



SUSTAINABILITY COMMITTEE

December 9, 2019

9:00 A.M. - 10:30 A.M.

651 Pine Street, Room 101, Martinez

Supervisor John Gioia, Chair

Supervisor Federal D. Glover, Vice Chair

Agenda Items:

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

1. Introductions
2. 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 from the September 23, 2019, meeting of the Sustainability Committee. (Jody London, DCD)
4. RECEIVE Report on Enrolling County Facilities in MCE's Deep Green Program and MAKE RECOMMENDATION to Board of Supervisors re: same.
5. ACCEPT report on Employee Commute Survey and RECOMMEND ACCEPTANCE by Board of Supervisors.
6. RECEIVE REPORT on including an Environmental Justice seat on the County's Hazardous Materials Commission & MAKE RECOMMENDATION to Board of re Same. (Jody London, DCD)
7. RECEIVE REFERRAL from Board of Supervisors to deliberate on adoption of a Climate Emergency Resolution, as recommended by the Sustainability Commission.
8. RECEIVE REPORT on potential participation in California Electric Vehicle Infrastructure Project (CALeVIP) and RECOMMEND to the Board of Supervisors that the County participate in same.
9. RECEIVE REPORT on modifications to County Administrative Bulletins to reflect greater reliance on electric vehicles in the County fleet. (Joe Yee, Public Works)
10. RECEIVE REPORT on Building Electrification and PROVIDE DIRECTION re: same. (Jody London, DCD)
11. RECOMMEND SUPPORT for the federal Green Act. (Jody London, DCD)

12. RECEIVE report from Sustainability Commission Chair.
13. RECEIVE report from Sustainability Coordinator.
14. The next meeting is currently scheduled for January 27, 2019, 12:30 P.M. in Room 101, 651 Pine Street, Martinez, CA.
15. Adjourn

The Sustainability Committee will provide reasonable accommodations for persons with disabilities planning to attend Sustainability Committee 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 Sustainability Committee less than 96 hours prior to that meeting are available for public inspection at 651 Pine Street, 1st floor, during normal business hours.

Public comment may be submitted via electronic mail on agenda items at least one full work day prior to the published meeting time.

For Additional Information Contact:

Jody London, Sustainability Coordinator
Phone: (925) 674-7871
Jody.London@dcd.cccounty.us



Contra Costa County Board of Supervisors

Subcommittee Report

SUSTAINABILITY COMMITTEE

Meeting Date: 12/09/2019

Subject: APPROVE Record of Action from the September 23, 2019, meeting of the Sustainability Committee

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 made available at the Committee web page, <http://www.contracosta.ca.gov/7029/Sustainability-Committee>.

Recommendation(s)/Next Step(s):

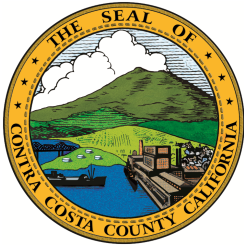
Staff recommends approval of the attached Record of Action for the September 23, 2019, meeting of the Sustainability Committee.

Fiscal Impact (if any):

N/A

Attachments

09-23-19 Mtg Minutes



SUSTAINABILITY COMMITTEE

RECORD OF ACTION FOR
September 23, 2019

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

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).
There was no public comment.
3. Staff recommends approval of the attached Record of Action for the August 1, 2019, meeting of the Sustainability Committee.
The Record of Action from the August 1 meeting was approved unanimously.
4. INTERVIEW applicants for the At-Large, Environmental Justice Seat #2 on the Contra Costa County Sustainability Commission.
The Committee interviewed three applicants for the At-Large, Environmental Justice seat #2: Sarah Foster, LaMar Harrison, and Renee Fernandez-Lipp.
5. RECEIVE UPDATE on options for bringing more electric vehicles into the County fleet and PROVIDE DIRECTION as appropriate

Joe Yee, Deputy Director, Public Works, reported that Public Works provided the County Administrator's Office (CAO) with an estimate on installing more electric vehicle (EV) chargers at County facilities. Public Works has identified 18 County building sites for installation of 92 charging stations, with an equipment hookup cost estimate of \$1.2 million. That does not include panel upgrades, trenching, and conduit. Public Works would like to place the EV chargers at facilities where the County has already installed or will be installing solar energy. Public Works is having conduit installed as solar is installed, to lessen the cost of future EV charger deployment. Public Works made an initial request of \$250,000 for planning; after consultation with the CAO's office, they are moving forward with direct installation where possible.

The Committee asked staff to make final the changes to the Administrative Bulletins on fleet to reflect greater reliance on EVs, and report back at the next meeting. The Committee also inquired about the status of County adoption of streamlined EV charger permitting pursuant AB 1236, and a Ride and Drive event with EVs for County employees.

6. RECEIVE PRESENTATION on status of Climate Action Plan update and PROVIDE DIRECTION as appropriate

Jody London, County Sustainability Coordinator, reviewed the draft goals for the Climate Action Plan that were recommended by the Sustainability Commission and are being presented in draft form at ongoing community meetings. The Committee directed staff to name equity and environmental justice as a goal for the Climate Action Plan. The Committee discussed how to reflect economic benefits for Contra Costa County in an economy that relies less of carbon-based fuels. Supervisor Glover observed these environmental and economic benefits could be part of the marketing strategy for the Northern Waterfront Economic Development Initiative.

7. CONSIDER next steps regarding implementation of the Adapting to Rising Tides studies

Jody London, County Sustainability Coordinator, provided an overview of the report prepared by students from the UC Berkeley Goldman School of Public Policy on recommendations for governance and implementation of the Adapting to Rising Tides studies. Supervisor Gioia noted the question of governance and implementation can be discussed at the Bay Conservation and Development Commission. The Committee expressed interest in considering together the study for West County, which was completed in 2016, and the study for East County, which is ongoing. The Committee directed staff to bring this issue back when the study for East County is complete.

Supervisor Gioia reported that in West County, the community is looking at the recommendation from the Resilient by Design project to develop a horizontal levee and increase wetlands in North Richmond. They are bringing together waterfront property owners, and will pursue Measure AA funds for a planning grant. The County also is pursuing Measure AA for Lower Walnut Creek.

8. RECEIVE report from Sustainability Commission Chair.

Howdy Goudey, Sustainability Commission Chair, reported that the August meeting of the Sustainability Commission included a lot of content for the Climate Action Plan. The Commission received an update on carbon-neutral building materials, and reviewed the proposed polystyrene ordinance. The Commission recommended an environmental justice assessment tool for use in the General Plan update. The Committee asked staff to bring to its next meeting a recommendation to include an environmental justice seat on the County's Hazardous Materials Commission.

9. RECEIVE REPORT from County Sustainability Coordinator.

Jody London, Sustainability Coordinator, provided an overview of the written report included with the agenda. Demian Hardman, Senior Energy Planner, elaborated on the announcement by PG&E that it will no longer fund the East Bay Energy Watch (EBEW) after June 30, 2020. Since the Energy Watch started in 2006, the County has received close to \$1 million for energy-related projects in the cities and unincorporated County, including municipal facilities. The program until the call for funding for the 2020-2021 fiscal year allowed local government staff to determine how to allocated funds. The EBEW proposal for next year was not selected to move forward. For the County, this means a loss of about \$40,000 in direct contract funds. Staff is hopeful this can be backfilled through the Bay Area Regional Energy Network. For cities, the loss of EBEW may have a bigger impact and will make it more difficult for them to support energy efficiency programs sponsored by

PG&E.

The Committee discussed opportunities to move homes to all-electric appliances. Hardman explained that the regulatory rules have recently changed to consider fuel switching. He noted that contractors are not familiar with these technologies, and that there can be issues with obtaining building permits. The Committee asked for a report on building electrification at its next meeting, including how this can benefit existing homeowners.

10. DISCUSS and RECOMMEND to the Board of Supervisors a candidate for the At-Large, Environmental Justice, Seat #2 on the Contra Costa County Sustainability Commission.

The Committee moved to appoint Sarah Foster to the At-Large, Environmental Justice, Seat #2. The Committee expressed its interest in finding ways to keep other applicants for that seat involved in County sustainability work.

11. The next meeting is currently scheduled for December 9, 2019, 9:00 A.M. in Room 101, 651 Pine Street, Martinez.
12. Adjourn

For Additional Information Contact:

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



Contra Costa County Board of Supervisors

Subcommittee Report

SUSTAINABILITY COMMITTEE

Meeting Date: 12/09/2019

Subject: RECEIVE Report on Enrolling County Facilities in MCE's Deep Green Program.

Submitted For: Brian M. Balbas, Public Works Director/Chief Engineer

Department: Public Works

Referral No.: N/A

Referral Name: N/A

Presenter: Warren Lai, Public Works
Department

Contact: Frank DiMassa
(925)957-2473

Referral History:

At its September 23, 2019 meeting, the Sustainability Committee requested an update on the opportunities and considerations of enrolling County facilities in the Marin Clean Energy (MCE) Deep Green program.

Referral Update:

Public Works staff have been working with MCE staff to better understand the costs and benefits of the Deep Green 100% renewable electricity product offering. The Deep Green product comes at a cost premium of \$0.01/kWh (one cent per kWh) relative to the default MCE Light Green. For reference, the County spends approximately \$7,500,000/year on electricity.

An MCE analysis of Contra Costa County (CCC) load indicates that approximately 40,000,000 kWh are purchased from MCE per year and that opting up to Deep Green would result in an increase in electric utility costs to the County of approximately \$400,000/year (see Attachment A). The estimated associated greenhouse gas (GHG) emissions reductions from moving to Deep Green electricity would equal approximately 2,000 metric tons of CO₂e/year. This reduction in emissions would help the County to meet its Climate Action Plan goals.

Given that the County has solar at a number of its major buildings and is planning to install solar at an additional ten sites in 2020, Public Works requested that MCE provide an additional analysis on opting up to Deep Green for the non-solar facilities.

As can be seen in Attachment B, also provided by MCE, non-solar facilities could potentially purchase approximately 29,000,000 kWh/year with a Deep Green premium of approximately \$290,000/year and a GHG reduction of 1,500 metric tons/year.

For the purpose of this update, Public Works staff considered these approaches as Option 1 (All Buildings Serviced), anticipated increase of \$400,000/year or a 5.3% increase in annual electricity

expenditures; and Option 2 (All Buildings minus Buildings with Solar or Going Solar), anticipated increase of \$290,000/year or a 3.9% increase in annual electricity expenditures.

Additional Benefits of Deep Green for Contra Costa County

In addition to providing energy that is 100% renewable, it is important to note that half of the premium paid by customers for Deep Green is allocated to MCE's Local Renewable Energy & Program Development Fund which funds local projects and programs for MCE customers. The Fund is currently supporting "MCEv", which includes MCE's program for installation of electric vehicle charging equipment and MCE's recently launched low-income EV rebate program. Based on the estimated cost to Contra Costa County for enrolling accounts in Deep Green, it is estimated that approximately \$200,000 would be contributed to this fund annually if Option 1 were selected, and approximately \$145,000 annually should the County pursue Option 2. For perspective, in calendar year 2019, the County took advantage of MCE rebates for EV charger infrastructure totaling \$85,000.

Participation in Deep Green by other Jurisdictions

Attachment C, Contra Cost County at a Glance, provides community level information on participation rate for the default Light Green product and for the Deep Green product. Within Contra Costa County, El Cerrito and Lafayette currently have the highest penetration rates for Deep Green of all communities at 7% and 5% respectively. Attachment D shows a map of municipalities that have opted up to Deep Green.

Recommendation(s)/Next Step(s):

RECEIVE Report on Enrolling County Facilities in MCE's Deep Green Program .

Fiscal Impact (if any):

None.

Attachments

Attachment A: Quote for All Accounts - Deep Green

Attachment B: Quote For All Accounts Except Those with Solar - Deep Green

Attachment C: Contra Costa Jurisdictions that Have Joined MCE

Attachment D: Map of MCE Jurisdictions that Have Opted Up to Deep Green

DEEP GREEN 100% CALIFORNIA RENEWABLE ENERGY COST & GREENHOUSE GAS (GHG) EMISSIONS REDUCTION QUOTE

PREPARED FOR: _____

BY: _____ **ON:** _____

The following quote for Deep Green (\$0.01/kWh) is based on **your usage for last 12 months of** _____ **kWh.**

GHG EMISSIONS REDUCTION ESTIMATE

Current Emissions with MCE Light Green 60% Renewable Energy	Emissions with MCE Deep Green 100% Renewable Energy	Emission Savings Opting Up from Light Green to Deep Green	Equivalent Number of Passenger Vehicles Taken Off the Road ⁺
	0		
(lbs of CO ₂ e/MWh)	(lbs of CO ₂ e/MWh)	(metric tons)	
calculation = (your usage kWh / 1000) * 114 ⁺⁺ lbs of CO ₂ e/MWh	calculation = (your usage kWh / 1000) * 0 lbs of CO ₂ e/MWh	calculation = current emissions lbs. of CO ₂ e/MWh / 2204.6 lbs/metric tons	calculation = projected emission savings metric tons / 4.6 passenger vehicles/metric ton

COST ESTIMATE

Estimated Annual Cost with Deep Green	Estimated Monthly Cost with Deep Green
\$	\$
calculation = your usage kWh * \$0.01	calculation = your estimated annual cost / 12 months

DEEP GREEN BENEFITS

MCE's 100% renewable electricity is Green-e Energy certified, California bundled electricity made up of 50% solar and 50% wind. **Report zero Scope 2 Emissions** as of your next energy bill. **Help local communities** achieve their Climate Action Plans.



Environmental Certifications

- » Receive up to 6 credits for U.S. Green Building Council LEED certification for Green Power purchases
- » Get credits towards California Green Business, and Napa Green certifications



Community Investment

- » Half of the \$0.01/kWh Deep Green premium is invested in MCE's Local Renewable Energy & Program Development Fund,⁺⁺⁺ supporting projects like the MCE Solar One, a 10.5 MW solar array on a brownfield site in Richmond, CA



Cost Effectiveness

- » No contract or term requirement
- » No charge to the demand (kW) side of the bill
- » Only pay for what you use and pay less when energy efficiency updates are made and self-generation is installed



Marketing

- » Opportunity to leverage MCE's marketing channels by becoming a Deep Green Champion

⁺ Based on EPA's Greenhouse Gas Emissions from a Typical Passenger Vehicle epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle

⁺⁺ MCE Light Green emissions factor is 114 lbs. CO₂e/MWh and Deep Green emissions factor is 0 lbs. CO₂e/MWh, based on an independently developed methodology.

Learn more at mceCleanEnergy.org/wp-content/uploads/2018/07/8.2.18-Technical-Committee-Packet.pdf

⁺⁺⁺ Green-e Energy certifies the Deep Green product and does not certify the administration of the fund.

Thank you for working with MCE to achieve your energy and sustainability goals!

DEEP GREEN 100% CALIFORNIA RENEWABLE ENERGY COST & GREENHOUSE GAS (GHG) EMISSIONS REDUCTION QUOTE

PREPARED FOR: _____

BY: _____ **ON:** _____

The following quote for Deep Green (\$0.01/kWh) is based on **your usage for last 12 months of** _____ **kWh.**

GHG EMISSIONS REDUCTION ESTIMATE

Current Emissions with MCE Light Green 60% Renewable Energy	Emissions with MCE Deep Green 100% Renewable Energy	Emission Savings Opting Up from Light Green to Deep Green	Equivalent Number of Passenger Vehicles Taken Off the Road ⁺
	0		
(lbs of CO ₂ e/MWh)	(lbs of CO ₂ e/MWh)	(metric tons)	
calculation = (your usage kWh / 1000) * 114 ⁺⁺ lbs of CO ₂ e/MWh	calculation = (your usage kWh / 1000) * 0 lbs of CO ₂ e/MWh	calculation = current emissions lbs. of CO ₂ e/MWh / 2204.6 lbs/metric tons	calculation = projected emission savings metric tons / 4.6 passenger vehicles/metric ton

COST ESTIMATE

Estimated Annual Cost with Deep Green	Estimated Monthly Cost with Deep Green
\$	\$
calculation = your usage kWh * \$0.01	calculation = your estimated annual cost / 12 months

DEEP GREEN BENEFITS

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⁺ Based on EPA's Greenhouse Gas Emissions from a Typical Passenger Vehicle epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle

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Learn more at mceCleanEnergy.org/wp-content/uploads/2018/07/8.2.18-Technical-Committee-Packet.pdf

⁺⁺⁺ Green-e Energy certifies the Deep Green product and does not certify the administration of the fund.

Thank you for working with MCE to achieve your energy and sustainability goals!



106,020

Metric Tons (MT)
of CO₂ Reduced



314,000

Customers
Served



88.79%

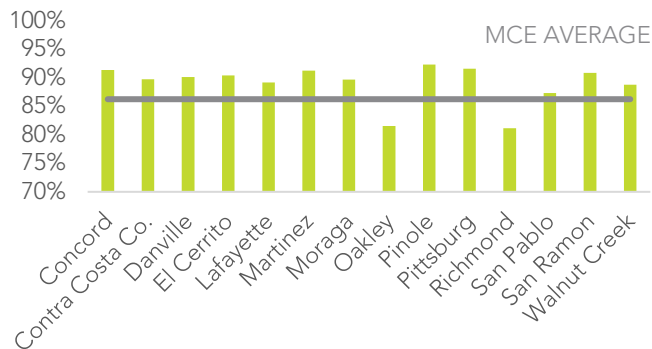
Accounts
Enrolled



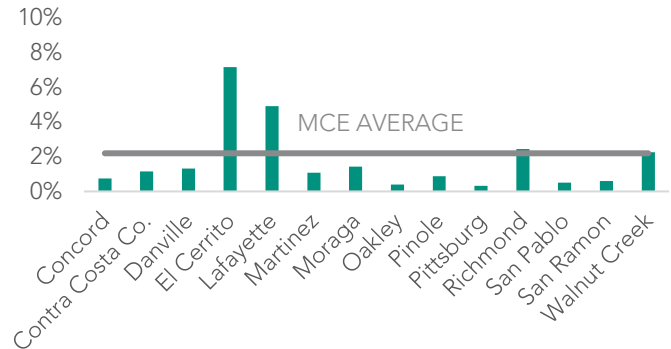
1.5%

Deep Green
Enrollment

MCE Electric Account Participation Rate by Community



MCE Deep Green Account Participation Rate by Community



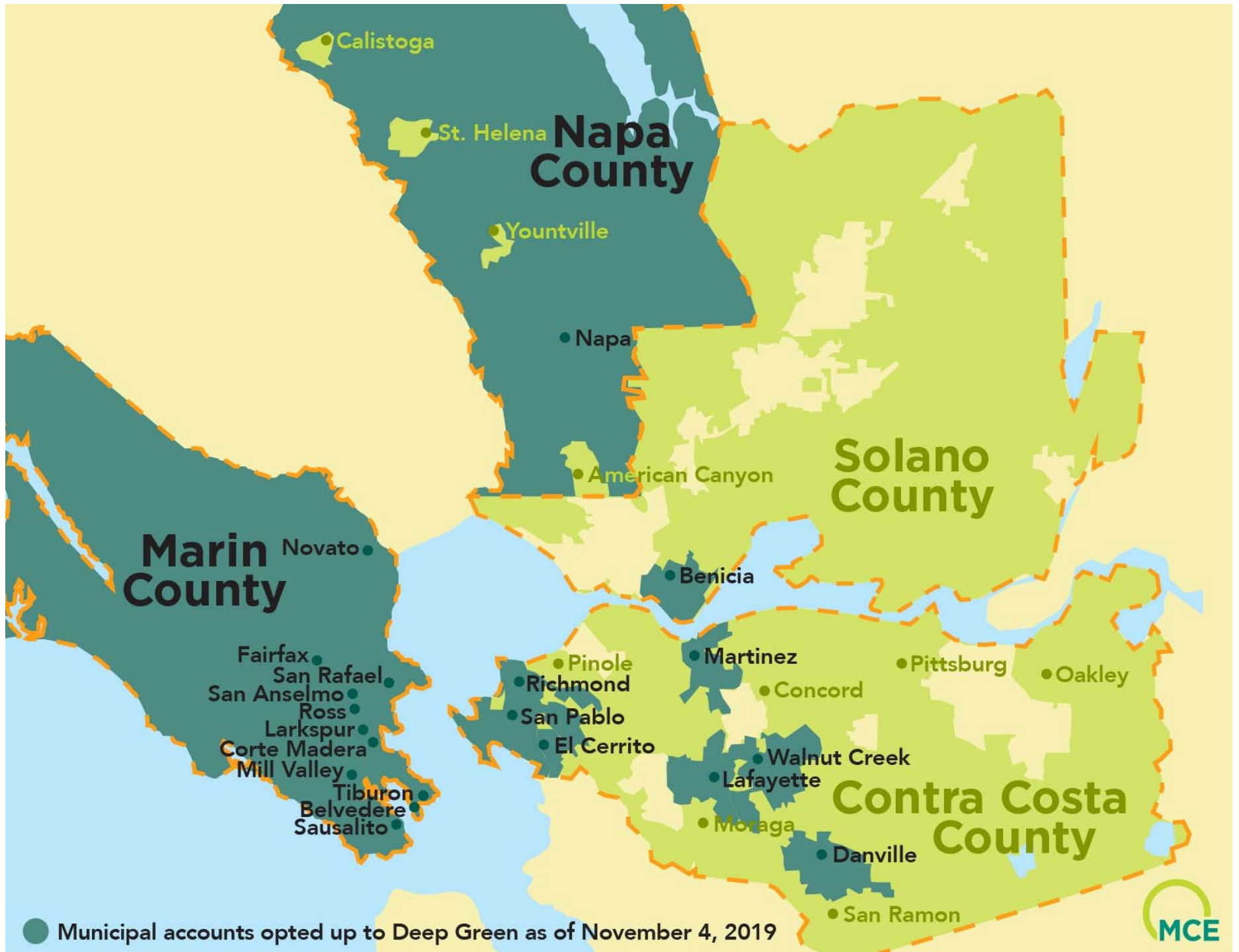
Community	Joined MCE	MT CO ₂ Reduced ¹	Participation Rate	Deep Green Rate	Deep Green ²
Concord	2018	2,474	91.35%	0.74%	N/A
Contra Costa	2018	3,554	89.71%	1.16%	N/A
Danville	2018	846	90.13%	1.32%	N/A
El Cerrito	2015	4,605	90.39%	7.17%	2017
Lafayette	2016	4,412	89.17%	4.92%	2017
Martinez	2018	730	91.20%	1.08%	N/A
Moraga	2018	230	89.63%	1.43%	N/A
Oakley	2018	560	81.55%	0.39%	N/A
Pinole	2018	307	92.28%	0.88%	N/A
Pittsburg	2018	2,032	91.58%	0.33%	N/A
Richmond	2013	64,504	81.12%	2.44%	2017
San Pablo	2015	4,536	87.33%	0.51%	2016
San Ramon	2018	1,458	90.83%	0.60%	N/A
Walnut Creek	2016	15,774	88.77%	2.26%	2018

Contra Costa County Future Enrollments

- City of Pleasant Hill – enrolling in Spring of 2021
- Antioch, Brentwood, Clayton, Hercules and Orinda are not considering MCE at this time

¹ Metric Ton reductions are calculated based on estimated retail electricity sales by community from 2010-2018 as compared to PG&E electric generation services. These figures should be considered only as illustrative estimates.

