, the County must also prepare for rising seas and other consequences of climate change that are already locked-in as a result of the fossil fuel industry's production, promotion, and marketing of products they knew would cause those problems, as well as its decades of deception about climate change and its impacts. Thus the County and other agencies and community groups

are taking further steps to prepare for the impacts of climate change regarding fire and flood hazards, sea level rise, drought, public health and agriculture including holding fossil fuel companies accountable for the costs of those measures so that those expenses don't fall solely on taxpayers.

Through a resolution, adopted January 29, 2019, the County of Santa Cruz declared that an existential climate emergency threatens our cities, towns, region, state, nation, civilization, humanity and the natural world and endorsed a just, countywide emergency climate action mobilization effort to reverse global warming, to drastically reduce greenhouse gas emissions and safely draw down carbon from the atmosphere as quickly as possible.

Recognizing the urgent need and the work ahead, in July 2019 the Commission on the Environment recommended that the Board investigate establishing a Climate Action Manager position. The Commission envisioned this role as coordinating existing work by County departments to continue to reduce greenhouse gas emissions from County operations and in the community, and maintain the focus on adaptation initiatives within the Climate Action Strategy and be enabled to pursue grant funding to expand the County's capacity and resources to address this pressing issue. The Commission recognized the budget impacts of such a new position could be mitigated with grant funding and cost savings from energy projects. Two prominent projects that are already producing cost savings include the County solar project and Monterey Bay Community Power. The solar installations are saving the County hundreds of thousands of dollars per year in energy costs for a total estimated cost saving of over seventeen million dollars over the entire financing period. The value of the rebates the County receives from MBCP are estimated to be approximately forty thousand dollars per year. These are just two examples and there is certainly more opportunity for cost savings through energy efficiency, fuel efficiency, renewable energy production and storage. Regarding adaptation initiatives, again, it is estimated that for every dollar invested in climate resilience, six dollars in damages are avoided.

The Board took action in October 2019 directing the establishment of such a position. At the same time the Board adopted a goal for the County as an institution to be carbon-neutral by the year 2030. Recruitment for a new Climate Action Manager position in the Department of Public Works is in progress with the application period recently closing on March 27, 2020. The proposed timeline envisions the establishment of a list of eligible candidates by the end of April 2020.

The Climate Action Manager will be primarily responsible for leading and coordinating efforts aimed at reducing emissions and greenhouse gases and preparing the County for climate change adaptation. This position will implement the County's Climate Action Strategy which may include projects that reduce greenhouse gases or improve energy efficiency, address climate change adaptation due to sea level rise, coastal erosion, fire hazards, drought, or extreme weather events, and advance County management of groundwater, storm water and solid waste, active transportation, commute alternatives, environmentally friendly purchasing, and green building in accordance with the County's Sustainability General Plan and Strategic Plan goals.

Recent experience related to increased statewide wildfire risk provides just one example of the work ahead and highlights the need to increase resilience of our local energy systems for the impacts of climate change. In response to public safety power shut off (PSPS) events, in December 2019 the Commission on the Environment recommended that the Board of Supervisors direct staff to pursue opportunities to evaluate an integrated and resilient response to its energy needs. Microgrids can be designed to combine the use of solar or other renewable energy generation with battery storage to provide electricity to essential facilities during PSPS or other power interruptions. Microgrids can also be used to achieve energy cost savings by allowing the shifting of loads during peak demand and pricing periods. Funding and assistance for microgrids will be available in 2020 from several sources including Monterey Bay Community Power, California's Public Utilities Commission, and the California Energy Commission

Financial Impact

County cost savings from energy efficiency and renewable energy projects as described in the CAS Annual Report. The costs of future programs and staffing may be offset by energy savings and grant funding in the future.

Strategic Plan Element(s)

This item supports the Strategic Plan Element of Sustainable Environment. Implementation of the CAS promotes the following goals:

Local Conservation: Support and strengthen efforts for clean air and water, conservation, renewable energy, recycling and reuse.

Climate Change: Increase resilience to climate change impacts, including sea-level rise and changing weather patterns.

The twin strategies to achieve these goals are to advance policies and programs that reduce impacts from and increase community resiliency to climate hazards, and be prepared for and respond to natural disasters, including those resulting from climate change.

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Recommended by:

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