² These dates correspond to the date when municipal accounts in the jurisdiction were opted up. N/A indicates communities where either a customer's electric account status cannot be publicly disclosed, or the municipal accounts have not been opted into Deep Green.





Contra Costa County Board of Supervisors

Subcommittee Report

SUSTAINABILITY COMMITTEE

Meeting Date: 12/09/2019

Subject: ACCEPT report on Employee Commute Survey and RECOMMEND
ACCEPTANCE by Board of Supervisors.

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:

The County is engaged in updates of its General Plan and Climate Action Plan (CAP). The CAP Update includes County Operations. A primary input to greenhouse gas emissions from County Operations is employee commutes, which comprise nearly 45 percent of all emissions from County operations.

Referral Update:

As part of the CAP Update, staff worked with 511 Contra Costa to conduct a survey of County employees regarding how they travel to and from work. This survey was conducted in July and August 2019. The survey found that most employees drive alone and are spending 40-45 minutes on average commuting each day. Two-thirds of County employees would consider alternatives for their work commute, particularly telecommuting and carpools. Primary factors that inform current commute choices are travel time, cost, and flexibility. While a small percentage of County employees taking the survey drive electric vehicles currently, over half are considering purchasing an electric vehicle, and 75 percent would like the County to install electric vehicle chargers at County facilities. The survey report is attached.

The survey finds that County employees, although supportive of adopting alternative commute modes, are not committing to these options because they are not as convenient as driving alone to and from work. In the comments portion of the survey, many respondents indicated that they would be interested in telecommuting options and carpool options. Such programs would be effective ways for the County to reduce GHG emissions from employee commute trips. The report suggests that the County may want to explore options for telecommuting and workplace electric vehicle charging, as well as provide more information at the department level on commute alternative modes and incentives. The County policy on telecommuting was last updated in 1993. The report suggests the County may wish to revisit this policy in light of the survey results and current technological options.

The report also identifies areas for future research. The report suggests the County could further

examine the data pertaining to electric vehicles, including perceived costs, range anxiety, adequate charging infrastructure, and other factors. Next steps may also include a cost-benefit analysis to compare the costs of electric vehicles or alternative commute modes to the drive-alone trips currently made by the majority of employees. This information could be used to help educate employees on the long-term cost and benefits of EV ownership or alternative commute modes.

The report also suggests the County could research opportunities for shuttles and other options that would facilitate employees using public transit. This research should include collaboration with other large employers in Martinez, such as Kaiser Permanente and the U.S. Veterans Administration Medical Center. Additional surveys, specific to the Martinez sites where the majority of County employees work, may be needed.

Recommendation(s)/Next Step(s):

ACCEPT report on Employee Commute Survey and RECOMMEND ACCEPTANCE by Board of Supervisors.

Fiscal Impact (if any):

None.

Attachments

2019 Employee Commute Survey

Contra Costa County Employee Commute Survey

REPORT
December 2019



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INTRODUCTION AND SUMMARY

INTRODUCTION

This report summarizes a survey conducted in July and August 2019 of Contra Costa County (County) employees regarding how they travel to and from work. The survey found that most employees drive alone and are spending 40-45 minutes on average commuting each day. Two-thirds of County employees would consider alternatives for their work commute, particularly telecommuting and carpools. Primary factors that inform current commute choices are travel time, cost, and flexibility. While a small percentage of County employees taking the survey drive electric vehicles currently, more than half are considering purchasing an electric vehicle, and 75 percent would like to the County to install electric vehicle chargers at County facilities.

In 2015, Contra Costa County adopted a Climate Action Plan (CAP) to set goals and identify solutions to reduce emissions of Greenhouse Gases (GHGs) and other harmful pollutants. The County's CAP supports then-current California legislation related to climate change, including AB 32 and SB 375, which directed state and local agencies to reduce GHG emissions.¹ The CAP supports a balanced transportation system including bicycle, pedestrian, transit, and carpooling facilities, transit, and parking demand management. This balance ensures that harmful environmental effects from the transportation sector can be addressed, and effective policies put in place.

As one of the largest employers in the county, it is imperative that County government understands transportation trends and the preferences of its employees, in order to adopt measures that will best support the use of alternative commute modes, including zero-emission vehicles.

The findings presented in this report were derived from a survey of Contra Costa County employees and was commissioned by the County. The questionnaire was designed by the County's Sustainability Office with input from 511 Contra Costa. The survey was administered by the County. 511 Contra Costa tabulated the data and prepared this report with further analyses and modifications by the County.

SUMMARY

The following conclusions were based on the analysis of 727 completed surveys.

Popular Commute Type by Mode

The most popular commute mode is driving alone to work. Of the 727 employees responding to the survey, 93 percent of respondents indicated that they drive alone to work. On average, employees live 18 miles from their place of employment.

Preference for Alternative Commute Options

More than 67 percent of respondents indicated that they would consider an alternative mode of commute and 73 percent cited that travel time is the greatest barrier to choosing an alternative mode of commuting. Many respondents shared that their alternative commute mode preferences would

¹ The County is in the process of updating its Climate Action Plan, concurrent with an update to its General Plan and Zoning Code. The updated CAP is expected to be adopted by the end of 2020.

include carpooling and telecommuting/ working from home. The survey included a comments section, where many of the respondents indicated that they would prefer telecommuting when possible.

Preference for Electric Vehicle Adoption

Only 4 percent of respondents currently drive electric vehicles. Of the respondents that answered the question about whether they would consider buying an electric vehicle, 57 percent of respondents answered positively. Of those respondents, more than 61 percent shared that their greatest barrier to purchasing an electric vehicle is the cost of the vehicle.

Findings, Additional Research and Next Steps

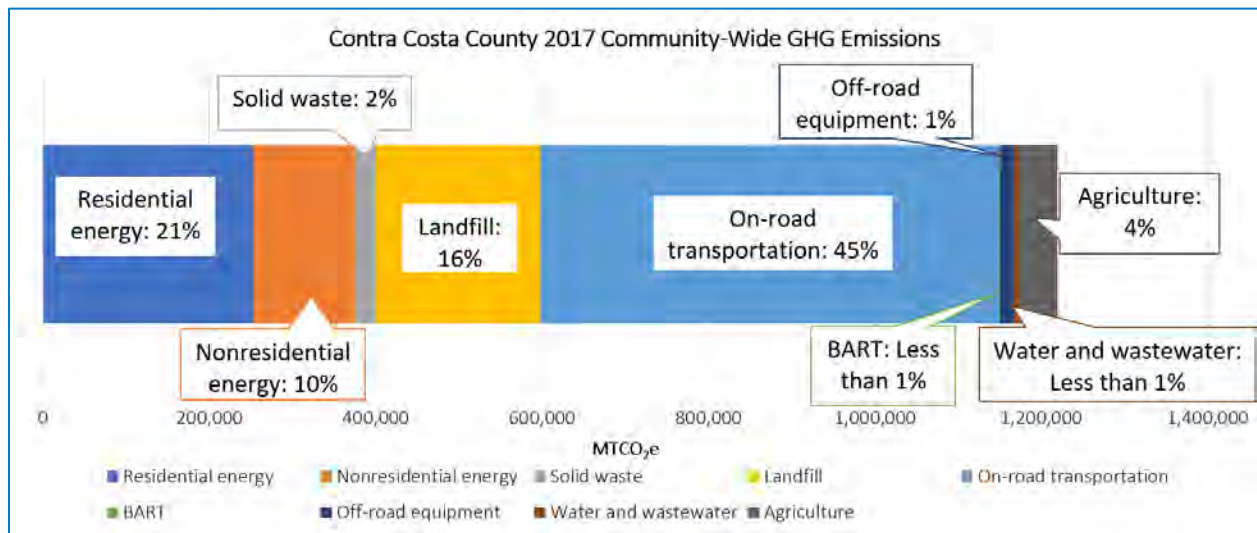
Capturing the zip codes for the trip origins and worksite addresses of employees in future surveys would provide further insight on the context for commute options, incentives, demand for electric vehicle charging, bicycle parking infrastructure, and transit stops near worksites.

The County could further examine the data pertaining to electric vehicles, including perceived costs, range anxiety, adequate charging infrastructure, and other factors. It may be beneficial to coordinate events for County employees to learn and share additional information on electric vehicle ownership. One such event can be a ride and drive event that brings people and electric vehicles together in an experience area. Additionally, more information can be shared with the public regarding the cost and cost savings of electric vehicles along with first-hand experience to dispel any misgivings about electrical vehicle ownership.

Based on the survey results and respondent comments, additional focus on County sites in Martinez, where the majority of County employees work, is warranted. Follow-up can focus on telecommuting for worksite or department-specific County employees, relocating employees to office sites closer to their homes and coordinating commute services with other large Martinez employers such as Kaiser Permanente and the U.S. Veterans Administration Medical Center.

WHY COMMUTE CHOICES MATTER FOR CLIMATE GOALS

In Contra Costa County, as in much of California, the transportation sector comprises 45 percent of community-wide greenhouse gas emissions. This is true for County employees, as well. Reducing travel in single-occupant vehicles that run on fossil fuels is important to achieving the County's climate goals.



PURPOSE OF ANALYSIS AND STUDY APPROACH

PURPOSE OF STUDY

To successfully fulfill the goals set in the Contra Costa County Climate Action Plan, and as one of the largest employer in the county, it is imperative for the County to understand how employee commutes contribute to GHG emissions and what barriers employees have cited that prevent them from using commute alternatives. In order to identify opportunities for encouraging more environmentally-friendly means of travel the County must understand employee travel preferences and have current information regarding the travel behaviors of its employees. By profiling employees' commute characteristics (distance, time, mode, alternative commute type etc.) this report will allow the County to plan for necessary infrastructure and incentives to encourage the use of alternative commute modes.

This survey gauges the need for electric charging infrastructure, and attitudes regarding the use of alternative commute modes to support the shift to zero emission-based transportation.

APPROACH

The County employs 9,478 people who report to various worksites located throughout the county. The electronic survey administered through Google Forms was distributed via email to every department on July 22, 2019 and closed on August 2, 2019. The survey instrument contained a total of 19 questions including the opportunity to provide comments. Additionally, participants who shared their email address were included in a prize drawing to win one of ten (10) \$20 BART tickets, provided by 511 Contra Costa.

COUNTY EMPLOYEE COMMUTER SURVEY GOALS AND OBJECTIVE

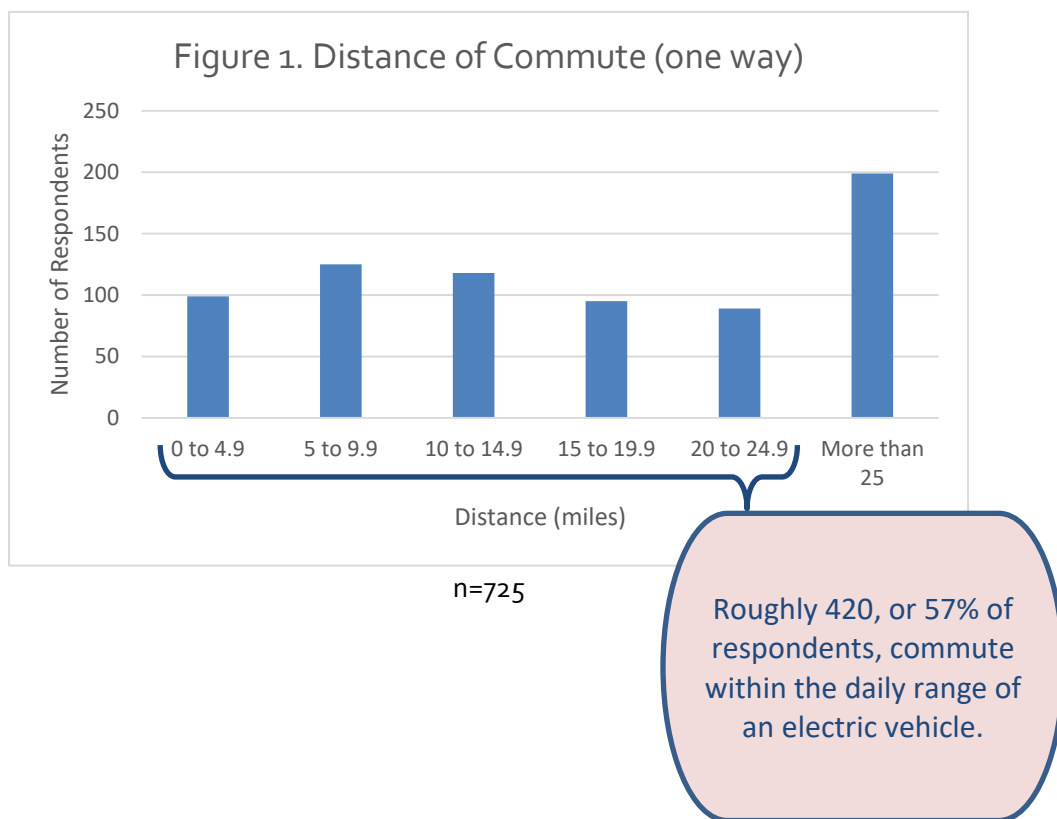
The County issued the survey mindful of the goals being considered for the ongoing update to the Contra Costa County Climate Action Plan. The survey was conducted to evaluate the current commute modes of County employees and to understand the barriers to adoption of alternative modes of transportation and electric vehicles.

FINDINGS

The survey was completed by 727 employees, representing a response rate of 7 percent. Some survey questions allowed multiple answers, and some attitudinal questions were optional.

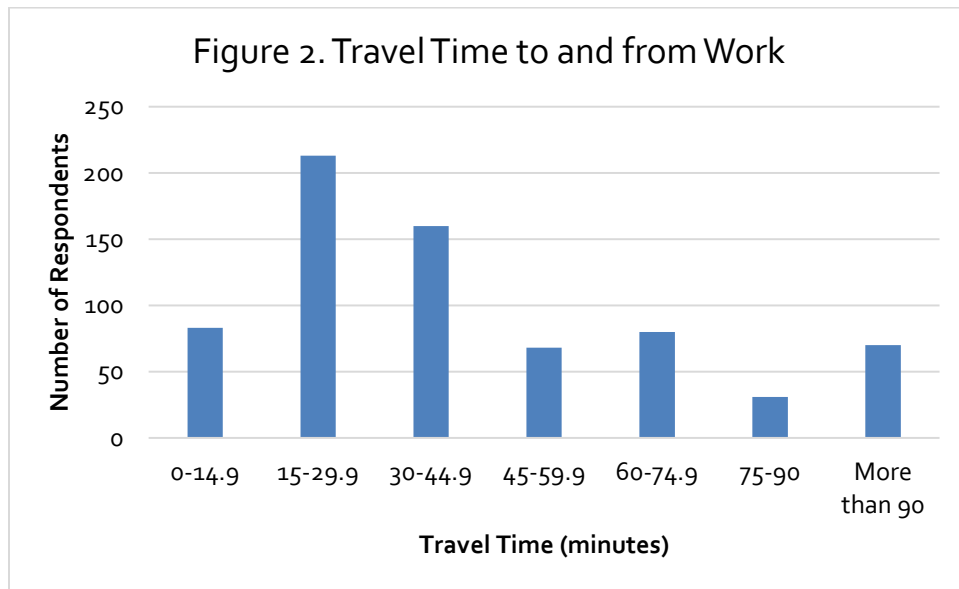
On average, what is the distance of your commute in miles (one way)?

Average commute distance: 18.4 miles



On average, how long is your travel time to get to and from work?

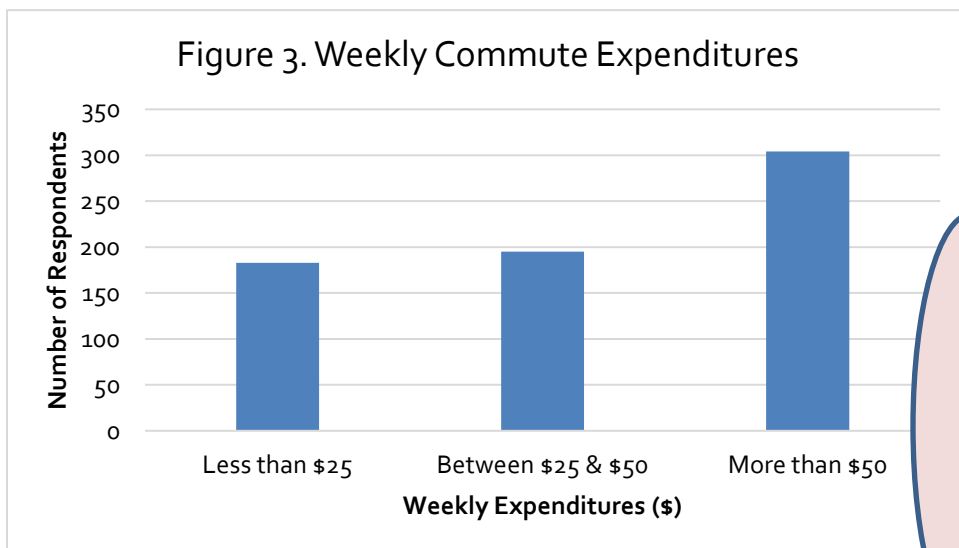
Average travel time to and from work: 40.45 minutes



n=705

On average, how much money do you spend on your commute weekly (including tolls, ferry passes, ride hailing apps, gas, public transit, bike costs, etc.)?

Average weekly commute costs: \$52.66



n=682

Cost of electric vehicle charging is roughly .049 per mile, or \$9.06 per week, based on the average 37-mile round trip.*

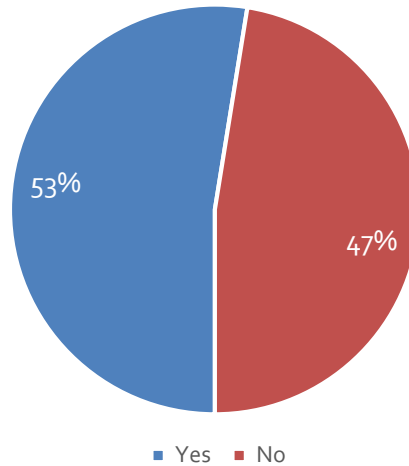
* Based on 2018 Nissan Leaf. 240V charger, costs are \$7.36 for a full 150-mile charge. This was arrived at by 40kWh battery size x electricity costs of .184 per kWh. $\$7.36 / 150 \text{ mile charge} = .049 \text{ per mile} \times 37\text{-mile daily round trip} \times 5 \text{ days} = \9.06 .

Do you have an alternate work schedule?

Yes: 53%

No: 47%

Figure 4. Alternate Work Schedule



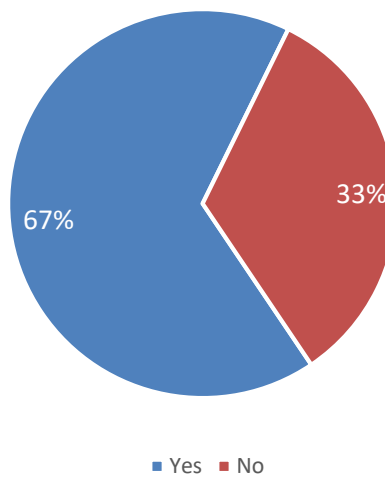
n=726

If you drive alone, would you consider an alternate commuting method where feasible?

Yes: 67%

No: 33%

Figure 5. Consideration of Commute Alternative

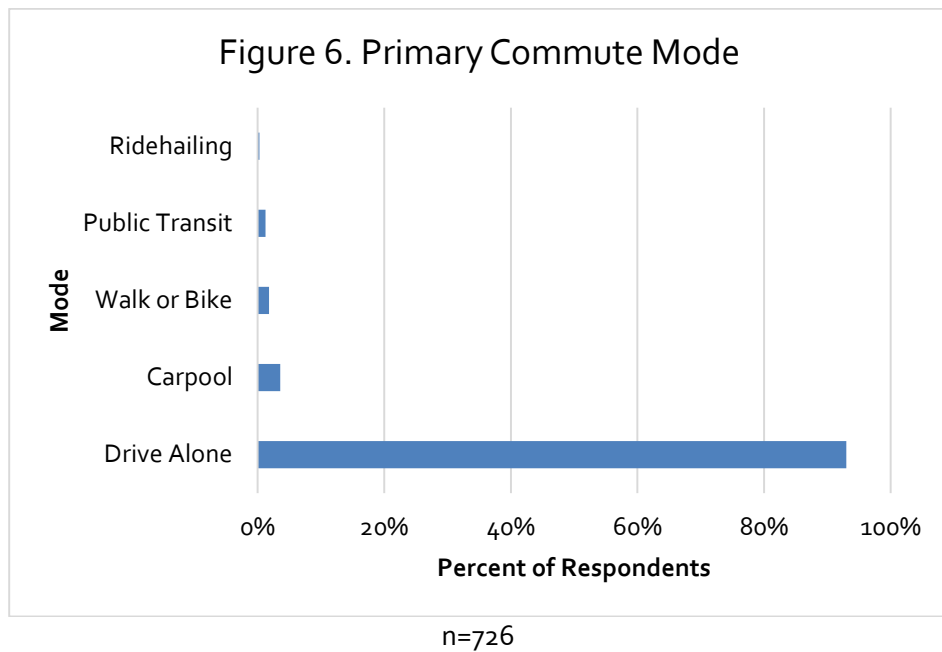


n=697

What is your primary mode of transportation?

Drive Alone	93%
Carpool	4%
Walk or Bike	2%
Public Transit (Bus, BART, Amtrak)	1%
Ridehailing	0.3%

Figure 6. Primary Commute Mode



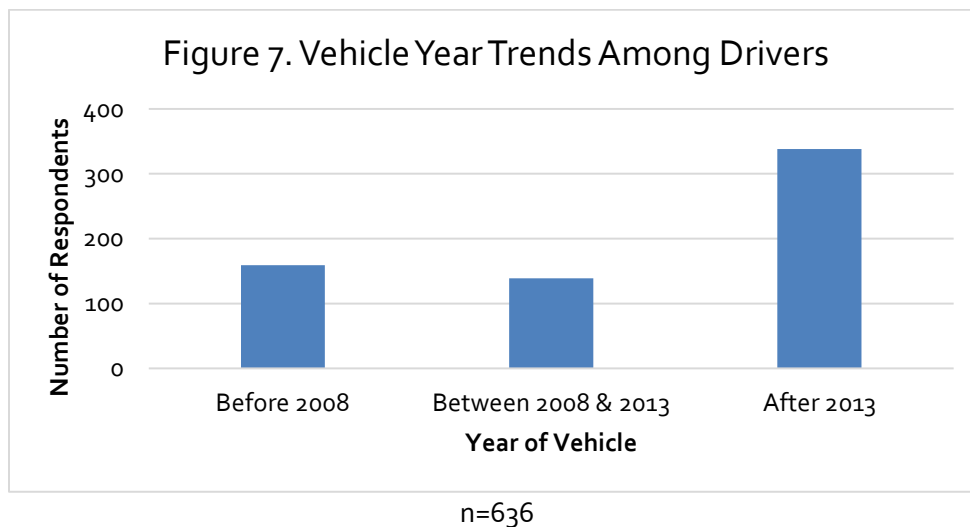
If you drive alone, what is the model year of your car?

Before 2008: 25%

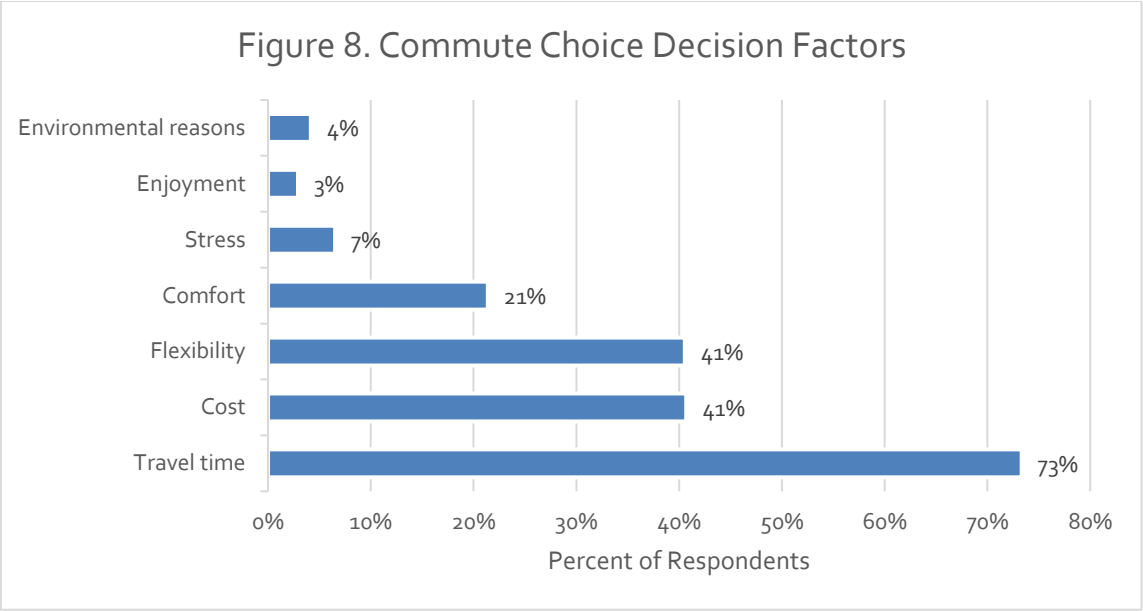
Between 2008 and 2013: 22%

After 2013: 53%

Figure 7. Vehicle Year Trends Among Drivers

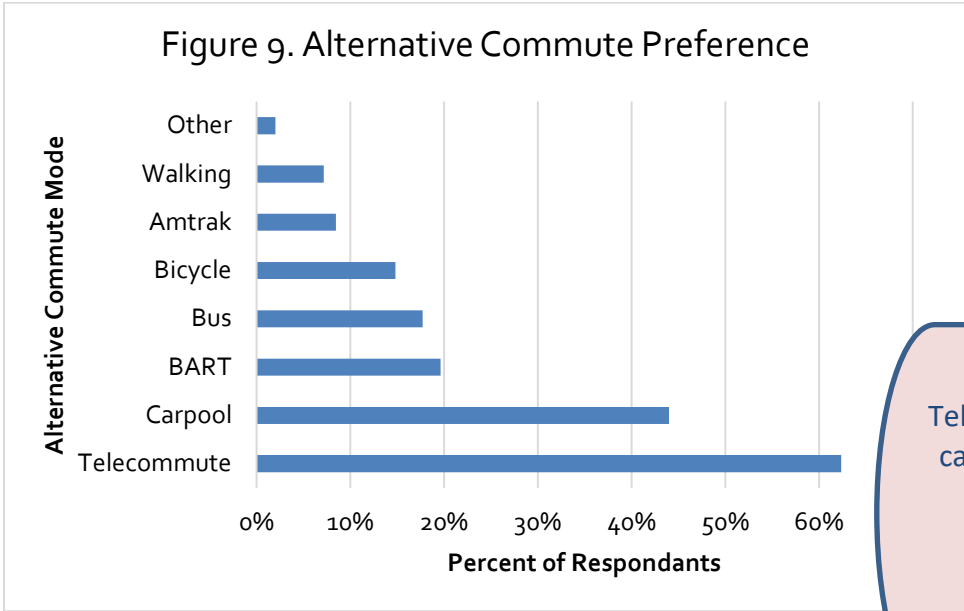


What informs your commute choice decision?	
Travel time	73%
Cost	41%
Flexibility	41%
Comfort	21%
Stress	7%
Enjoyment	3%
Environmental reasons	4%



n=720; multiple selections allowed by respondents

What forms of alternative commuting would you consider?	
Telecommute	62%
Carpool	44%
BART	20%
Bus	18%
Bicycle	15%
Amtrak	8%
Walking	7%
Other	2%



n=627; multiple selections allowed by respondents

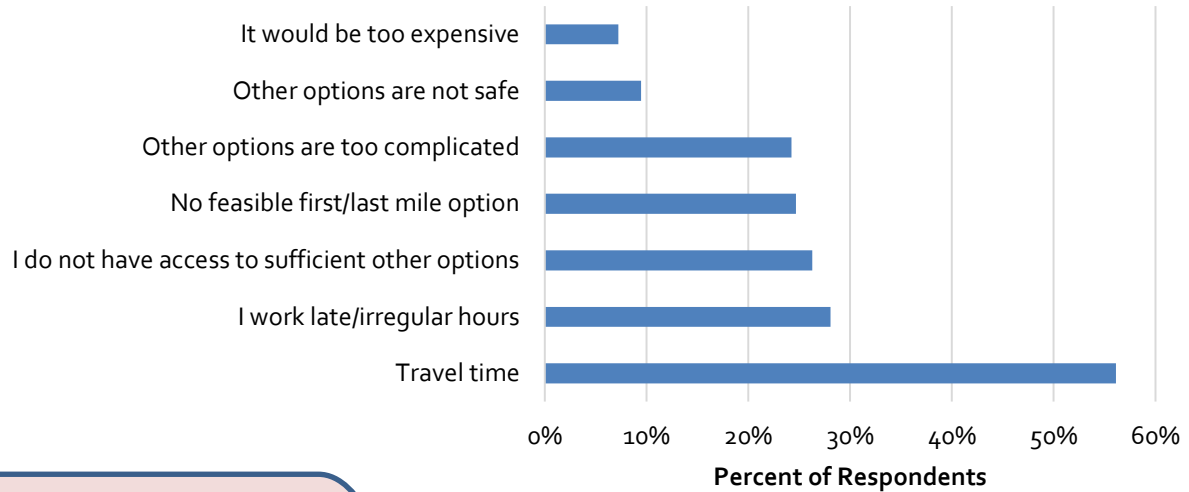
Telecommuting and carpooling are the most common commute preferences to driving alone.

“The Board approved telecommuting for employees as an alternative to driving into the office, especially for bad commutes like Highway 4. So, why doesn’t management support this initiative if the Board already approved it? ... I’m not sure why we can’t get buy in at the management level.”

What are your obstacles to using alternative transportation modes?

Travel time	56%
I work late/irregular hours	28%
I do not have access to sufficient other options	26%
No feasible first/last mile option	25%
Other options are too complicated	24%
Other options are not safe	9%
It would be too expensive	7%

Figure 10. Obstacles to Alternate Modes of Transportation



n=677; multiple selections allowed by respondents

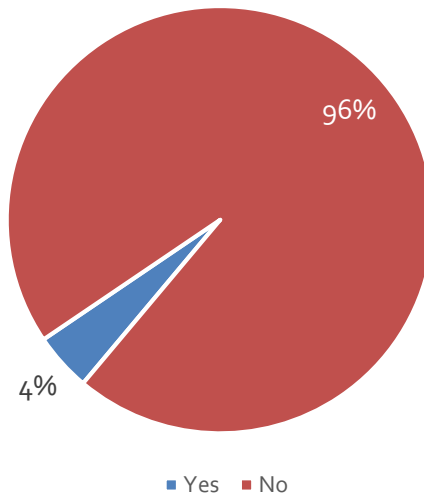
"While the bus may appear to be a viable option, the length of time it takes to get to my office...makes the bus, for me, an impossible solution."

Do you drive an electric vehicle?

Yes: 4%

No: 96%

Figure 11. Electric Vehicle Use



n=725

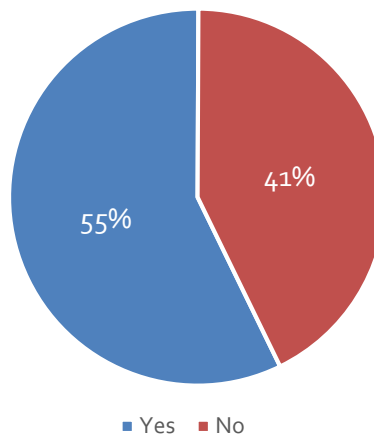
"I think many more people would drive electric vehicles if work sites everywhere had sufficient charging stations."

Would you consider purchasing an electric vehicle?

Yes: 55%

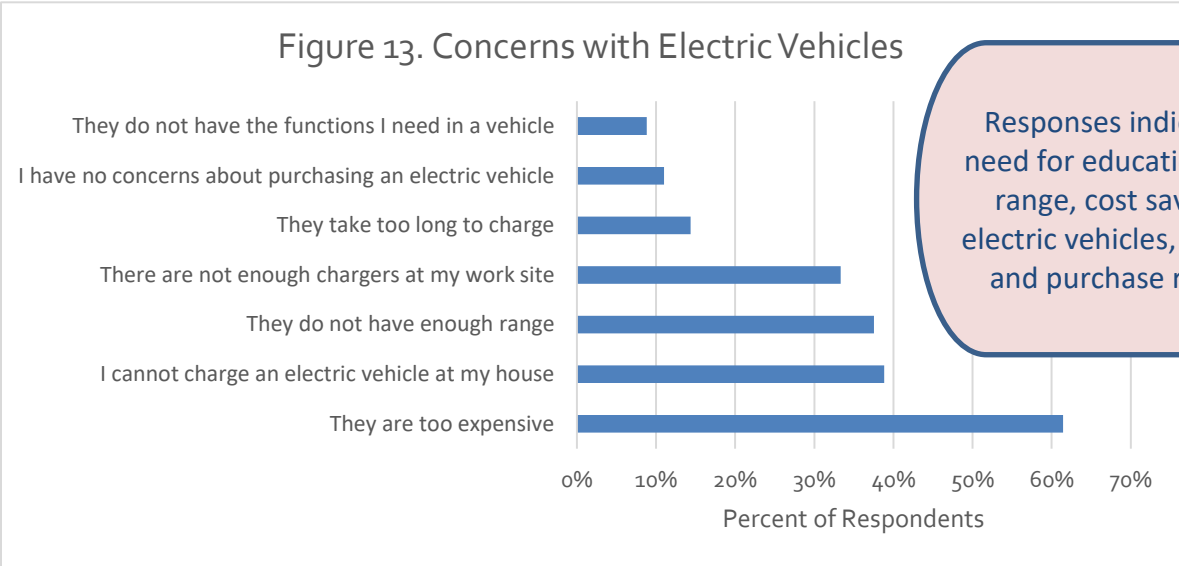
No: 41%

Figure 12. Considering Purchasing an Electric Vehicle



n=695

What concerns do you have about purchasing an electric vehicle?	
They are too expensive	61%
I cannot charge an electric vehicle at my house	39%
They do not have enough range	38%
There are not enough chargers at my work site	33%
They take too long to charge	14%
I have no concerns about purchasing an electric vehicle	11%
They do not have the functions I need in a vehicle	9%



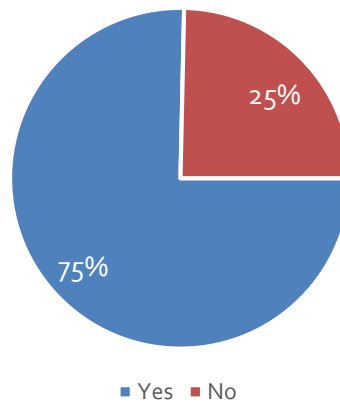
n=690; multiple selections allowed by respondents

Would you like to see more electric vehicle chargers at County offices and facilities?

Yes: 75%

No: 25%

Figure 14. Electric Vehicle Chargers at County Facilities



n=726

"If there was electrical vehicle charging at my workplace, I would purchase an electric vehicle tomorrow."

KEY TAKEAWAYS

In considering the County's Climate Action Plan, we find that County employees, although supportive of adopting alternative commute modes, are not committing to these options because they are not as convenient as driving alone to and from work. In the comments portion of the survey, many respondents indicated that they would be interested in telecommuting options and carpool options. Such programs would be effective ways for the County to reduce GHG emissions from employee commute trips. The County may want to explore options for telecommuting and workplace electric vehicle charging, as well as provide more information at the department level on commute alternative modes and incentives. The County policy on telecommuting was last updated in 1993 (see Appendix C). The County may wish to revisit this policy in light of the survey results and current technological options.

FUTURE RESEARCH

The County could further examine the data pertaining to electric vehicles, including perceived costs, range anxiety, adequate charging infrastructure, and other factors. Next steps may also include a cost-benefit analysis to compare the costs of electric vehicles or alternative commute modes to the drive-alone trips currently made by the majority of employees. This information could be used to help educate employees on the long-term cost and benefits of electric vehicle ownership or alternative commute modes.

The County could research opportunities for shuttles and other options that would facilitate employees using public transit. This research should include collaboration with other large employers in Martinez, such as Kaiser Permanente and the U.S. Veterans Administration Medical Center. Additional surveys, specific to the Martinez sites where the majority of County employees work, may be needed.

APPENDIX A: SURVEY INSTRUMENT

Employee Commute Survey

Please help Contra Costa County by finishing this survey to the best of your ability. The survey will be open for 2 business weeks. Participants who share their name and email will be entered into a raffle to win 1 of 10 BART tickets each with a value of \$20.

* Required

Commute Questions

1. Which County department do you work for? *

2. On average, what is the distance of your commute in miles (one way)? *

3. On average, how long is your travel time to get to and from work (in hours and minutes)? *

4. On average, how much money do you spend on your commute weekly (including tolls, ferry passes, ride hailing apps, gas, public transit, bike costs, etc.)? *

5. Do you have an alternate work schedule? **

Mark only one oval.

☐ Not Offered

☐ 4/10s

☐ 9/80s

☐ Other: _____

6. Which of these transportation modes do you use in an average week? Mark all that apply.

Check all that apply.

- ☐ Drive alone
- ☐ Carpool
- ☐ Ride hailing (Uber, Lyft, etc.)
- ☐ Bus
- ☐ BART
- ☐ Amtrak
- ☐ Bicycle
- ☐ Walk
- ☐ Telecommute/work from home
- ☐ Other: _____

7. If you use more than one mode of transportation to get to work in an average week, please list the predominant mode and distance of that mode:

8. If you drive to work, what is the make, model, and year of the car:

9. If you carpool, how many other people on average do you share the ride with? Do not include ride hailing apps if you are the only person in the car.

10. If you drive alone, would you consider an alternate commuting method where feasible?

Mark only one oval

- ☐ Yes
- ☐ No

Commute Preference Questions

11. What informs your commute choice decision? *

Check all that apply.

- ☐ Travel time
- ☐ Cost
- ☐ Flexibility
- ☐ Comfort
- ☐ Environmental reasons
- ☐ Enjoyment
- ☐ Stress
- ☐ Other: _____

12. What forms of alternative commuting would you consider? Mark all that apply:

Check all that apply.

- ☐ Carpool
- ☐ Bus
- ☐ BART
- ☐ Amtrak
- ☐ Bicycle
- ☐ Walking
- ☐ Telecommute/work from home
- ☐ Other: _____

13. What are your obstacles to using alternative transportation modes? Mark all that apply:

Check all that apply.

- ☐ Travel time
- ☐ No feasible first/last mile option
- ☐ I work late/irregular hours
- ☐ It would be too expensive
- ☐ I do not have access to sufficient other options
- ☐ Other options are not safe
- ☐ Other options are too complicated
- ☐ Not enough secure bicycle parking spots
- ☐ Not enough protected bicycle lanes or sidewalks
- ☐ Other: _____

Electric Vehicles

14. Do you drive an electric vehicle to work? *

Mark only one oval.

- ☐ Yes. Skip to question 17.
- ☐ No. Skip to question 15.

Electric Vehicles

15. Would you consider purchasing an electric vehicle? *

Mark only one oval

- ☐ Yes
☐ No

16. What concerns do you have about purchasing an Electric vehicle? Mark all that apply *

Check all that apply

- ☐ They are too expensive
☐ They do not have enough range
☐ They do not have the functions I need in a vehicle
☐ They take too long to charge
☐ I cannot charge an electric vehicle at my house
☐ There are not enough chargers at my work site
☐ I have no concerns about purchasing an electric vehicle
☐ Other: _____

Electric Vehicles

17. Would you like to see more Electric Vehicle chargers at County offices and facilities? *

Mark only one oval

- ☐ Yes
☐ No

18. To be entered into the raffle add your name and email address:

19. Do you have any concerns or issues related to this survey that are not captured in this survey? If so, please describe them:

APPENDIX B: COMMENTS

Do you have any concerns or issues related to this topic that are not captured in this survey? If so, please describe them:

There should be more work time options. Alternative work schedules should be reinstated.

I wish our office offered more flexibility for start times. Many people accrue additional childcare cost from being late to pick up their children from daycare and the traffic is expected to get worse as the construction of highway proceeds for the next two years

Give employees alternate work schedules!!

Earlier and later start times should be offered in 8-5 offices.

Alternative work schedules might also help relieve the parking challenge at Ellinwood campus.

It would be ideal if my office opened at 7am for a 7am-4pm shift

Why is there no BART service directly to downtown Martinez? There needs to be better BART service not only from Central County but also from East and West.

I would never take BART, I live in Solano County and BART is not offered, AMTRAK tickets would be more appropriate for those who don't use BART.

BART along the 680 corridor in Contra Costa County would be lovely.

Would like to see more bike friendly lanes and routes and offices to support bikes.

There is a lot to be said for "if they build it, people will use it" - As a bicyclist I see this every time a road is improved with a bike lane or a new section of multi-use pathway is added anywhere. If the county just prioritized connecting their buildings to emphasize this, it would increase usage tremendously as well as improve the overall network for everyone considerably.

Public Works should encourage bicycling to work by paying a subsidy.

More bike lanes please.

If would be nice to have shower at work for people who bike. Also, monetary incentives are nice for people who biked rather than drove.

If there were painted bike lanes from Clayton to Martinez route I would be more inclined to ride my bike the 12 miles to work 2 - 3 days per week. I rode my bike on Bike to Work Day this year and it felt very unsafe on some sections of commute road.

What can the county do to assist employees with bridge toll expensive? I think mileage reimbursement should reflect the current cost of gas.

Although there is a fairly direct route from my area to work, the bus requires multiple transfers, backtracking, and several hours to complete when I can drive in 30 minutes. Carpools are not flexible and I don't necessarily want to have to converse with others on the drive. A county organized vanpool would be more welcome.

While the bus may appear to be a viable option, the length of time it takes to get to my office and the physical issues for me that go with the bus make the bus, for me, an impossible solution.

When my car died, public transportation was inefficient. The bus takes 1.5 hours for a ride that takes 10 minutes.

Very limited bus service and times near office.

The bus route that would get me to work would require transfers. Time to get from my location to work via bus would take almost an hour. Thirteen miles in an hour is way too long. I work very early in the morning and buses do not run during this time anyway. Public transportation in the Eastbay in my opinion is poor. Some routes are good but going from one transit area to another like WestCat to County Connection can prove difficult, and travel times are not very efficient.

I would take a bus if there was a route from Benicia to Martinez that didn't take two hours each way and still make you walk over a mile to/from each stop

I would really like to see a better bus route with shorter times from the Clayton Road Treat area to Conservation and Development.

Even if I would like to take the bus, there are no convenient locations close to my house. It would also limit me if I want to stop by somewhere after work, or I have too much to carry. The entire trip would cost too much time.

My personal vehicle is a condition of hire.

I use my car for County business.

Would 511.org be a better option to find a carpooler?

if carpooling is established to and from Martinez to Fairfield, how do you allocate the Fastrak charges?

Unable to carpool due to having drop off children in the morning.

On my scheduled work days, I take my child to two different child care locations (different locations on different days), so it's difficult to have a set schedule with carpooling unless some don't mind driving to different places

I would say that the issue of adding childcare into the mix has been the biggest restriction for me when it comes to evaluating commuting options. I used to carpool four days a week with my husband, and occasionally took BART, but with the added time that it takes to drop off my son at daycare, we have had to drive separately. BART and biking aren't really options when transporting babies and making multiple stops. This is only temporary, but I imagine it is an issue for many other families as well.

My organization does not offer commuter check. I wish they would. It would be a great supplement to my already low income.

Please take into consideration when making any changes, how it may affect those with a disability so that any changes may be accessible for everyone.

Accessibility of transportation for disabled employees

I would consider an Electric Bike or Scooter. That would help in my commute and it is a cheaper option for part of my commute.

Are there resources/programs available through Contra Costa County to help purchase an electric vehicle?

There are 9 chargers in a controlled/ gated lot behind the Board of Supervisors' building. They are routinely empty, yet I cannot access them to charge my electric vehicle. I am a county employee and have to drive as a part of my job, so I find this extremely frustrating, and makes my efforts to be environmentally responsible with my driving much more difficult.

The electric vehicle survey has been sent for at least 4 years and nothing has been done to allow more employees to have access to charging stations.

Some employers require employees to pay for charging stations at work.

Not enough electric car chargers.

Not commute related, but happy to see so many EVs in the county's fleet. I get good feedback from others when I arrive at meetings in a full EV, and it paints the county in a positive, progressive light.

Multiple charging stations at the County Administration Building not being used. All county employees should be able to use charging stations.

Low interest loans available to buy an electric car :)

If there was EV charging at my workplace I would purchase an EV tomorrow.

If more EV chargers are at county offices, it reduces the number of regular space parking. There aren't enough parking spaces at my work site.

I would drive an electric vehicle more often if there was an electric vehicle charger available in downtown Martinez.

I would consider an electric vehicle or other alternatives but the expense of a vehicle and upgrading my electrical at home are definitely cost considerations. One other issue about carpooling is that not that people at my office live in Pleasant Hill/Walnut Creek area so not that many choices for carpooling partners.

I think the county should provide free electric vehicle charging as an incentive for employees to drive electric vehicles - especially when the electricity is being generated for free by solar panels as it is at 651 Pine.

I think MANY more people would drive electric vehicles, if work sites everywhere had sufficient charging stations.

EV chargers take up space that could be used for regular parking spaces. If EVs were able to use regular electrical outlets, then the county could require the placement of regular outlets at parking spaces rather than the current EV charging stations. Also, there are constraints on commercial parking lots due to the dedicated EV charging stations.

EV chargers should be free for county employees especially for county rideshare/carpool to other county employees.

Access to electric charging while at work is difficult. New charging stations are not accessible and are not used to the potential. Please provide a pass to the parking lot at 651 Pine for staff with electric cars. That way Charge Point can recoup some of their investment.

There are not enough charging stations for electric cars in Martinez. There should be charging stations at all county buildings as well as access to chargers for all county employees. There should be chargers at the jail parking lots in Martinez and Richmond. Jurors need chargers at the courthouses.

We have lots of other things to do before electric car chargers.

There are way too many vacant electric-only vehicle parking spots and a surplus of Hybrid cars in normal parking spots. Although Hybrid cars also positively impact our environment, those who chose to purchase environmentally friendly hybrids receive no benefits. Hybrids should be allowed to park in the electric-only vehicle parking spots while there is a surplus. Otherwise we are just contributing to pollution by forcing others to drive in circles in search of parking while various electric only vehicle parking spots remain vacant.

Need chargers at Summit Center.

I often have to make off-site visits for work, so just getting to work does not address my work-related transportation expenses. To drive an electric vehicle, there would have to be a way to charge the vehicle at work.

Covered solar parking and EV chargers would be great!

Charging stations should not be free.

Why do people have to commute so far? Wages do not match housing costs. To afford to buy a home I had to move out of Contra Costa County.

The lack of proper infrastructure between Pittsburg and Martinez.

I purposely moved here with the intention of having a short commute and the costs that I previously paid in commute, toll, car maintenance, etc. In turn, I pay more in housing expenses for living here in Martinez.

I prefer living in the San Leandro area, but don't want the commute.

I live in Solano County.

I just would like to see some action. Thanks.

I answered these questions as they apply currently. However, I was previously commuting 30 miles one way. If this Pilot unit doesn't work out I'll be back to the long drive.

I am a renter and single. The place I was living that was 20 minutes (1w) from work was sold. I had to find a rental that I could manage on my county salary. So now I am living twice as far away. I am dealing with a tough commute too.

Considering areas such as Solano Co. that does not have BART.

Company-wide practices, such as use of electricity, low flow toilets, and other sustainable practices that should be implemented.

Commuting is dictated by where people live, and people live where they can afford to live, and affordable housing is dictating by the wage they make.

Commuting from a different city is difficult.

Safety of leaving office at night - it is safer to walk the short distance to my car than to BART.

I haven't looked into the county's carpooling program since I don't have a car, but if it's financially feasible and the county wants to promote better commuting, it could provide financial incentives for carpooling or electric vehicle purchases.

How about a toll raffle, or incentives for those who pay toll to commute daily. BART is not an option for those in Solano County so we must pay toll regardless.

Employee benefits for commuting environmentally efficient.

County facilities need to be located near services so that at lunch, you can access restaurants and other things without needing a car. Many county facilities are located in areas that require a vehicle just to get lunch...and I'm not always a good planner to pack a lunch the night before.

Employees should have options to work closer to their home, 4/10 schedules or telecommute. 4/10 schedule allows our participants to meet before and after work and cuts out one day of commuting time.

There are two offices closer to my house.

My concern is that there are not enough offices in far East Contra Costa County to house those of us that live in East Contra Costa.

If a transfer was available to work as an SSPA Intake worker, at the Hercules office, which is 5 minutes from my house, I'd take it!

How about placing employees who request to be closer to their homes instead of forcing them to commute and deal with this horrible traffic jam! County need to start paying mileage.

Please place county offices near public transportation options!

It would be easier to relocate people to offices closer to home. I live in walking distance to the Pittsburg SIT site and 4545 Delta Fair is 15 minutes from my home.

If/ when electric chargers will be offered, we need to ensure that parking is not jeopardized for all employees.

There is no parking downtown Martinez even if people did have electric cars.

There is a diminishing amount of parking spaces available at my worksite (625 Court St., Martinez). Even with this issue, there are minimal options for workers other than to drive.

Parking is limited/impacted in the downtown Martinez area. Hopefully there are plans to improve parking for county employees.

Need to make sure there are enough parking spaces for employees as well as visitors during all times of the day.

If I used an alternate form of transportation, I would be concerned that I wouldn't be able to attend late meetings easily. I also would be concerned that if I had a family emergency, I wouldn't be able to be available to get home quickly.

Maybe all departments should have an electric car on hand for work use. Then people like me could leave their car at home more often.

I would consider other modes of transportation if I had county car access.

Expansion of light rail throughout county to get last mile, such as eTranzUSA. We need this type of rail to make Contra Costa County vital.

Walking would be a great alternative as would be electric scooters for rent or free usage as a commute option to free up a parking space and reduce carbon footprint.

1. Commuter Check should be an option for county employees 2. Shuttle to county building from BART stations (e.g. Kaiser shuttles). Richmond is the only convenient office within walking distance from BART station.

Yes, a BART station is nowhere near Martinez, where most of the county buildings are located. BART is irrelevant to the county employees. If the county did provide a shuttle from one of the stations 10 miles away, then I think it would be appropriate to include on the survey.

A shuttle service from local BART stations to county offices would be ideal

We need to solve the issue of how employees can more easily take transit, bike, and/or carpool. The current Commuter Benefit program is a joke, totally irrelevant unless you work downtown and can reliably take Amtrak from your home. The county should invest in shuttles from employment centers to BART - consider partnering with other nearby employers such as Kaiser and the Veterans Administration.

There should be mini buses with a schedule to transport county people from point A to point B. It would be amazing if the county invested in a shuttle from BART to the various sites in Martinez. Perhaps the city of Martinez could be a partner - it could increase traffic to downtown Martinez without requiring more parking spaces.

I tried taking Amtrak + biking from Oakland, but trains are not frequent, and are often delayed in the evenings. A bus or shuttle connection from central county BART stations would help me stop driving for my commute. More frequent bus connections to 30 Muir would also help me take transit more often.

This question is oddly worded. What informs your commute choice decision?

Its worded very poorly. 1st question asks about commute one direction. 2nd question asks about commute both ways?

I'm glad to see the outreach for this important issue!

I drive a hybrid and that question was not asked.

Hoping that I will not receive a ton of spam emails as this is a work address.

Add to survey question of hometown to better understand commute options.

I would love to take BART, but the station is nowhere near the office. I would to take Amtrak, but the cost is prohibitive. I would love to telecommute, but my office has a strict policy against all forms of telecommuting (even though I regularly telecommute on sick days and vacation days). The county could help by 1) offering Amtrak discounts, 2) arranging BART shuttles from/to downtown Martinez

(from 7 am to 9 am, and 4pm to 7pm), 3) encouraging department heads to officially allow telecommuting.

Would love it if telecommuting was offered more.

Would like to telecommute, not sure how to go about it.

Work on clear policies to support and promote secure telecommuting.

There should be a written telecommute program available for employees. There was once a pilot program, but no other information is available.

The county should expand the option of telecommuting where feasible. This is a win-win for all involved. Less traffic, wear and tear on the roads and our cars, less pollution, fewer hours wasted on the road traveling, less electricity usage in county buildings, huge savings for the employee in travel costs, etc.

The BOS approved telecommuting for employees as an alternative to driving into the office, especially for bad commutes like Highway 4. So, why doesn't management support this initiative if the Board already approved it? My work can be monitored and I'm a Level 1 Performer, so I'm not sure why we can't get buy in at the management level.

Telecommuting should be considered more seriously. There should be adequate parking for all employees at all offices at all times of the day.

Telecommuting should be an option.

Telecommuting 1-2 days a week should be an option for some staff.

Telecommute should be top of the list for county employees.

More telecommute days should be offered to employees that travel more than an hour from their office site. I have only been approved one day a week however I could potentially work from home every work day unless I need to be in the office for meetings. I drive a total of 146 miles round trip every day and would be more productive if I was not spending 3 to 4 hours a day in my car. Thank you for the commute survey.

Just wish telecommute was an option at least partially.

If you get management to agree to telecommute options, I would be first in line.

If I could work from home, I wouldn't have to replace my vehicle as often.

I would like to have telecommuting and the option of a 4/10 schedule. I feel like these two options are not "encouraged" in my office; however, I would like it to be.

I like the county to consider work from home more than one day a week. Maybe 2 or 3 days a week to reduce driving. If I do take public transit, it will require, ferry, Bart and bus. The travel time one way will be 3 hours. To reduce carbon footprint, 2 or 3 days' work from home will be very helpful.

Department (Library) seems to offer working remotely on a few days per week for some administrative positions and not others, and it's not clear how it's offered. Would be interested even if it's one day per week or per month.

Alternated work schedules should be offered to all units not just some units.

Telecommute is a good idea if the unit one works in is supported.

I feel with some departments/jobs would be feasible for telecommuting.

The county could work to ensure traffic lights along commute routes are timed.

APPENDIX C: COUNTY TELECOMMUTING POLICY & PROCEDURES

CONTRA COSTA COUNTY TELECOMMUTING POLICY AND PROCEDURES

Approved by the Board of Supervisors July 13, 1993



I. OBJECTIVE

The telecommuting program is part of Contra Costa County's employee Transportation Demand Management (TDM) program. The objectives of the telecommuting program are to reduce peak hour traffic congestion, air pollution, and demand for parking spaces by allowing selected employees to work at home or at a satellite location near their home, as provided in an agreement between the employee and management. As a secondary benefit, the County believes that telecommuting will increase productivity and improve the morale of employees.

II. TELECOMMUTING POLICY

A. Participation in Telecommuting

The telecommuting program allows County employees, upon approval of their supervisor and department head, to work at a home or a satellite work facility. The specific arrangements for telecommuting will be set forth in an agreement between the employee and management. Telecommuting is a privilege and not a right. Participation in telecommuting may be terminated at the request of either the employee or management. Attachment A provides guidelines to management for selecting telecommuters.

B. Working Hours

Work hours, compensation and vacation schedules will conform to the County Ordinance Code, MOU provisions, Fair Labor Standards Act (FLSA) provisions, and to terms otherwise agreed upon by the telecommuting employee and the supervisor. The telecommuter will spend a minimum of one regular work day per week in the office or usual place of work. No employee shall work more hours than his/her normal work week as a result of telecommuting unless he/she has received prior overtime authorization and is compensated for that overtime (except if that employee is exempt from overtime).

C. Communications

Telecommuting employees will agree with their supervisor on a method for receiving and responding to communications, including mail, telephone messages, electronic mail, departmental and County memoranda and announcements, training opportunities, and other. This method will be specified in the telecommuting agreement.

D. Measuring Work Activity

Telecommuting employees will agree with their supervisor on the objectives and work assignments to be accomplished during the telecommuting period. The agreement will also identify the method of measuring productivity. The telecommuting program is not intended to require more work from employees than normally accomplished, nor to encourage employees to work uncompensated hours.

E. On-Site Visits

When the work site is located in an employee's residence, the County reserves the right to conduct an on-site visit. A minimum of 48 hours advance notice of the visit will be provided to the employee. The purpose of the visit would be to determine that the worksite is suitable, ensure that any confidential records used by the employee are secure, and, if applicable, to maintain, repair, inspect or retrieve County-owned equipment.

F. Overall Obligations

Telecommuting employees are obligated to comply with all applicable County rules, policies, practices and instructions. Employees are responsible for clarifying any questions regarding the applicability of rules, policies, practices and instructions through discussions with their supervisor. If an employee finds he/she is unable to work effectively while telecommuting and stops telecommuting, this will not reflect negatively in the employee's performance evaluation.

G. Flexibility to Departments

It is the intent of these policies and procedures that department heads have the maximum flexibility in developing telecommuting agreements that reflect the nature of work of their department and characteristics of their employees.

III. TELECOMMUTING PROCEDURES

A. Set-Up

1. Application Procedures

To become eligible to telecommute, an employee must submit to their supervisor an application requesting consideration for telecommuting (Attachment B). Applications for telecommuting will be reviewed by the employee's supervisor for a recommendation. All applications, regardless of the supervisor's recommendation, will be forwarded to the department head for approval or disapproval. Copies of all approved applications will be submitted to the Community Development Department during the pilot program. If a new supervisor or department head is assigned to a

telecommuter after he/she has begun telecommuting, the new supervisor/department head must also approve the agreement.

2. *Telecommuting Training*

Prior to initiation of telecommuting, both supervisor and employee must participate in training designed to survey and identify the following: job responsibilities and physical arrangements necessary to support telecommuting; supervision and measurement of performance; methods of communication; and procedures or use of tools/equipment to be used in telecommuting. Training will emphasize the organizational and planning skills necessary for telecommuting.

3. *Agreement*

The application to participate in telecommuting also serves as a written agreement between the employee and supervisor and sets forth the terms for telecommuting, including work schedule, work location, work to be performed while telecommuting, method of communicating with the office, use of County equipment and supplies, and any other terms mutually agreed to.

4. *Termination*

A telecommuting agreement may be terminated by either party with at least two weeks notice unless both parties agree otherwise. Termination of a telecommuting agreement by the supervisor or department head shall not be a grievable issue and will not reflect negatively on the employee.

5. *Participation in Telecommuting Studies*

Employees and their supervisors/managers must agree to participate in all studies and analyses relating to telecommuting for the County. Individual survey responses will remain anonymous, unless authorized for release. Otherwise, aggregate employee responses may be compiled and made available to the public, without identification of the study participants. Non-telecommuters will also be surveyed to identify any adverse impact resulting from telecommuters. All studies shall be reviewed by the Telecommuting Committee.

B. *Operations*

1. *Employee Benefits*

All existing employee benefits will continue for telecommuting employees. An employee is covered by Workers' Compensation whether working at home or for work-related travel. Requests for sick leave, vacation or other leave must be approved by the telecommuter's supervisor/manager.

in the same manner as the employee who does not telecommute. If a telecommuter becomes ill while telecommuting, he/she must report the hours actually worked and use sick leave for those hours not worked.

2. *Clerical Support*

The need for clerical support will be identified and addressed in the agreement between the supervisor and the employee.

3. *Requests for Training*

All requests for training, other than telecommuting training, and all other activities will be handled in accordance with existing County policy.

4. *Program equipment and Supplies*

The equipment and supplies necessary to telecommute will be provided by either the employee, the department, or a combination of both employee and department. The County will endeavor to make available to an employee wishing to purchase equipment, any discounts for hardware, software, or equipment to be used to complete assigned work. County assigned equipment and supplies shall not be loaned by the telecommuter to anyone unless authorized by his/her supervisor. The telecommuter and supervisor are responsible for including a plan to safeguard confidentiality of work and protection of equipment as part of the telecommuting agreement.

Participants that are assigned County-owned hardware and software will provide written acceptance before being given custody of the items. The responsible supervisor/manager and employee, along with the help of a representative from Data Processing Services, if necessary, will define what tools are needed beyond what is available. Once this is determined, a request should be submitted to the appropriate department head for approval to obtain identified items.

Materials needed to support the telecommuting effort will be provided by the department. All requests must be submitted by the responsible supervisor/manager to the department head for approval, if feasible.

5. *Software and Required Hardware*

The cost of software and hardware modifications will be paid by the department. The supervisor/manager, after consulting with Data Processing Services, will obtain the necessary equipment. The software and all files and databases shall remain the property of the department. All software copyright laws will be strictly adhered to; no unauthorized copies will be made of County-owned software.

6. *Repairs to Equipment*

The cost of repairs of employee owned equipment will be paid by the employee. When County equipment is provided to the telecommuter, it is his/her responsibility to ensure that the equipment is used properly. Repair costs for equipment owned by the County will be paid for by the department.

Upon determining that there is a problem with County-owned hardware, the employee should notify his/her department as soon as practical and inform them of the problem. The department will decide whether or not to repair or replace any items identified.

If there is a delay in the repair or replacement of the equipment or any other circumstance under which it would be impossible for the telecommuter to work off-site, then he/she will be reassigned to a County facility until the repair has been made or circumstance has been corrected.

7. *Designated Work Space*

The telecommuter will designate a work space at the off-site area. Any equipment to be used while telecommuting will be installed at this work space. This work space should be maintained in a safe condition, free from hazards to people and equipment, and should comply with County VDT standards. The County will provide guidelines for VDT and ergonomic standards and provide assistance to telecommuters for complying with these standards. The County reserves the right to conduct on-site visits.

8. *Costs Directly Attributed to Telecommuting*

Costs incurred as the direct result of telecommuting, such as billings for local and long distance County calls, and the costs of a direct line for a computer modem, will be reimbursed to the employee by the department, upon verification as agreed between the department and the employee. The employee must maintain an adequate record of expenses incurred while telecommuting. Attachment C may be used for recording telephone calls made on behalf of the County. Alternatively, the department may provide calling cards to telecommuting employees. The department and employee should work together to minimize the direct costs attributed to telecommuting. This method will aid in the verification of the calls being paid for by the department. No form of reimbursement will be made without this or similar proof.

IV. PILOT PROGRAM

In order to test the feasibility of a telecommuting program for County employees and to resolve any problems inherent in such a program, the County conducted a six-month telecommuting pilot program between November 1992 and May 1993. On July 13, 1993, the Board of Supervisors approved an extension of the pilot program through June 30, 1994. The Board set an objective of enrolling 70 additional telecommuters in the pilot program. Training Sessions for new telecommuters and their supervisors will be held in September and January. A report on the expanded pilot program will be made to the Board of Supervisors prior to June 30, 1994.

Attachments: 1) How to Select Commuters
2) Contra Costa County Telecommuting Application/Agreement
3) Contra Costa County Telecommuting Telephone Log

Item 5-6-1-Proc. CCC



Contra Costa County Board of Supervisors

Subcommittee Report

SUSTAINABILITY COMMITTEE

Meeting Date: 12/09/2019

Subject: RECEIVE REPORT on including an Environmental Justice seat on the County's Hazardous Materials Commission & MAKE RECOMMENDATION to Board of re Same.

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

Department: Conservation & Development

Referral No.: N/A

Referral Name: RECEIVE PRESENTATION on status of Climate Action Plan update and PROVIDE DIRECTION as appropriate

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

Referral History:

At their September 23, 2019 meeting the Board of Supervisors asked staff to bring to its next meeting a report on adding an environmental justice seat on the County's Hazardous Materials Commission.

Referral Update:

A memo from the Hazardous Materials Commission Executive Assistant is attached detailing the history of this issue.

Recommendation(s)/Next Step(s):

ACCEPT the memo from the Executive Assistant to the Hazardous Materials Commission and CONSIDER adding an environmental justice seat on the County's Hazardous Materials Commission..

Fiscal Impact (if any):

None.

Attachments

CAP Community Meetings Announcement

HMC attachment

We Want to Hear From You!

CONTRA COSTA COUNTY CLIMATE ACTION PLAN

West County

Thursday, September 26

6:30 – 8:00 p.m.

Crockett Community Center

850 Pomona Street

Crockett, CA

Central County

Thursday, September 19

7:00 – 8:30 p.m.

Fairway Room, Creekside Complex

1010 Stanley Dollar Drive

Walnut Creek, CA

East County

Tuesday, October 15

6:30 – 8:30 p.m.

Prewett Family Park, Multi-Purpose Room

4701 Lone Tree Way

Antioch, CA

Let's make Contra Costa County a better place to live and work!

Be part of the conversation about the future of Contra Costa County! The County is updating its Climate Action Plan, which outlines actions the County will take to address our changing climate. We'd like your input on goals and strategies to reduce pollution emissions and be more resilient. We're holding three community meetings, each in a different region of the county. Thanks to partners **Crockett Community Services District**, **Sustainable Rossmore** and the **City of Antioch**.

Contact Jody London, Contra Costa County Sustainability Coordinator for more information.

Jody.London@dcd.ccounty.us, 925-674-7871

For more information and to share your ideas online, visit:

EnvisionContraCosta2040.org



CONTRA COSTA COUNTY HAZARDOUS MATERIALS COMMISSION



November 23, 2019

MEMO

To: Sustainability Committee

From: Michael Kent, Executive Assistant to the Hazardous Materials Commission *MK*

Re: Consideration of Adding an Environmental Justice Seat to the Hazardous Materials Commission

The Contra Costa County Hazardous Materials Commission was established in 1986 to advise the Board, County Staff and the mayor's council members, and staffs of the cities within the County, on issues related to the management of hazardous materials. The Commission's current composition consists of thirteen members and alternates appointed by the Contra Costa County Board of Supervisors – two representatives of cities, three representatives of business, three representatives of environmental organizations, one representative of the League of Woman Voters, two labor representative, one representative of environmental engineering firms located in Contra Costa County, and one representative of the general public.

The Hazardous Materials Commission has a long-standing interest in environmental justice. The Commission wrote a report to the Board of Supervisors on environmental justice in October, 2000 recommending that the Board of Supervisors declare the County's commitment to environmental justice. This led to the Board of Supervisors endorsing the application of environmental justice as defined in California Government Code Section 65040.12, and directing the County Administrator to assemble the appropriate County departments to work with the Hazardous Materials Commission to develop and implement policies related to environmental justice in a Board Order dated October 11, 2000. The Commission subsequently worked with the County Administrator and the appropriate County departments to develop a report on environmental justice and participate in a pilot program on illegal dumping. This led to the Board of Supervisors adopting a policy on environmental justice in a Board Order dated September 23, 2003.

Members: George Smith, Chair, Rick Alcaraz, Jonathan Bash, Don Bristol, Fred Glueck, Frank Gordon, Mark Hughes, Steven Linsley, Jim Payne, Gabe Quinto, Mark Ross, Ralph Sattler, Leslie Stewart,

597 Center Ave., Suite 200 Martinez, CA 94553 (925) 313-6712

Since the adoption of the County's environmental justice policy in 2003 the Commission has conducted two formal reviews in 2008 and 2015 of the implementation of the County's environmental justice policy, and has written letters to the Board of Supervisors containing the results of their reviews and recommendations for further implementation of the County's environmental justice policy. The Commission has consistently addressed environmental justice issues in their workplan, and has committed to considering environmental justice concerns for all issues they address.

Members of the Commission meet annually with each County Supervisor to brief them on the work the Commission has been doing that year and to learn from each Supervisor issues of concern they have related to the mission of the Commission. When members of the Commission met with Supervisor Gioia on June 27, 2017 he recommended that the Commission create an environmental justice seat. The Commission had a lengthy discussion about Supervisor Gioia's recommendation at a subsequent Commission meeting and the Chairperson provided a written response to Supervisor Gioia on January 18, 2018. In that letter, the Chairperson explained that during the Commission's discussion, many members expressed the sentiment that even though they didn't specifically represent environmental justice organizations, they felt they understand environmental justice concerns, and take them into account in their deliberations and decision-making. Many members also felt that while an environmental justice champion such as Henry Clark no longer sits on the Commission, the interest and knowledge level, and culture of commitment to the principles of environmental justice on the Commission ensures that environmental justice concerns are being fairly addressed by the Commission. The Commission also acknowledged that this level of commitment needs to continue by ensuring their Environmental representatives understand, and are committed to, the principles of Environmental Justice. Therefore, in response to his concerns, the Commission decided to add a requirement for applicants to the three Environmental Seats that they have an understanding of, and commitment to, the principles of Environmental Justice as defined in County policy. The Commission has since applied this requirement when applicants have been considered for Environmental Seats.

Members: George Smith, Chair, Rick Alcaraz, Jonathan Bash, Don Bristol, Fred Glueck, Frank Gordon, Mark Hughes, Steven Linsley, Jim Payne, Gabe Quinto, Mark Ross, Ralph Sattler, Leslie Stewart,

597 Center Ave., Suite 200 Martinez, CA 94553 (925) 313-6712



Contra Costa County Board of Supervisors

Subcommittee Report

SUSTAINABILITY COMMITTEE

Meeting Date: 12/09/2019

Subject: RECEIVE REFERRAL from Board of Supervisors to deliberate on adoption of a Climate Emergency Resolution, as recommended by Sustainability Commission.

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

Department: Conservation & Development

Referral No.:

Referral Name:

Presenter:

Contact:

Referral History:

On November 19, 2019, the Board of Supervisors referred to the Sustainability Committee a proposal from the County's Sustainability Commission that the Board adopt a Climate Emergency Resolution (Item C.47).

Referral Update:

Many jurisdictions across the country, particularly in California and the Bay Area, are adopting resolutions declaring a climate emergency and calling for various actions to mobilize resources to address this crisis. The Sustainability Commission recommends the Board of Supervisors adopt such a resolution because the impacts of a changing climate are affecting the quality of life, economy, and well-being of Contra Costa County, for example, recent wildfires and public safety power shutoffs.

Attached are examples of recently adopted Climate Emergency Resolutions adopted by Sonoma County (2018); Austin, Texas (2019); San Mateo County (2019); the City of Alameda (2019); the State of California (2019); the City of Richmond (2018); and the City of Hayward (2019).

Possible actions that have been adopted by other jurisdictions and could be included in a Contra Costa County climate emergency resolution include:

- Establishing an advisory group that will help the County anticipate and plan for an economy that is less dependent on fossil fuel extraction and processing. As the State of California adopts policies and goals for reducing pollution, the County should consider what this will mean for County revenues, jobs, health, and infrastructure.
- Directing the County Administrator to establish an interdepartmental task force that will focus on implementing the County's Climate Action Plan and identifying additional actions, policies, and programs the County can undertake to reduce and adapt to the impacts of a changing climate.
- Identifying potential resources to support work in Contra Costa County to reduce and adapt

to a changing climate.

The Sustainability Commission advised the Board to refer this topic to the Sustainability Committee and direct the Department of Conservation and Development to prepare a report to the Sustainability Committee to evaluate whether the County should adopt a Climate Emergency Resolution.

Recommendation(s)/Next Step(s):

RECEIVE REFERRAL from Board of Supervisors to deliberate on adoption of a Climate Emergency Resolution, as recommended by the Sustainability Commission.

Fiscal Impact (if any):

Staff time to evaluate whether the County should adopt a Climate Emergency Resolution.

Attachments

Attachment A: Sonoma County Climate Emergency Resolution

Attachment B: Austin, TX Climate Emergency Resolution

Attachment C: San Mateo County Climate Emergency Resolution

Attachment D: City of Alameda Climate Emergency Resolution

Attachment E: State of California Climate Executive Order

Attachment F: Richmond, CA Climate Emergency Resolution

Attachment G: Hayward, CA Climate Emergency Resolution



County of Sonoma
State of California

THE WITHIN INSTRUMENT IS A
CORRECT COPY OF THE ORIGINAL
ON FILE IN THIS OFFICE.

ATTEST: MAY 08 2018

SHERYL BRATTON, Clerk/Secretary
BY C. Woodson
DEPUTY CLERK/ASST. SECRETARY

Date: May 8, 2018

Item Number: 25

Resolution Number: 18-0166

☐ 3/5 Vote Required

Resolution Of The Board Of Supervisors Of The County Of Sonoma, State Of California, Reaffirming Its Intent To Reduce Greenhouse Gas Emissions As Part Of A Coordinated Effort Through The Sonoma County Regional Climate Protection Authority And To Adopt Local Implementation Measures As Identified In Climate Action Plan 2020 and Beyond

Whereas, climate change is a real and increasingly urgent threat that demands action at every level of government; and

Whereas, actions taken by local governments to reduce greenhouse gas emissions (GHGs) provide multiple benefits by providing energy and cost savings, air quality and public health improvements, local job creation, resource conservation, climate resilience, and enhanced equity; and

Whereas, the State of California has adopted policy targets to reduce GHGs by 40% from 1990 levels by 2030 and by 80% from 1990 levels by 2050; and

Whereas, the Sonoma County General Plan 2020 includes a section on Energy which includes strong policy language related to the reduction of GHGs; and

Whereas, Sonoma County participates in a coordinated, countywide collaboration to address climate change via the Sonoma County Regional Climate Protection Authority (RCPA); and

WHEREAS, the success of the RCPA depends on the participation of and collaboration with all local jurisdictions, and a commitment to pool resources towards common goals; and

WHEREAS, the RCPA has adopted the same GHG reduction targets as the State of California; and

WHEREAS, the RCPA has established twenty goals to reduce GHG emissions and nine goals to prepare for local climate impacts; and

WHEREAS, the RCPA and Sonoma County collaborated through the Climate Action Plan 2020 and Beyond project to develop Measures specific to Sonoma County that will result in the reduction of GHG and result in substantial environmental and community benefits.

Now, Therefore, Be It Resolved that Sonoma County agrees to work towards the RCPA's countywide target to reduce GHG emissions by 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050; and

Be It Further Resolved, that Sonoma County adopts the following goals to reduce GHG emissions, and will pursue local actions that support these goals:

1. Increase building energy efficiency
2. Increase renewable energy use
3. Switch equipment from fossil fuel to electricity
4. Reduce travel demand through focused growth
5. Encourage a shift toward low-carbon transportation options
6. Increase vehicle and equipment fuel efficiency
7. Encourage a shift toward low-carbon fuels in vehicles and equipment
8. Reduce idling
9. Increase solid waste diversion
10. Increase capture and use of methane from landfills
11. Reduce water consumption
12. Increase recycled water and greywater use
13. Increase water and waste-water infrastructure efficiency
14. Increase use of renewable energy in water and wastewater systems
15. Reduce emissions from livestock operations
16. Reduce emissions from fertilizer use
17. Protect and enhance the value of open and working lands
18. Promote sustainable agriculture
19. Increase carbon sequestration
20. Reduce emissions from the consumption of goods and services; and

Be It Further Resolved, that Sonoma County will continue to work to increase the health and resilience of social, natural, and built resources to withstand the impacts of climate change; and

Be It Further Resolved, that Sonoma County has the goal of increasing resilience by pursuing local actions that support the following goals:

1. Promote healthy, safe communities
2. Protect water resources
3. Promote as sustainable, climate-resilient economy
4. Mainstream the use of climate projections

5. Manage natural buffer zones around community resources
6. Promote agricultural preparedness and food security
7. Protect infrastructure
8. Increase emergency preparedness and prevention
9. Monitor climate change and its effects.

Be It Further Resolved, that Sonoma County will support these goals through its own actions and through collaboration with other local governments through the efforts of the Regional Climate Protection Authority; and

Be It Further Resolved that Sonoma County intends to implement its local measures from the Climate Action Plan 2020 and Beyond planning project.

THE FOREGOING RESOLUTION was duly adopted this eighth day of May 2018, by the following vote:

Supervisors:

Gorin: Aye

Rabbitt: Aye

Zane: Aye

Hopkins: Aye

Gore: Aye

Ayes: 5

Noes: 0

Absent: 0

Abstain: 0

So Ordered.

RESOLUTION NO. 20190808-078

WHEREAS, on April 22, 2016 174 countries and the European Union signed the Paris Climate Agreement, recognizing the threat of climate change and agreeing to pursue efforts to limit the global temperature increase to 1.5 degrees Celsius; and

WHEREAS, on October 8, 2018 the United Nations International Panel on Climate Change (IPCC) projected that limiting the global temperature increase to 1.5 degrees Celsius will require unprecedented transitions in all aspects of society over the next 12 years; and

WHEREAS, over 700 governmental jurisdictions across the world have recently declared or officially acknowledged the existence of a global climate emergency; and

WHEREAS, the impacts and risks of the climate crisis include increased and intensifying extreme weather events, including those that Austin is particularly vulnerable to, such as wildfires, flooding, and drought; and

WHEREAS, NASA's Goddard Institute for Space Studies reported global temperatures in 2018 were .83 degrees Celsius warmer than the average temperature between 1951 and 1980, and the past five years are collectively the warmest in modern history; and

WHEREAS, on June 24, 2019 more than 70 health organizations including the American Medical Association and the American Public Health Association declared climate change to be a health emergency and issued a call to action for government, business, and civil society leaders to recognize climate change as a health emergency; and

WHEREAS, in 2014, ATMOS Research and Consulting's Climate Change Projections for the City of Austin predicted increases in annual and seasonal average

temperatures, more frequent high temperature extremes, more frequent extreme precipitation, and more frequent drought conditions in summer due to hotter weather; and

WHEREAS, on November 29, 2018 City Council adopted Water Forward, Austin's Integrated Water Resource Plan;

WHEREAS, the City of Austin has committed to achieving net zero greenhouse gas emissions by 2050, which is a vital and necessary step towards slowing warming trends; and

WHEREAS, Austin Energy plans for 65 percent of the power supplied to customers to be from renewable sources by 2027; and

WHEREAS, on January 11, 2019 Austin was selected as a winner of up to two years of support from Bloomberg Philanthropies as part of the American Cities Climate Challenge; and

WHEREAS, the City of Austin has committed to a goal of Zero Waste by 2040; and

WHEREAS, transportation is currently the leading cause of greenhouse gas emissions in Austin, and the City of Austin has taken the following actions to address transportation's role in climate change: 1) on May 9, 2019 the City Council voted unanimously to include planning and goal-setting for the electrification of Austin's transportation systems in the upcoming update to the Austin Community Climate Plan; 2) on April 11, 2019 the City Council adopted the Austin Strategic Mobility Plan; 3) on October 5, 2017 the City released the Smart Mobility Roadmap; and 4) on October 5, 2016 the Mobility Committee approved a roadmap to electrify 330 fleet vehicles by 2020; and

WHEREAS, on May 9, 2019 the City Council unanimously approved a resolution supporting the Green New Deal and directing City staff to develop recommendations for a comprehensive climate resilience plan; and

WHEREAS, City Council anticipates City staff will return to Council with such climate resilience recommendations over the coming weeks, at which time Council will respond; and

WHEREAS, Health and Environment was identified as one of six priority Strategic Outcomes of Austin Strategic Direction 2023, with indicators including climate change and resilience and environmental quality; and

WHEREAS, the City of Austin has been at the forefront of sustainability and environmental policy and can be a global leader in emergency climate action by building a climate-resilient and adaptive city for all residents; and

WHEREAS, building a climate-resilient and adaptive society will have a positive impact on the health and wellbeing of residents, and will offer protections from the adverse potential consequences of climate change to Austin's ecosystems and economies; **NOW, THEREFORE**,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

Austin City Council declares a climate emergency and calls for an immediate emergency mobilization to restore a safe climate.

BE IT FURTHER RESOLVED:

Accountability

The City Manager is directed to determine an accountability and regular reporting structure to City Council on overarching climate change goals and mobilization efforts.

The City Manager is also directed to provide clarity on leadership responsibilities for climate change goals within the new Assistant/City Manager organizational structure. Beginning with the FY2021 budget process, the City Manager is directed to identify proposed budget items that might have a significant contribution to greenhouse gas emissions; and identify areas where additional resources could make new or existing greenhouse gas emissions reduction efforts more successful.

BE IT FURTHER RESOLVED:

External Engagement

The City Manager is directed to support the City's external engagement in climate change policy, including support for Council roles in intergovernmental bodies involved in issues related to the climate crisis including CAMPO, CAPCOG, and CapMetro, as well as coordination of efforts with partners at the county, state, and federal levels, including but not limited to expressing the City's support for a national declaration of climate emergency.

The City Manager is directed to work with relevant City staff who act in nongovernmental bodies such as the Urban Sustainability Directors Network, the National Association of City Transportation Officials, and the Electric Power Research Institute, to elevate the climate crisis as a priority.

BE IT FURTHER RESOLVED:

Achieving Net-Zero and Mitigating Impacts of the Climate Crisis

As part of the upcoming update to the Austin Community Climate Plan, the City Manager is directed to

- provide options for more aggressive interim targets to accelerate the reduction pathway to achieve net-zero by 2050;

- consider a range of innovative and aggressive strategies, to include but not be limited to: community agriculture and local food access; incentivizing non-fossil fuel heating sources; carbon tax credits; and promoting the goals of the Austin Strategic Mobility Plan, including a shift to 50 percent of trips being independent from single occupancy cars, as a means of addressing the climate crisis;
- engage with relevant stakeholders and communities as part of the planning process to ensure those most impacted by the climate crisis have input on how the update to the Austin Community Climate Plan is conducted;
- develop and present to Council recommendations for a community awareness campaign plan that helps the City meet its Community Climate Plan goals. Goals of a community awareness campaign might include recruiting and training a diverse base of community ambassadors to educate, guide, and prepare communities that are most impacted by the climate crisis. Education might range from helping families engage with methods like recycling to ensuring that Austin residents understand the potential catastrophic effects of the climate crisis, especially for vulnerable communities at home and abroad. The community awareness campaign plan should identify all resources, budget, and schedule necessary for successful implementation;
- identify any funding gaps or shortfalls that arise and consider options to fill any such gaps.

Additionally, the City Manager is directed to examine other objectives related to greenhouse gas emissions reduction (such as those set by the Austin Energy Resource Generation and Climate Plan) and identify the feasibility of accelerating the timelines of achieving such objectives.

The City Manager is directed to incorporate climate resilience policies during implementation and planned updates of the Austin Community Climate Plan, and to other City plans with climate impacts (to ensure climate change and resiliency efforts are strong, effective, and aligned), including: the Austin Energy Resource, Generation, and Climate Protection Plan, the Zero Waste Master Plan, the Hazard Mitigation Plan, the Flood Mitigation Plan, Water Forward, the Land Development Code, the Energy Code, the Austin Strategic Mobility Plan, Public Health Emergency Preparedness plans, and other City plans. The City Manager is also directed to examine existing City plans to identify those that may be outdated.

The City Manager is directed to identify innovative policy approaches to address the climate crisis's causes as well as mitigation strategies, including the promotion of natural systems, green infrastructure, and carbon sequestration; the role of tree planting as a carbon offsetting strategy; public cooling spaces to combat heat waves; and updated information about the heat island effect in Austin and strategies to mitigate this effect.

Furthermore, the City Manager is directed to identify the support needed to implement the Office of Sustainability's recommendation to leverage and invest in established and trusted community facilities in low-to-moderate income areas to serve as "Resilience Hubs," and to ensure that new facilities have the capacity to serve as shelters, evacuation centers, and disaster response hubs during climate emergencies.

BE IT FURTHER RESOLVED:

Emergency Management

The City Manager is directed to promote inter-departmental coordination to ensure that existing emergency management plans offer an aligned approach to the threats of the climate crisis and natural hazards, including wildfire and flooding, and to

identify where planning gaps may exist.

BE IT FURTHER RESOLVED:

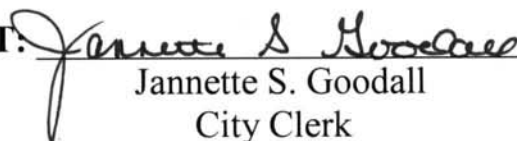
Reporting

The City Manager is directed to report back to City Council on an accountability and regular reporting structure, as well as the proposed stakeholder engagement process for the planned update to the Austin Community Climate Plan, by October 1, 2019.

The City Manager is directed to report back to City Council on a climate awareness campaign, and identified gaps in City planning by May 2020, as part of the planned update to the Austin Community Climate Plan.

ADOPTED: August 8, 2019

ATTEST:


Jannette S. Goodall
City Clerk

Adopted September 2019

RESOLUTION NO. .

BOARD OF SUPERVISORS, COUNTY OF SAN MATEO, STATE OF CALIFORNIA

* * * * *

**RESOLUTION ENDORSING THE DECLARATION OF A CLIMATE EMERGENCY IN
SAN MATEO COUNTY THAT DEMANDS ACCELERATED ACTIONS ON THE
CLIMATE CRISIS AND CALLS ON LOCAL AND REGIONAL PARTNERS TO JOIN
TOGETHER TO ADDRESS CLIMATE CHANGE**

RESOLVED, by the Board of Supervisors of the County of San Mateo, State of California, that

WHEREAS, according to the Intergovernmental Plan on Climate Change (IPCC), increasing greenhouse gases (GHG) will cause global temperatures to rise 1.5 degrees Celsius by as early as 2030; and

WHEREAS, for San Mateo County, rising global temperatures will cause sea levels to rise (up to six feet or more by 2100 under certain scenarios), contribute to increasingly extreme weather including intense rainfall, storms and heat events, and heighten risk of large wildfires; and

WHEREAS, the consequences of climate change pose risks to life, safety and critical infrastructure in San Mateo County and throughout the world, and threaten physical, social and mental well-being; and

WHEREAS, climate change impacts will be most acutely felt by children, the elderly, those with preexisting physical and mental health conditions, low income or communities of color, and residents with unstable economic or housing situations; and

WHEREAS, the County of San Mateo Sea Level Rise Vulnerability Assessment indicates that in the County over 160,000 children under the age of 18 years, and over 100,000 older adults, are vulnerable to risks posed by sea level rise; and

WHEREAS, the County has taken a number of actions to address climate change, including: helping to launch Peninsula Clean Energy; facilitating the Regional Integrated Climate Action Planning Suite (RICAPS) program that brings together the County and its 20 cities to plan and implement measures to reduce GHG emissions; launching Climate Ready SMC to better prepare San Mateo County for the changing climate; and facilitating the formation of the Flood and Sea Level Rise Resiliency District in partnership with the City/County Association of Governments; and

WHEREAS, in 2015 the County reduced GHG emissions by 21.8% below 2005 levels; and

WHEREAS, the current pace of climate actions may still fall short of reducing the projected harm to people and places and accelerated actions need to be taken to reduce our GHG emissions and implement solutions to prepare and protect our communities; and

WHEREAS, by declaring a climate emergency, the County of San Mateo will join the City and County of San Francisco, County of Santa Clara, other Bay area cities, including Berkeley, Alameda, Richmond, Santa Cruz, Hayward and Oakland, and over 1,000 national, international and local jurisdictions with similar declarations that are committed to reducing GHG emissions and planning for climate change; and

WHEREAS, the County invites all cities and other local jurisdictions and agencies to also approve a Climate Emergency Declaration to create a unified Countywide voice around climate change and to strengthen the call for state and federal actions and funds to address the economic, social, public health, and national security threats posed by the climate crisis.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of the County of San Mateo declares a climate emergency that threatens the economic and social well-being, health and safety, and security of the County of San Mateo.

BE IT FURTHER RESOLVED, that the County will continue to educate residents about the seriousness of climate change, invest in climate solutions, and address the current and future impacts of climate change.

BE IT FURTHER RESOLVED, that health, socio-economic and racial equity considerations should be included in policymaking and climate solutions at all levels and across all sectors as the consequences of climate change have significant impacts on all County residents, but especially the young, the elderly, low income or communities of color, and other vulnerable populations.

BE IT FURTHER RESOLVED, that County commits to completing the Government Operations and Unincorporated Area Climate Action Plans that will include measurable climate-related goals and actions to attain carbon neutrality in advance of the State of California's 2045 goal.

BE IT FURTHER RESOLVED, the County will develop and enact resiliency policies and plans to ensure continuous operation of County services and facilities.

BE IT FURTHER RESOLVED, that the County will achieve its climate action and resiliency goals through cross departmental partnerships within the County.

BE IT FURTHER RESOLVED, that the County will collaborate and coordinate with the 20 cities in the County, and other local partners like Peninsula Clean Energy and the Flood and Sea Level Rise Resiliency District, to achieve carbon neutrality throughout San Mateo County and to implement other actions to address climate change.

BE IT FURTHER RESOLVED, that the Board directs the Office of Sustainability to report annually to the Board, starting in April 2020, on progress towards meeting resiliency goals and achieving carbon neutrality in advance of 2045.

* * * * *

CITY OF ALAMEDA RESOLUTION NO. _____

ENDORSE DECLARATION OF A CLIMATE EMERGENCY AND
REQUEST REGIONAL COLLABORATION ON AN IMMEDIATE JUST
TRANSITION AND EMERGENCY MOBILIZATION EFFORT TO
RESTORE A SAFE CLIMATE

WHEREAS, as of February 2019, 194 United Nations member governments recognized the threat of climate change and the urgent need to combat it by signing the Paris Agreement, agreeing to keep warming "well below 2°C above pre-industrial levels" and to "pursue efforts to limit the temperature increase to 1.5°C"; and

WHEREAS, the death and destruction already caused by global warming of approximately 1°C has increased and intensified wildfires, floods, rising seas, diseases, droughts, and extreme weather, and

WHEREAS, national and international security experts have identified climate change as a significant threat to the security of the United States and the stability of the international community, and

WHEREAS, the State of California Ocean Protection Council, in its 2018 Rising Seas in California report, projects an increase between a medium-high risk aversion scenario of 6.9 feet of sea level rise in the San Francisco Bay by 2100 and an extreme risk aversion scenario of 10 feet; and

WHEREAS, restoring a safe and stable climate requires an emergency mobilization to reach zero greenhouse gas emissions across all sectors, to rapidly and safely draw down or remove all the excess carbon from the atmosphere, and to implement measures to protect all people and species from the consequences of current facts and projections of additional, abrupt climate change; and

WHEREAS, core to a socially just response is ensuring equity is centered in climate actions in a framework that ensures sustainability for present and future generations and supports self-determination and the maintenance of culture, tradition, and deep democracy, while supporting the belief that people around the world have a right to clean, healthy and adequate air, water, land, food, education, and shelter, as well as living wages and the attainment of basic human needs for all; and

WHEREAS, the City of Alameda and community members including Community Action for a Sustainable Alameda (CASA) have begun a robust process to create a newly revised and expanded Climate Action and Resiliency Plan (Plan) that identifies Greenhouse Gas (GHG) emissions reduction targets for 2030 and 2050 that meet or exceed legislated federal and California objectives and targets; and

WHEREAS, the City of Alameda, as the Bay Area's largest island city, faces an existential crisis from sea-level rise and must act as a global and regional leader by

transitioning to an ecologically, socially, and economically regenerative economy and by acting at emergency speed in a unified regional climate adaptation and mobilization effort.

NOW, THEREFORE, BE IT RESOLVED that the City of Alameda declares that a climate emergency threatens our city, region, state, nation, civilization, humanity and the natural world; and

BE IT FURTHER RESOLVED that the City of Alameda commits to citywide action that is rooted in equity, self-determination, culture, tradition, deep democracy, and the belief that people locally and around the world have right to clean, healthy and adequate air, water, land, food, education and shelter; and

BE IT FURTHER RESOLVED that an urgent global climate mobilization effort to reverse global warming is needed as quickly as possible towards zero net emissions no later than 2030, and that the City of Alameda should actively participate in an effort to safely draw down carbon from the atmosphere, and accelerate adaptation and resilience strategies in preparation for intensifying climate impacts; and

BE IT FURTHER RESOLVED that the City of Alameda commits to educating our residents about the climate emergency and working to catalyze a just transition and urgent climate mobilization effort at the local, state, national, and global levels to provide maximum protection for our residents to include Alameda's unhoused population, indigenous, low-income, and/or communities of color specifically, as well as all the people and species of the world; and

BE IT FURTHER RESOLVED that the City of Alameda underscores the need for full community participation, inclusion, and support, and recognizes that the residents of Alameda, community organizations (including CASA), faith, youth, labor, business, academic institutions, homeowners' associations, and environmental, economic, science-based, racial, gender, family and disability justice and indigenous, immigrant and women's rights organizations and other such allies will be integral to the leadership of the mobilization effort; and

BE IT FURTHER RESOLVED that the City of Alameda acknowledges that there is still time to act and that as a city, known to come together in support of large efforts and committed to addressing this crisis, we can work together to make the necessary change in order to do so; and

BE IT FURTHER RESOLVED that the City of Alameda joins a nationwide call for a regional just transition away from fossil fuels and urgent climate mobilization collaborative effort focused on transforming our region, enacting policies that dramatically reduce heat-trapping emissions, and rapidly catalyzing a mobilization at all levels of government to restore a safe climate; and

BE IT FURTHER RESOLVED that the Alameda City Council supports the City's ongoing development of a Climate Action and Resiliency Plan, including the development of measurable climate-related goals for 2030 and 2050;

BE IT FURTHER RESOLVED that the Alameda City Council recognizes that in order to meet these goals, the City must continue to formulate and implement subsequent phases of mitigation and resiliency plans as soon as practicable, along with priority programs and projects both locally and with regional partners to secure a sustainable environment, infrastructure, commerce and living conditions for all residents; and

BE IT FURTHER RESOLVED that the Alameda City Council directs the Interim City Manager to work with the Department of Public Works to identify, within the Climate Action and Resiliency Plan, a Climate point person and appropriate internal structure to support ongoing climate action and accountability and identify a reporting timeline and process for identifying progress in meeting the plan's goals, including adding a Climate Impacts section to all council staff reports that provides meaningful information on how proposed actions will impact GHG reduction efforts.

* * * * *

I, the undersigned, hereby certify that the foregoing Resolution was duly and regularly adopted and passed by the Council of the City of Alameda in regular meeting assembled on the 19th day of March, 2019, by the following vote to wit:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

IN WITNESS, WHEREOF, I have hereunto set my hand and affixed the official seal of said City this 20th day of March, 2019.

Lara Weisiger, City Clerk
City of Alameda

APPROVED AS TO FORM:

Michael H. Roush, Interim City Attorney
City of Alameda

EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA

EXECUTIVE ORDER N-19-19

WHEREAS California is proof that a bold climate agenda is good for the economy, for workers, for health and for our future, as evidenced by our state having achieved record economic growth while reaching some of the strongest climate goals in the world; and

WHEREAS in the face of inaction on climate change from the federal government, California is a global leader in climate change mitigation efforts through bold climate goals and actions, as well as leadership in the US Climate Alliance and Under2 Coalition, using the state's power as the fifth largest economy in the world to drive positive action; and

WHEREAS California has ambitious and essential climate goals to transition to a healthier, more sustainable and more inclusive economy, including: reducing greenhouse gas emissions 40 percent below 1990 levels by 2030; providing 100 percent of the state's electricity from clean energy sources by 2045; reducing methane emissions and hydrofluorocarbon gases by 40 percent; and adding five million zero-emission vehicles to California's roads by 2030; and

WHEREAS California has made substantial, measurable progress on many of the goals enumerated above, but in recent years, direct tailpipe emission from cars, ships, diesel trains, airplanes, and other transportation sources have remained a stubborn driver of greenhouse gas emissions, totaling 40.1 percent of all greenhouse gas emissions statewide; and

WHEREAS the California Air Resources Board has a fifty-year history of leading the globe in addressing harmful pollution through innovative air pollution control standards, including the nation's first NOx emissions standards for motor vehicles; and

WHEREAS California's renewable energy targets have spurred innovation and private investment in new technologies with California leading the nation in clean technology patents and bringing in more than 50 percent of all clean energy investment in the nation; and

WHEREAS the state has made significant progress in lowering greenhouse gas emissions and mitigating climate risk in California's own state government operations and public schools; and

WHEREAS achieving California's climate goals will require concerted commitment and partnership by government, the private sector, and California residents.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, by virtue of the power and authority vested in me by the Constitution and the statutes of the State of California, do hereby issue the following Order to become effective immediately to require that every aspect of state government redouble its efforts to reduce greenhouse gas emissions and mitigate the impacts of climate change while building a sustainable, inclusive economy.

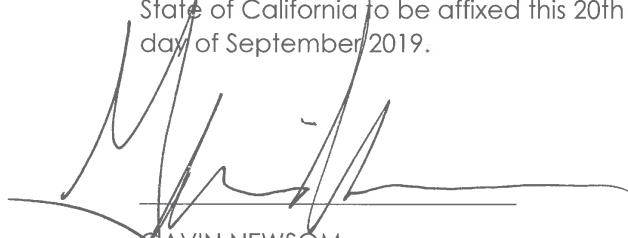
1. To leverage the state's \$700 billion investment portfolio to advance California's climate leadership, protect taxpayers, and support the creation of high-road jobs, the Department of Finance shall create a Climate Investment Framework.
 - a. The Framework shall include a proactive investment strategy for the state's pension funds that reflects the increased risks to the economy and physical environment due to climate change.
 - b. The Framework shall provide the timeline and criteria to shift investments to companies and industry sectors that have greater growth potential based on their focus of reducing carbon emissions and adapting to the impacts of climate change, including but not limited to investments in carbon-neutral, carbon-negative, climate resilient, and clean energy technologies.
 - c. The Framework shall align with the fiduciary responsibilities of the California Public Employees' Retirement System, California State Teachers' Retirement System and the University of California Retirement Program.
 - d. The Department of Finance shall consult with the Governor's Office of Planning and Research, and the California Department of Human Resources on the Framework.
2. The State Transportation Agency shall leverage the more than \$5 billion in annual state transportation spending for construction, operations, and maintenance to help reverse the trend of increased fuel consumption and reduce greenhouse gas emissions associated with the transportation sector. To accomplish this, the State Transportation Agency, in consultation with the Department of Finance, shall:
 - a. Align the state's climate goals with transportation spending on planning, programming and mitigation to achieve the objectives of the state's Climate Change Scoping Plan, where feasible,
 - b. Reduce vehicle miles traveled by strategically directing discretionary transportation investments in support of housing production near available jobs and in accordance with the state's smart growth principles, as defined in Government Code section 65041.1, and taking public health into account,

- c. Reduce congestion through innovative strategies designed to encourage people to shift from cars to other modes of transportation,
 - d. Fund transportation options that contribute to the overall health of Californians and reduce greenhouse gas emissions, such as transit, walking, biking and other active modes, and
 - e. Mitigate increases in transportation costs for lower income Californians.
3. The Department of General Services shall leverage its management and ownership of the state's 19 million square feet in managed buildings, 51,000 vehicles and other physical assets and goods to minimize state government's carbon footprint. To accomplish this, the Department of General Services shall:
- a. Maximize reduction of greenhouse gas emissions, including harmful diesel emissions, from the state fleet,
 - b. Develop and implement sustainable purchasing policies across state agencies that prioritize the purchase of environmentally preferable goods such as more sustainable food and recycled materials, consistent with state climate policies,
 - c. Reduce greenhouse gas emissions and mitigate climate risk from the state's owned and future-leased buildings,
 - d. Manage energy demand to maximize benefits to the grid, and
 - e. Promote zero-emission vehicle purchasing in state and local government fleets.
4. To accelerate progress towards California's goal of five million zero emissions vehicles sales by 2030, the California Air Resources Board shall:
- a. Develop new criteria for clean vehicle incentive programs to encourage manufacturers to produce clean, affordable cars,
 - b. Propose new strategies to increase demand in the primary and secondary markets for zero emissions vehicles, and
 - c. Consider strengthening existing or adopting new regulations to achieve the necessary greenhouse gas reductions from within the transportation sector.

IT IS FURTHER ORDERED that as soon as hereafter possible, this Order shall be filed with the Office of the Secretary of State and that widespread publicity and notice shall be given to this Order.

This Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its departments, agencies, or other entities, its officers or employees, or any other person.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 20th day of September 2019.



GAVIN NEWSOM
Governor of California

ATTEST:

ALEX PADILLA
Secretary of State

RESOLUTION NO. 69-18

RESOLUTION OF THE COUNCIL OF THE CITY OF RICHMOND, DECLARING A CLIMATE EMERGENCY

WHEREAS, human activities have warmed the Earth to a point that threatens climate stability and the modern way of life, and in December 2015 196 nations signed the Paris Climate Accord under the United Nations Framework Convention on Climate Change to address this threat by limiting destabilizing activitiesⁱ; however a failure to implement these plans has resulted in an increase in global temperatureⁱⁱ that at the current rate will exceed the goal set by the Paris Climate Accord by 2026ⁱⁱⁱ; and

WHEREAS, over 19,000 scientists have signed a “Second Warning to Humanity” calling for a drastic change in how ecological resources are managed, and global leaders have declared that humanity is on the verge of a "global catastrophe" and called for drastic changes to the ecological economy^{iv}; and

WHEREAS, climate change has already set in motion catastrophic changes to the Earth system including accelerating ice mass loss that will result in sea-level rise, fresh water scarcity, the extinction of species, billions of climate refugees, the disappearance of island nations, and "certain death" for Africa^v; and

WHEREAS, climate change has been called a “threat multiplier” that exacerbates pre-existing tensions and political instability in regions across the world^{vi}; and climate-fueled droughts, famines, and diseases have already resulted in the death or displacement of millions of people^{vii}, and the increasing severity of storms and climate events instigated by climate change represents a devastating burden to the global economy and the economy of the United States^{viii}; and

WHEREAS, common sense and morality indicate that humanity can no longer safely emit greenhouse gases and must demand an emergency mobilization effort to reach zero emissions across all sectors, to rapidly and safely remove excess carbon from the atmosphere, to preserve and restore the Earth's biodiversity, to implement safety measures to protect all people and species from the consequences of abrupt warming in the near-term, and to cultivate a shift toward climate-resiliency, prioritizing conservation, community, and independence from fossil fuels; and

WHEREAS, indigenous communities, low-income communities, and communities of color have suffered the gravest consequences of climate change^{ix}, and justice requires that those countries, classes, and industries that have contributed the most to this global crisis carry a commensurate burden in reversing it and protecting those most impacted, including the active consultation and protection of vulnerable and historically exploited population in the development and implementation of these efforts; and

WHEREAS, the United States of America has disproportionately contributed to climate change and to preventing a transition away from fossil fuels^x, and Americans thus bear an extraordinary responsibility in combatting climate change; and

WHEREAS, climate change has already resulted in immediate danger to California and Bay Area communities through severe storms, lasting droughts, and increased wildfires^{xi}, and we cannot wait for more devastating floods, heat waves, fires, droughts, rising sea levels, and public health and humanitarian crises that threaten our community before beginning the necessary emergency response; and

WHEREAS, the City of Richmond has often contributed to this crisis and was slow to hearing the voices of those in the Richmond community suffering under environmental injustice, and thus bears a substantial moral and practical responsibility to continue to curtail the use of fossil fuels and support an equitable transition to a stable climate; and

WHEREAS, as outlined in the Richmond Climate Action Plan it is the goal of the City of Richmond to reduce greenhouse gas emissions, create green jobs, and prepare for the impacts of climate change on public health, infrastructure, the economy, ecosystems, and public spaces in our community, and Richmond has repeatedly upheld this mission through resolutions to protect

the environment and divest from extractive industries; and

WHEREAS, the City of Richmond strives to be a leader in combatting climate change, and it is the firm belief of the City Council that the Richmond community and surrounding counties have the insight, drive, capacity and capital to work for environmental justice, and that when we work together across social and city borders we can build transformative networks to combat climate change.

NOW THEREFORE BE IT RESOLVED, that the Council of the City of Richmond declares that we face a Climate Emergency that threatens our city, region, state, nation, civilization, humanity and the natural world; and

BE IT FURTHER RESOLVED, the City of Richmond calls for a Regional Just Transition and Climate Emergency Mobilization Collaborative Effort, inviting all leaders, agencies, and organizations in our regional community to initiate a climate emergency mobilization effort to restore a safe climate; and

BE IT FURTHER RESOLVED, the City of Richmond calls for an emergency mobilization effort to end citywide greenhouse gas emissions, educate residents about climate change, and work to advocate for a mass mobilization at the local, state, national, and global levels; and

BE IT FURTHER RESOLVED, the City of Richmond commits to keeping the considerations of disadvantaged communities central to all climate emergency mobilization planning processes, and to inviting and encouraging these communities to directly advocate for their specific needs and equity in the environmental justice process; and

BE IT FURTHER RESOLVED, the City of Richmond recognizes community environmental justice, economic justice, and racial justice organizations and activists as partners in the Regional Just Transition and Climate Emergency Mobilization Collaborative Effort, and will consult with them at every step of the mobilization process to ensure that efforts are centered in equity and respect for all community members; and

BE IT FURTHER RESOLVED, the City of Richmond calls on the State of California and the United States as a whole to initiate an emergency mobilization effort to mitigate climate change, end greenhouse gas emissions, and immediately initiate an effort to safely draw down carbon from the atmosphere.

I certify that the foregoing resolution was passed and adopted by the Council of the City of Richmond at a regular meeting thereof held July 24, 2018, by the following vote:

AYES:	Councilmembers Beckles, Choi, Martinez, Myrick, Recinos, Vice Mayor Willis, and Mayor Butt.
NOES:	None.
ABSTENTIONS:	None.
ABSENT:	None.

PAMELA CHRISTIAN
CLERK OF THE CITY OF RICHMOND
(SEAL)

Approved:
TOM BUTT
Mayor

Approved as to form:
BRUCE GOODMILLER
City Attorney

State of California	}	
County of Contra Costa	}	: ss.
City of Richmond	}	



I certify that the foregoing is a true copy of **Resolution No. 69-18**, finally passed and adopted by the City Council of the City of Richmond at a regular meeting held on July 24, 2018.

Pamela Christian

Pamela Christian, Clerk of the City of Richmond

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- ⁱ United Nations. (2015). *Paris Agreement under the United Nations Framework Convention on Climate Change*. United Nations.
- ⁱⁱ Hansen, James, et al., Global Temperature in 2017 (18 January 2018).
- ⁱⁱⁱ See, *inter alia*, Henley, B. J., and A. D. King (2017), *Trajectories toward the 1.5°C Paris target: Modulation by the Interdecadal Pacific Oscillation*, *Geophys. Res. Lett.*, 44, 4256--4262, doi: 10.1002/2017GL073480; Jacob, D. , Kotova, L. , Teichmann, C. , Sobolowski, S. P., Vautard, R. , Donnelly, C., Koutroulis, A.G., Grillakis, M. G., Tsanis, I. K., Damm, A., Sakalli, A. and van Vliet, M. T. (2018), *Climate Impacts in Europe Under +1.5°C Global Warming*. *Earth's Future*, 6: 264-285. doi:10.1002/2017EF000710
- ^{iv} William J. Ripple, Christopher Wolf, Thomas M. Newsome, Mauro Galetti, Mohammed Alamgir, Eileen Crist, Mahmoud I. Mahmoud, William F. Laurance, 15,364 scientist signatories from 184 countries; World Scientists' Warning to Humanity: A Second Notice, *BioScience*, Volume 67, Issue 12, 1 December 2017, Pages 1026–1028, <https://doi.org/10.1093/biosci/bix125>
- ^v William J. Ripple, Christopher Wolf, Thomas M. Newsome, Mauro Galetti, Mohammed Alamgir, Eileen Crist, Mahmoud I. Mahmoud, William F. Laurance, 15,364 scientist signatories from 184 countries; World Scientists' Warning to Humanity: A Second Notice, *BioScience*, Volume 67, Issue 12, 1 December 2017, Pages 1026–1028, <https://doi.org/10.1093/biosci/bix125>; Sheppard, K. (2009, December 9). Poor Countries Reject “Suicide Pact”. *Mother Jones*. Retrieved from <https://www.motherjones.com/environment/2009/12/poor-countries-g77-suicide-pact-copenhagen/>
- ^{vi} Bryan, J. (2017, November 16). Climate Change as a Threat Multiplier. *Atlantic Council*. Retrieved from <http://www.atlanticcouncil.org/blogs/new-atlanticist/climate-change-as-a-threat-multiplier>
- ^{vii} Shah Azhar, G. (2017, December 18). Climate change will displace millions in coming decades. Nations should prepare now to help them. *The Conversation*. Retrieved from <http://theconversation.com/climate-change-will-displace-millions-in-coming-decades-nations-should-prepare-now-to-help-them-89274>
- ^{viii} NOAA NCEI U.S. Billion-Dollar Weather and Climate Disasters (2018).
- ^{ix} Environmental and Climate Justice. (n.d.). *National Association for the Advancement of Colored People*. Retrieved from <https://www.naacp.org/issues/environmental-justice/>
- ^x Gillis, J., & Popovich, N. (2017, June 1). The U.S. Is the Biggest Carbon Polluter in History. It Just Walked Away From the Paris Climate Deal. *The New York Times*. Retrieved from <https://www.nytimes.com/interactive/2017/06/01/climate/us-biggest-carbon-polluter-in-history-will-it-walk-away-from-the-paris-climate-deal.html>
- ^{xi} Howard, B. C. (2014, August 12). 5 Key Threats to California From Climate Change. *The National Geographic*. Retrieved from <https://news.nationalgeographic.com/news/2014/08/140812-california-climate-change-global-warming-science/>

HAYWARD CITY COUNCIL

RESOLUTION NO. 19-

Introduced by Council Member _____

RESOLUTION ENDORSING THE DECLARATION OF A CLIMATE EMERGENCY
AND REQUESTING REGIONAL COLLABORATION ON AN IMMEDIATE JUST
TRANSITION AND EMERGENCY MOBILIZATION EFFORT TO RESTORE A SAFE
CLIMATE

WHEREAS, In April 2016 world leaders from 175 countries recognized the threat of climate change and the urgent need to combat it by signing the Paris Agreement, agreeing to keep warming “well below 2°C above pre-industrial levels” and to “pursue efforts to limit the temperature increase to 1.5°C”; and

WHEREAS, The death and destruction already caused by global warming of approximately 1°C demonstrates has increased and intensified wildfires, floods, rising seas, diseases, droughts, and extreme weather; and

WHEREAS, Climate change and the global economy’s conflict with ecological limits are contributing to mass extinction of species, which could devastate much of life on Earth for the next 10 million years; and

WHEREAS, A recent state report, Rising Seas in California, projects a conservative estimate of between 1 and 3.4 feet of sea level rise in the San Francisco Bay by 2100; and

WHEREAS, The range of projections in the state report includes the possibility of up to 10 feet of sea level rise in the San Francisco Bay by 2100, a scenario consistent with rapid Antarctic ice sheet mass loss that would be catastrophic to Hayward and every other coastal community; and

WHEREAS, The United States of America has disproportionately contributed to the climate and ecological crises and has repeatedly obstructed global efforts to transition toward a sustainable economy, and thus bears an extraordinary responsibility to rapidly solve these crises; and

WHEREAS, Restoring a safe and stable climate requires an emergency mobilization to reach zero greenhouse gas emissions across all sectors, to rapidly and safely draw down or remove all the excess carbon from the atmosphere, and to implement measures to protect all people and species from the consequences of abrupt climate change; and

WHEREAS, Justice requires that frontline communities, which have historically borne the brunt of the extractive fossil-fuel economy, participate actively in the planning and implementation of this mobilization effort at all levels of government and that they benefit first from the transition to a renewable energy economy; and

WHEREAS, Fairness demands a guarantee of high-paying, good-quality jobs with comprehensive benefits for all and many other tenets of a Green New Deal effort as the mobilization to restore a safe climate is launched; and

WHEREAS, The term “Just Transition” is a framework for a fair shift to an economy that is ecologically sustainable, equitable and just for all its members; and

WHEREAS, Just transition strategies were first forged by a ‘blue-green’ alliance of labor unions and environmental justice groups who saw the need to phase out the industries that were harming workers, community health and the planet, while also providing just pathways for workers into new livelihoods; and

WHEREAS, Just transition initiatives shift the economy from dirty energy to energy democracy, from funding highways to expanding public transit, from incinerators and landfills to zero waste, from industrial food systems to food sovereignty, from car-dependent sprawl and unbridled growth to smart urban development without displacement, and from rampant, destructive over-development to habitat and ecosystem restoration; and

WHEREAS, Core to a just transition is equity, self-determination, culture, tradition, deep democracy, and the belief that people around the world have a fundamental human right to clean, healthy and adequate air, water, land, food, education and shelter; and

WHEREAS, The City of Hayward’s Climate Action Plan, updated with the adoption of the Hayward 2040 General Plan in 2014, includes GHG emission reduction targets of 61.7% by the year 20430 and 82.5% by 2050 using the year 2005 as the baseline; and

WHEREAS, The City of Hayward can act as a global leader by both converting to an ecologically, socially and economically regenerative economy, and by catalyzing a unified regional just transition and urgent climate mobilization effort.

NOW, THEREFORE, BE IT RESOLVED by the City Council, the City of Hayward declares that a climate emergency threatens our city, region, state, nation, civilization, humanity and the natural world.

BE IT FURTHER RESOLVED, the City of Hayward commits to a citywide just transition and urgent climate mobilization effort to reverse global warming, which, with appropriate financial and regulatory assistance from the County of Alameda and State and Federal authorities, reduces citywide GHG emissions as quickly as possible towards zero net emissions, immediately initiates an effort to safely draw down carbon from the

atmosphere, and accelerates adaptation and resilience strategies in preparation for intensifying climate impacts.

BE IT FURTHER RESOLVED, the City of Hayward commits to educating our residents about the climate emergency and working to catalyze a just transition and urgent climate mobilization effort at the local, state, national, and global levels to provide maximum protection for our residents as well as all the people and species of the world.

BE IT FURTHER RESOLVED, the City of Hayward underscores the need for full community participation, inclusion, and support, and recognizes that the residents of Hayward, and community organizations, faith, youth, labor, business, academic institutions, homeowners' associations and environmental, economic, science-based, racial, gender, family and disability justice and indigenous, immigrant and women's rights organizations and other such allies who will be integral to and in the leadership of the mobilization effort.

BE IT FURTHER RESOLVED, the City of Hayward commits to keeping of the outcomes to vulnerable communities central to all just transition and urgent climate mobilization effort planning processes and invites and encourages such communities to actively participate in order to advocate directly for their needs.

BE IT FURTHER RESOLVED, the City of Hayward joins a nation-wide call for a regional just transition and urgent climate mobilization collaborative effort focused on transforming our region, enacting policies that dramatically reduce heat-trapping emissions, and rapidly catalyzing a mobilization at all levels of government to restore a safe climate.

BE IT FURTHER RESOLVED, the City of Hayward calls on the State of California, the United States of America, and all national and sub-national governments and peoples worldwide to initiate a just transition and urgent climate mobilization effort to reverse global warming by restoring near pre-industrial global average temperatures and greenhouse gas concentrations, that immediately halts the development of all new fossil fuel infrastructure, rapidly phases out all fossil fuels and the technologies which rely upon them, ends human-induced greenhouse gas emissions as quickly as possible, initiates an effort to safely draw down carbon from the atmosphere, transitions to regenerative agriculture, ends the potential for a sixth mass extinction, and creates high-quality, good-paying jobs with comprehensive benefits for those who will be impacted by this transition.

IN COUNCIL, HAYWARD, CALIFORNIA _____, 2019

ADOPTED BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS:
 MAYOR:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ATTEST: _____
 City Clerk of the City of Hayward

APPROVED AS TO FORM:

City Attorney of the City of Hayward



Contra Costa County Board of Supervisors

Subcommittee Report

SUSTAINABILITY COMMITTEE

Meeting Date: 12/09/2019

Subject: RECEIVE REPORT on potential participation in California Electric Vehicle Infrastructure Project and RECOMMEND same to the Board of Supervisors.

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:

In 2018, the County worked with the Contra Costa Transportation Authority (CCTA) to receive a grant from the California Energy Commission (CEC) to develop an Electric Vehicle Readiness Blueprint. The Blueprint was completed in July and adopted by the CCTA Board. The Blueprint provides CCTA, County departments, and jurisdictions within the County data, best practices, and strategies to bring about a broad transition to electric vehicles across the County.

Referral Update:

The CEC administers the CALeVIP program, which is focused on building out electric vehicle (EV) infrastructure across the state. To date the CEC has authorized active projects with incentives totaling \$73.5 million. (See Attachment A.) In 2020, San Mateo and Santa Clara Counties will begin receiving \$60 million over four years through the CALeVIP program. (See Attachment B.) Sonoma and Mendocino Counties in 2020 will launch a program that will receive \$6.75 million over three years. The CEC expects to have up to \$200 million in future funding for the CALeVIP program. The CALeVIP program requires each participating group to provide matching funds.

MCE is interested in pursuing CALeVIP for its jurisdiction (cities and county governments in the counties of Marin, Napa, Solano, and Contra Costa). In a report to the MCE Board of Directors on November 21, 2019, MCE reported that \$30 million is expected to be available through CALeVIP for program year 2021, and that 3-4 proposals will be accepted. The three factors that will influence which proposals are selected will be a technical analysis of infrastructure needs (50%), partnerships and funding match (25%), and compliance with AB 1236, a streamlined EV permitting requirement (25%); County staff are preparing an ordinance to comply with AB 1236 and will bring that to the Board in this month. The MCE staff report is included as Attachment C.

MCE is approaching potential partners across its service territory to ascertain their interest in participating in the CALeVIP program, and their ability to provide matching funds. These potential partners include transit agencies, the Bay Area Air Quality Management District, and

local jurisdictions. The MCE Board on November 21 agreed to provide \$5.5 million in matching funds over four years. \$2.8 million of that amount would be directed to EV charger installations in Contra Costa County. MCE is asking other potential partners to contribute an additional \$5.4 total over this time period for the entire MCE service territory. MCE has informally suggested that the County and CCTA contribute a total of \$2.8 million as well, to match the MCE contribution. It is possible that funds the County has already identified for EV infrastructure might be able to count toward CALeVIP, if those chargers are accessible to the general public.

MCE also is asking potential partners to sign a letter of intent that it will submit to the CEC in January.

Staff recommends that the County participate in CALeVIP. The total amount of funding that would become available for EV infrastructure in Contra Costa County would be \$11.5 million over four years. Staff requests direction from the Board on issues including: signing the Letter of Intent that will be submitted in January and the amount of funding the County might contribute. DCD staff is working with County Counsel to review the implementation services agreement that is part of the program implementation.

Recommendation(s)/Next Step(s):

RECEIVE REPORT on potential participation in California Electric Vehicle Infrastructure Project (CALeVIP), and RECOMMEND to the Board of Supervisors that the County participate in same.

Fiscal Impact (if any):

The County is being asked to contribute matching funds for the CALeVIP program, in an amount that is still being negotiated with MCE, the community choice aggregator that serves Contra Costa County. The amount could be \$1.4 million over four years.

It is possible that funds the County has already identified for EV infrastructure might be able to count toward CALeVIP, if those chargers are accessible to the general public.

Attachments

Attachment A: CALeVIP Projects Funded Through 2019

Attachment B: CALeVIP Project in San Mateo and Santa Clara Counties

Attachment C: Presentation re CALeVIP to MCE Board

CALeVIP Background - Projects

Incentive Project	Launch Date	Counties	Funding	Technologies
Fresno County	December 2017	Fresno	\$4 million	Level 2
Southern California	August 2018	Los Angeles Orange Riverside San Bernardino	\$29 million	DC Fast Chargers
Sacramento County	April 2019	Sacramento	\$15.5 million*	Level 2 & DC fast chargers
Northern California	May 2019	Shasta Humboldt Tehama	\$4 million	Level 2 & DC fast chargers
Central Coast	Launching October 2019	Monterey Santa Cruz San Benito	\$7 million**	Level 2 & DC fast chargers
San Joaquin Valley	Launching December 2019	San Joaquin Kern Fresno	\$14 million	Level 2 & DC fast chargers
Total: \$73.5 million				

*Includes SMUD's \$1.5 million investment that is in the process of being added.

** Includes MBCP's \$1 million investment. MBCP is investing \$1M/year for 3 years.



Peninsula-Silicon Valley Incentive Project May 2020

Proposed Funding

County	Region	DCFC Funding	Level 2 Funding	Total Funding (2-4 years)*	At least 25% in DAC / Low Income
San Mateo	Entire County	\$12M	\$12M*	\$24M*	No
Santa Clara	SVCE**	\$6M	\$6M*	\$12M*	No
Santa Clara	City of San Jose	\$7M	\$7M*	\$14M*	Yes
Santa Clara	City of Santa Clara	\$4M	\$4M*	\$8M*	Yes
Santa Clara	City of Palo Alto	\$1M	\$1M*	\$2M*	No
Total:		\$30M	\$30M*	\$60M*	

*Funding includes pending partnership pledges, subject to Board or Council consideration and approval, which would be added on a fiscal year basis. Funding from pending CCA partnerships (PCE, SVCE, SJCE) will only be available to their customers (Opt-ins)

**Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale, Unincorporated Santa Clara County



CALeVIP and MCE



Agenda

1. Intro
2. Market Primer
3. CALeVIP Program
4. Options for MCE and our Member Communities

Intro



CEC's CALeVIP addresses regional needs for EV charging infrastructure to meet the State's 2025 goals by providing \$30M/yr in grants & creating a community of practitioners to learn from each other.

Market Primer



Veloz is an EV trade & marketing group with public, private, & non-profit representation

EV Charging Levels & Use Case

KNOW YOUR EV CHARGING STATIONS

AC Level One



VOLTAGE

120v 1-Phase AC

AMPS

12–16 Amps

CHARGING LOADS

1.4 to 1.9 kW

CHARGE TIME FOR VEHICLE

3–5 Miles of Range Per Hour

AC Level Two



VOLTAGE

208V or 240V 1-Phase AC

AMPS

12–80 Amps (Typ. 32 Amps)

CHARGING LOADS

2.5 to 19.2 kW (Typ. 7 kW)

CHARGE TIME FOR VEHICLE

10–20 Miles of Range Per Hour

DC Fast Charge



VOLTAGE

208V or 480V 3-Phase AC

AMPS

<125 Amps (Typ. 60 Amps)

CHARGING LOADS

<90 kW (Typ. 50 kW)

CHARGE TIME FOR VEHICLE

80% Charge in 20–30 Minutes

Barriers to EV Adoption still exist

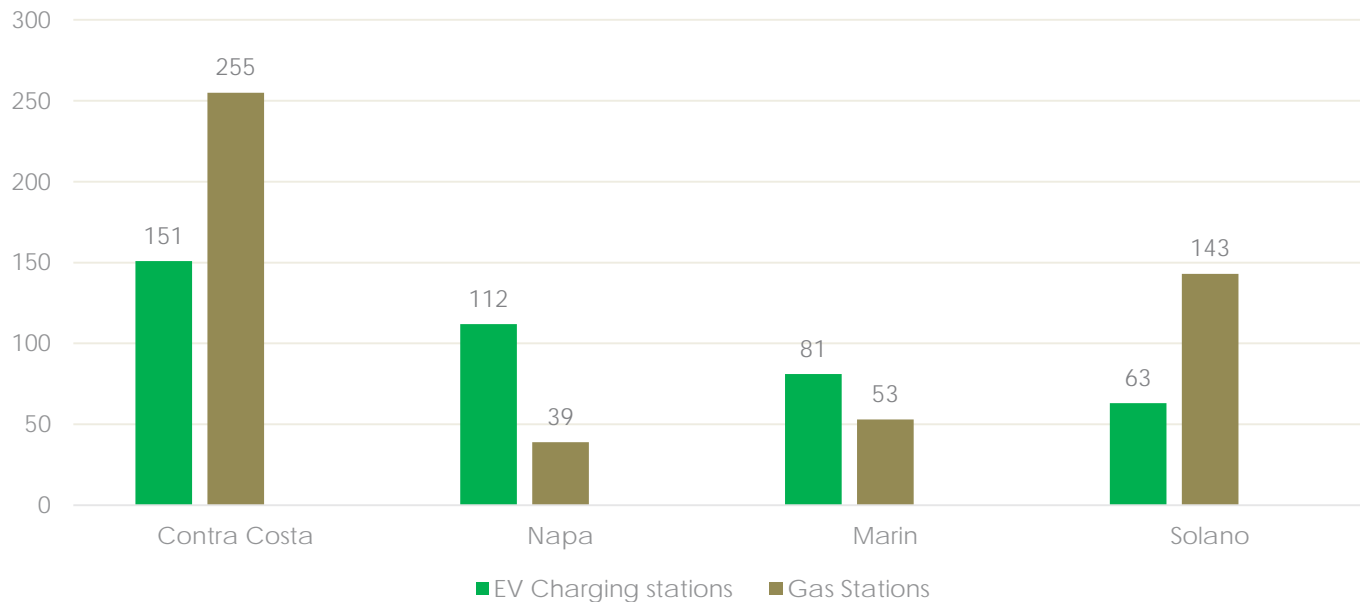
1. Too Expensive – 51%
2. Unable to charge away from home – 48%
3. Unable to charge at home – 30%
4. Technology is not dependable – 28%
5. Not available in vehicle segment – 24%
6. Poor performance – 24%
7. Other – 17%

Barriers to EV Adoption still exist

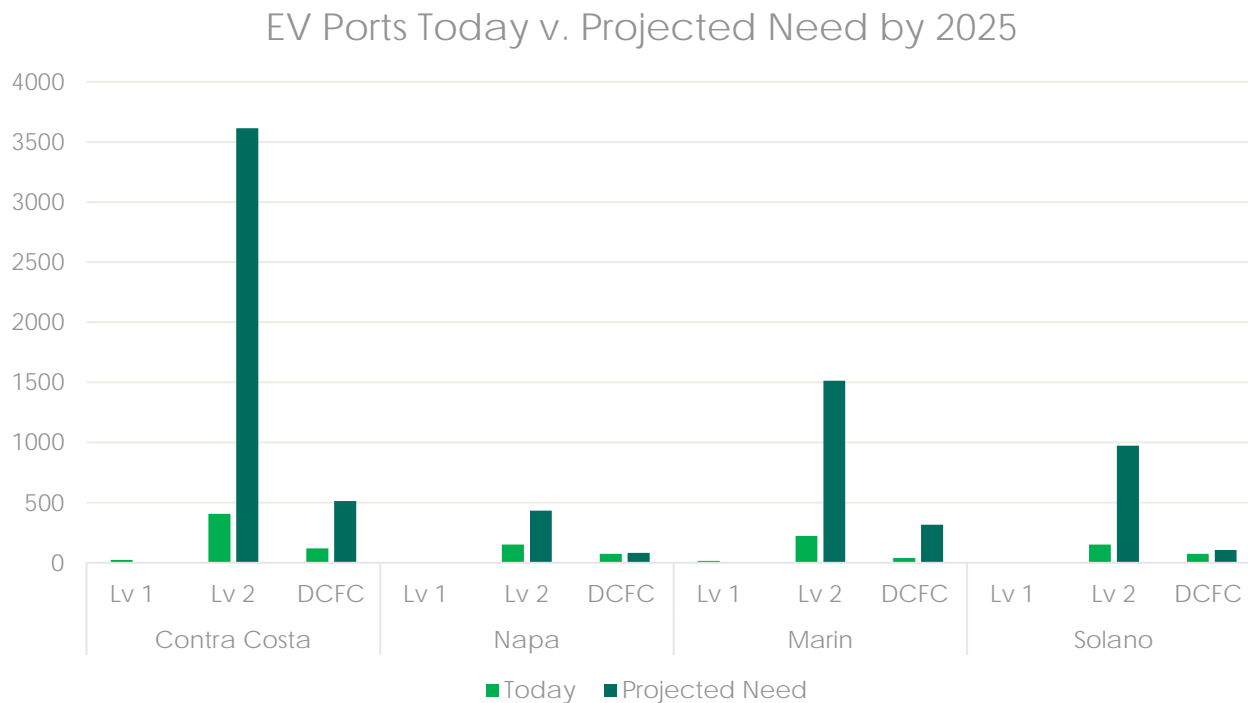
1. Too Expensive – 51%
- 2. Unable to charge away from home – 48%**
- 3. Unable to charge at home – 30%**
4. Technology is not dependable – 28%
5. Not available in vehicle segment – 24%
6. Poor performance – 24%
7. Other – 17%

Access to EV Charging

Current Availability of EV Charging
compared to Gas



Mind the Gap, Close the Gap



CALeVIP

- \$30M for Program Year 2021
- 3-4 Proposals will be accepted for 2021
- “non-competitive”
- 3 variables in selection:
 - EVI-Pro Analysis (50%)
 - Partnerships & Funding Match (25%)
 - AB1236 Compliance (25%)

Timeline

1. November 2019: Partners Identified
2. Feb 14, 2020: Letter of Intent (LOI) signed w/ non-binding funding commitments
3. March 27, 2020: Project Customization Due
4. May 8, 2020: SOW, Budget, & Contract finalized
5. June 2020: CEC selects 2021 Projects
6. August 2020: Public Workshop & Comment Period starts
7. December 2020: Project Launch

Program Benefits

- Match funding, at least 1:1
- Incentives cover wide range of customer costs
- Bucket funds: CCA customers, Counties
- Designated Implementer
- Customer friendly user experience
- Up to 7% of funds → outreach & education

CALeVIP v. MCEv Charging

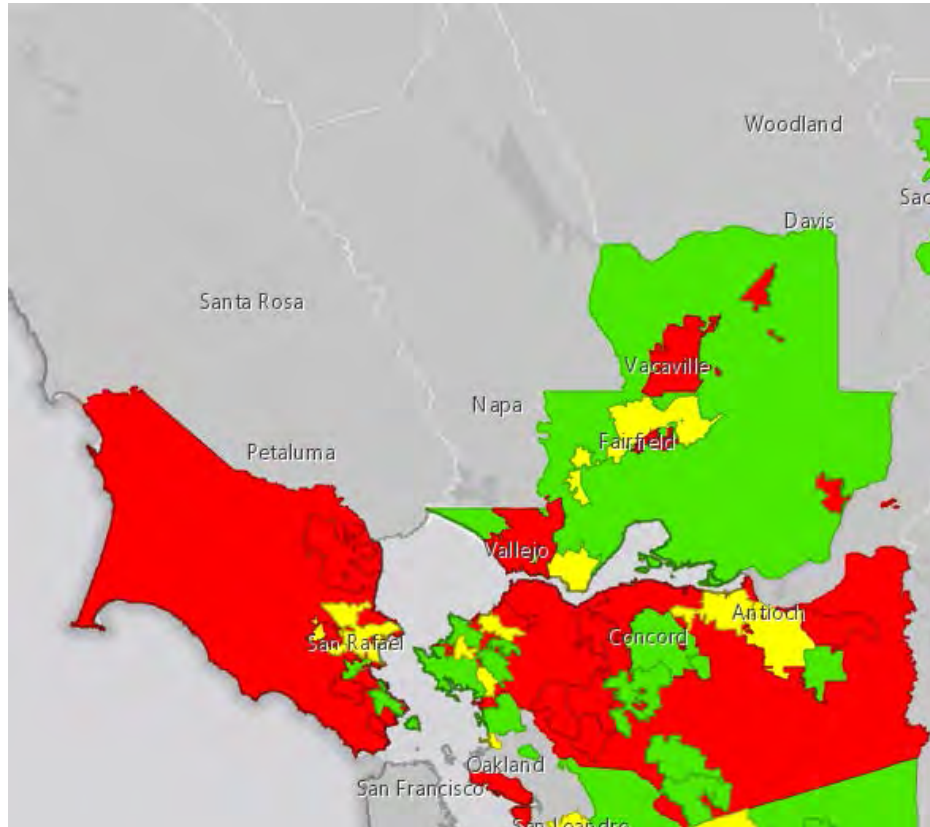
Program	Level 2	DCFC	Implementer
CALeVIP	Yes – up to \$5K	Yes – up to \$55K	CSE
MCEv Charging	Yes – up to \$3K	No	MCE

To date, MCE customer's average cost/per Level 2 port: \$5,738. MCE rebate covers ~47% of project costs.

CCAs Committed to CALeVIP

CCA	Launch Date	CCA Funding	CALeVIP	Length of Term
MBCP	Oct '19	\$3M	\$4M	3 years
SCP	Oct '20	\$1.5M	\$5.1M	3 years
PCE	May '20	\$12M	\$12M	3 years
SVCE	May '20	\$12M		3 years
SJCE	May '20	\$4M	\$10M	3 years

AB 1236 Compliance



Red= hasn't passed an ordinance

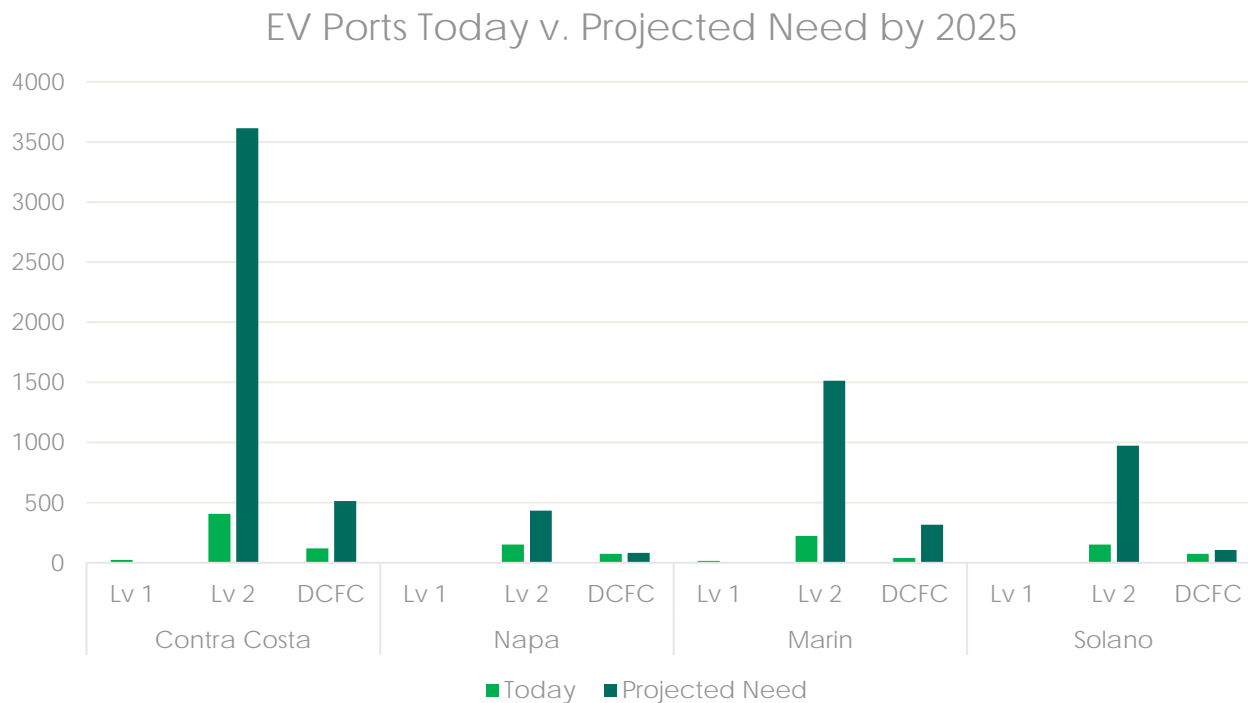
Yellow= passed an ordinance, but not implemented

Green= fully compliant

Partnerships & Commitments

Partner	Engaged	LOI Support	Funding Support
BAAQMD	Yes	Yes	(in kind)
MTC	Yes	Yes	(in kind)
TAM	Yes	Yes	Yes - Verbal
County of Marin	Yes	Yes	Tbd
CCTA	Yes	Yes	Yes - Verbal
Contra Costa County	Yes	Yes	Yes - Verbal
NVTA	Yes	Yes	Tbd
Napa County	Yes	Yes	Tbd
SCTA	Yes	Yes	Tbd
Solano County	Scheduled	--	--

Mind the Gap, Close the Gap



CALeVIP and MCE + 4 Counties

	Fully Fund the L2 Gap	Fully Fund DCFC Gap
Contra Costa	\$15M	\$13.3M
Marin	\$6.4M	\$14.6M
Solano	\$3.8M	n/a
Napa	\$1.5M	n/a

CALeVIP and MCE + 4 Counties

	Fully Fund the L2 Gap	Fully Fund DCFC Gap	Fund 50% of L2	Fund 30% of DCFC	Total CALeVIP Project
Contra Costa	\$15M	\$13.3M	\$7.5M	\$4M	\$11.5M
Marin	\$6.4M	\$14.6M	\$3.2M	\$4.4M	\$7.6M
Solano	\$3.8M	n/a	\$1.9M	n/a	\$1.9M
Napa	\$1.5M	n/a	\$750K	n/a	\$750K

CALeVIP and MCE + 4 Counties

	Fund 50% of L2	Fund 30% of DCFC	Total CALeVIP Project	Expected Match from Partners
Contra Costa	\$7.5M	\$4M	\$11.5M	~\$5.75M
Marin	\$3.2M	\$4.4M	\$7.6M	~\$3.8M
Solano	\$1.9M	n/a	\$1.9M	~\$1M
Napa	\$750K	n/a	\$750K	~\$375K

Total Expected
Match:

\$10.9M

Next Steps

- Submit a LOI that covers MCE's entire service area for a 4-year period
- MCE's non-binding commitment: \$1,375,000/year or \$5.5M total.
- Partners contribute the other \$5.4M
- Secondary option enclosed in LOI: CALeVIP match for Contra Costa County & Napa County + self-funded (at a lower amount) by MCE for Marin and Solano Counties

Thank You!

Brett Wiley, Customer Programs Manager





Contra Costa County Board of Supervisors

Subcommittee Report

SUSTAINABILITY COMMITTEE

Meeting Date: 12/09/2019

Subject: RECEIVE REPORT on modifications to County Administrative Bulletins to reflect greater reliance on electric vehicles in the County fleet.

Submitted For: Brian M. Balbas, Public Works Director/Chief Engineer

Department: Public Works

Referral No.: N/A

Referral Name: N/A

Presenter: Joe Yee, Deputy Director, Public Works

Contact: Joe Yee (925)313-2104

Referral History:

The Sustainability Committee throughout 2019 has been discussing strategies for increasing the number of cars in the County fleet that are all electric, and installing more electric vehicle chargers at County facilities. At the September 23, 2019 meeting of the Sustainability Committee, the Committee directed staff to make final the changes to the Administrative Bulletins on fleet to reflect greater reliance on electric vehicles, and report back at the next meeting.

Referral Update:

Staff has been working with the County Administrator's Office to publish the updated Administrative Bulletins.

Recommendation(s)/Next Step(s):

RECEIVE REPORT on modifications to County Administrative Bulletins to reflect greater reliance on electric vehicles in the County fleet.

Fiscal Impact (if any):

None.

Attachments

No file(s) attached.



Contra Costa County Board of Supervisors

Subcommittee Report

SUSTAINABILITY COMMITTEE

Meeting Date: 12/09/2019

Subject: RECEIVE REPORT on Building Electrification and PROVIDE DIRECTION
re: same.

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

Department: Conservation & Development

Referral No.: N/A

Referral Name: N/A

Presenter: Demian Hardman, DCD

Contact: Jody London (925)674-7871

Referral History:

On September 23, 2019, the Sustainability Committee requested that staff provide a report on building electrification, including its benefits to existing homeowners. Building electrification has also been an item of recent interest by the Sustainability Commission and has been identified as a potential strategy to include in the update to the County's Climate Action Plan.

Referral Update:

Department of Conservation and Development (DCD) staff has completed some initial research on various jurisdictions throughout the Bay Area that have adopted new building electrification ordinances for new construction. Attached are a list of jurisdictions throughout the State that have either adopted all-electric or electric-preferred ordinances. Also included are reports from the cities of Oakland, San Jose, and San Mateo that provide some information on the benefits of building electrification.

Recommendation(s)/Next Step(s):

RECEIVE REPORT on benefits of building electrification and PROVIDE DIRECTION as appropriate.

Fiscal Impact (if any):

N/A

Attachments

[Jurisdiction Building Electrification Matrix](#)

[City of Oakland Memo](#)

[City of San Jose Staff Report](#)

[San Mateo Building Electrification Agenda Item](#)

Building Electrification

Active Reach Code Local Government Efforts

Building Decarbonization Coalition Code Comparison Matrix as of 11/25/2019

<http://www.buildingdecarb.org/active-code-efforts.html>

Jurisdiction	Status	Approach			Systems											Add-Ons			
		Natural Gas Infrastructure Ban	All-Electric Reach	Electric-Preferred	Whole Building	Water Heating	Space Heating	Low Rise Residential	City-Owned Properties	High Rise Residential	Hotel	Retail	Office	Restaurant	Life Sciences	Additional Solar	Electric Vehicles	Low Carbon Concrete	Natural Gas In Lieu Fee
Alameda	Approved	X			X				X										
Berkeley	Second Reading	A		B	X			X	A	X	X	A	A	A	A		X	X	
Brisbane*	Second Reading		X		X			X	X	X	X	X	X	X					
Carlsbad	Approved		X			X		X								X			
Davis	Approved			X	X			X											
Marin County	Approved			X	X			X	X	X	X	X	X	X	X		X		
Menlo Park*	Approved		X			X	X	X	X	X	X	X	X	X		X	X		
Mill Valley	Second Reading			X	X			X		X							X		
Milpitas	Second Reading			X	X			X	X	X	X	X	X	X	X				
Morgan Hill	Approved	X			X			X	X	X	X	X	X	X	X				
Mountain View*	Approved		X		X			X	X	X	X	X	X	X		X	X		
Pacifica	Second Reading		X			X	X	X	X	X	X	X	X	X		X	X		
Palo Alto*	Second Reading		A	B	X			A	X	B	B	B	B	B	B		X		
Saratoga	Second Reading		X			X	X	X	X	X	X	X	X	X	X		X		
San Jose*	Approved	A		B	X			A	X	B	B	B	B	B	B	B	X		
San Luis Obispo	Second Reading			X	X			X	X	X	X	X	X	X	X	X			X
San Mateo	Approved			X	X			X					X			X	X		
Santa Monica	Approved			X	X			X	X	X	X	X	X	X	X	X			
Santa Rosa	Approved		X		X			X											
Windsor	Approved		X		X			X											

*City Council opted to go beyond staff recommendation

A and B indicate different approaches as applied to specific building types.

Building Electrification

Active Reach Code Local Government Efforts

Building Decarbonization Coalition Code Comparison Matrix as of 11/25/2019

<http://www.buildingdecarb.org/active-code-efforts.html>

All-electric only:

- [Berkeley](#)
- [Brisbane](#)
- [Menlo Park^](#)
- [Morgan Hill](#)
- [Mountain View](#)
- [Pacifica^](#)
- **Palo Alto**
- [San Jose](#)
- [Santa Rosa](#)
- **Saratoga**
- [Windsor](#)

^Electric Clothes Drying, Space and Water Heating Required, Non-Residential All Electric Requirement

Electric-Preferred:

- [County of Marin](#)
- [Davis](#)
- [Mill Valley](#)
- **Milpitas**
- [San Jose](#)
- [San Mateo](#)
- [San Luis Obispo](#)
- [Santa Monica](#)

Other Approaches:

- [Carlsbad \(Electric Water Heating\)](#)
- [Sunnyvale \(Density Bonus\)](#)
- [Oakland \(Electric Vehicles\)](#)



INTER OFFICE MEMORANDUM

TO: ECAP ad hoc Community Advisory Committee

FROM: Daniel Hamilton

SUBJECT: Building Electrification Information

DATE: July 23, 2019

Foundation: IPCC Report for Policy Makers: Climate change caused by greenhouse gas emissions is significantly impacting the livability of the planet, and urgent action is needed to ensure the long-term viability of cities and nations. [The 2018 IPCC report](#) finds that limiting global warming to 1.5°C would require “rapid and far-reaching” transitions in land, energy, industry, buildings, transport, and cities. The majority of reductions in GHG emissions must occur by 2030 to avoid the most serious impacts of climate change. Globally, this translates to a reduction in emissions of 45% between 2010 and 2030.

In addition to the global analysis above, the State of California, through the California Energy Commission (CEC), has provided strong evidence of the need for building electrification to be a foundational piece of the State’s climate change strategy. The CEC has published reports that all-[electric building requirements are beneficial](#) to all utility customers, will improve the electricity grid, and significantly improve both GHG reductions and resident health. [Multiple long-term strategy reports](#) from the CEC indicate that all-electric buildings will be required Statewide in the future, and that leading cities are needed to demonstrate the effectiveness of the approach.

GHG Emissions in Oakland: Across the city, [the majority of emissions](#) in Oakland come from the burning of gasoline and diesel to power vehicles, as well as burning natural gas to provide heating and cooking for homes and businesses. With the creation of East Bay Community Energy, Oakland is now served with electricity that is more than 85% carbon free; expected to reach 100% carbon free within the next 10 years. With an abundant supply of clean green electricity, transitioning all remaining fossil-fuel based energy systems to electric alternatives becomes the City’s most impactful and cost-effective strategy for meeting the deep GHG reductions necessary to meet this global challenge and protect our community from deeper impacts of climate change. For newly constructed buildings, this memo provides a summary of the analysis demonstrating that all-electric buildings are a viable policy solution today.

Cost Effectiveness: Staff and stakeholders have been conducting analysis over the past several years to identify the most cost-effective ways to transition these building and transportation systems to electric alternatives. Working with the City, Bloomberg Associates prepared a [Cost Effectiveness Study for Reducing GHG Emissions in Oakland](#). This study concluded that electrifying the buildings and vehicles in Oakland are both cost-effective and critical items for the City to pursue, particularly the electrification of newly constructed buildings in the near term. This study is the most robust local government analysis ever undertaken to ascertain the costs

and benefits of such a policy, and conclusively demonstrates that Oakland is a prime location for requiring all newly constructed buildings to utilize electricity for all energy systems.

In addition to the Bloomberg Analysis, the Rocky Mountain Institute, a think tank focused on energy issues, [prepared an analysis of the costs and benefits of electrifying buildings](#) for four cities, including Oakland. This analysis came to a similar conclusion that all-electric buildings in Oakland are both cost-effective to build and to operate. The report concluded that the City should “Recognize and encourage all-electric new construction buildings as both a cost-reducing and carbon-reducing measure through new building codes”. The report also focused on the benefits of ending the construction of gas infrastructure in new residential buildings, documenting that the City should “Limit or stop further expansion of the natural gas distribution system to service more homes. Electric space and water heating is likely to provide the same service to customers for less cost and carbon emissions, and avoid the risk of stranded gas distribution assets”.

Health Benefits: Requiring all-electric buildings not only reduces the cost of both construction and lowers utility bills for residents and businesses, there are also significant health benefits for people using these buildings. Research into the impacts of natural gas systems in homes has been occurring across the medical and community health fields, documenting significant risks and impacts associated with natural gas cooktops, leaking natural gas from appliances, and poorly ventilated kitchens. Studies by [Lawrence Berkeley National Laboratory](#), the [National Institutes of Health](#), [California Energy Commission](#), and [Johns Hopkins University](#) have documented unhealthy levels of nitrous oxides (NOx) in homes with gas cooktops, particularly noting the disproportionately negative impact on inner city African American children. The Johns Hopkins University study calls for interventions to reduce exposure to natural gas to reduce asthma symptoms and morbidity in African American children, a critical policy consideration in considering whether to require gas-free buildings.

Regional and National Action to Electrify Buildings: Oakland is among more than 50 cities [actively considering policies](#) to reduce or eliminate the use of natural gas systems in buildings. In July 2019, the City of Berkeley became the first City to [ban natural gas systems](#) in all new construction, garnering a unanimous vote of Council following public support for the policy from residents, developers, the California Energy Commission, and PG&E. More than 30 cities in the Bay Area, in addition to cities along the central coast of California and in the Los Angeles area, have indicated that they are actively considering building codes that will eliminate natural gas systems from some or all building types. East Bay Community Energy (EBCE), in coordination with multiple other community choice energy providers, has provided cost-effectiveness studies for cities to use in considering this policy solution. EBCE has provided the City of Oakland with [analysis of all-electric buildings](#) in our climate zone, concluding that all-electric buildings are cheaper to build and will result in lower utility bills for all building types. This analysis was done in coordination with the standards set forth by the California Energy Commission, and can serve to meet the regulatory requirements of any Council action to eliminate natural gas options in newly constructed buildings. Similar studies have been completed for the peninsula and south bay, documenting similar results. These combined

analyses will enable dozens of Bay Area cities to consider all-electric building codes during the fall and winter of 2019.

Technologies for All Electric Buildings: Developers and contractors, as well as interested residents, have sought to learn whether there are appropriate technologies to replace the natural gas systems. Developers tend to focus mostly on replacements for gas furnaces, while residents tend to care most about gas cooktops. Staff in Oakland and elsewhere, including PG&E and other utilities, have been preparing materials to help interested parties learn about the wide range of technologies currently available for use in all-electric buildings. [Electric heating systems](#) such as heat pumps are available from many manufacturers, in sizes and configurations for any residential or commercial building type. Cooking systems for both homes and businesses have a variety of options, including [induction cooktops for homes](#), that are not only more energy efficient, but also far superior in cooking times and temperature control to natural gas cooktops. Working with other cities and industries, the Building Decarbonization Coalition has helped to demonstrate that all residential, commercial, and specialty building types can be designed as all-electric without any disruption to the ways residents and businesses currently use their homes and offices.

Conclusions: The City of Oakland is in an excellent position to reduce GHG emissions, decrease construction costs, lower utility bills, and improve the health of all residents through the elimination of natural gas systems in newly constructed buildings in Oakland. There is sufficient evidence of the cost effectiveness of the approach, market availability of technologies, and understanding within the impacted industries to ensure that the policy can be implemented as intended. Following the recent natural gas ban in Berkeley, multiple other cities in our region will be considering similar policies to this for these reasons. The cumulative impact of these policies will further aid rapid market transformation in the construction industry, and help Oakland take another major step forward in protecting the community from climate impacts.

City staff are conducting workshops with relevant stakeholders throughout the summer, and the proposed all-electric building code is tentatively scheduled to be publicly considered by the Community and Economic Development Committee on October 22nd. Full City Council consideration could then occur as early as November 5th.

Sincerely,

Daniel Hamilton
Oakland Public Works
Acting Manager, Environmental Services



Memorandum

TO: TRANSPORTATION AND
ENVIRONMENT COMMITTEE

FROM: Kerrie Romanow
Rosalynn Hughey

**SUBJECT: BUILDING REACH CODE
FOR NEW CONSTRUCTION**

DATE: August 21, 2019

Approved

Date

8-30-19

RECOMMENDATION

Accept the report and refer to the full City Council on September 17 for consideration of:

1. Approval of an Ordinance amending various sections of Title 24 (Technical Codes) to adopt Provisions of the 2019 California Green Building Standards and California Building Energy Efficiency Standards with certain exceptions, modifications, and additions which serve as a reach code to increase building efficiency, mandate solar readiness, and increase requirements related to electric vehicle charging stations; and
2. Acceptance of findings related to local modifications based upon local geographical, topographical, and climatic conditions and cost effectiveness; and
3. Authorization for the City Manager to submit a reach code submittal package to the California Energy Commission for its approval as required by law.

OUTCOME

City Council approval of a San José Reach Code Ordinance for new construction will further community-wide progress on meeting the goals of the following Climate Smart San José strategies:

- Strategy 1.1: Transition to a renewable energy future
- Strategy 2.2: Make homes efficient and affordable for our residents
- Strategy 2.3: Create clean, personalized mobility choices
- Strategy 3.2: Improve our commercial building stock

EXECUTIVE SUMMARY

The effects of climate change are devastating and increasing. To do its part to reduce greenhouse gas emissions and address climate change, the City adopted Climate Smart San José (“Climate Smart”) which sets aggressive goals around electric vehicle (EV) adoption, solar installation, and zero net energy/carbon (ZNE/ZNC) buildings. The proposed reach code is designed to lower and eventually eliminate greenhouse gas (GHG) emissions from new construction.

The California Energy Commission (CEC) updates the California Building Energy Efficiency Standards every three years. The 2019 California Code will go before City Council in October 2019 for approval, with an effective date of January 1, 2020. Jurisdictions may also adopt “reach codes” that require development projects to exceed the minimum Building Energy Efficiency requirements. A proposed reach code would need to be approved by City Council in September 2019 in order to submit to the CEC in time for an effective date of January 1, 2020, corresponding with the effective date of the new 2019 California Code.

As part of its American Cities Climate Challenge (ACCC) commitment, the City agreed to pursue adoption of a “reach code” for new residential and commercial construction, aligned with Climate Smart goals. To this end, the Environmental Services Department (ESD) and Planning, Buildings and Code Enforcement (PBCE) Departments co-lead the development of the proposed reach code with the New Buildings Institute (NBI), a technical partner that specializes in building codes and ZNE buildings. Staff reached out to over 250 stakeholders and conducted seven public meetings and several individual meetings to get community and developer input on a potential reach code. Several considerations influenced the scope of the proposed reach code including: input from various City departments; input from external stakeholders; impact on GHG emissions; the economic impact on development projects; regional reach code efforts; and alignment with the State’s longer term decarbonization efforts.

The proposed reach code will apply only to new residential and non-residential construction in San José. It incentivizes all-electric construction, a cost-effective construction option for all building types. It also requires increased energy efficiency and electrification-readiness for those choosing to maintain the presence of natural gas, a fossil fuel and powerful GHG, and construct mixed-fuel buildings. It requires that non-residential construction include solar readiness. It also requires additional EV charging readiness and/or electric vehicle service equipment (EVSE) installation for all development types.

The reach code will provide many benefits including: significant GHG emissions reductions; financial benefits related to lower cost electric construction, facilitate the transition to EVs, and avoidance of significant EV charging retrofit costs; and public health benefits by reducing both indoor and outdoor air pollution. All of these benefits are specifically pertinent to San José’s low-income communities, which are inordinately impacted by the negative environmental and financial impacts associated with natural gas in buildings and gasoline-powered vehicles.

BACKGROUND

The climate challenges of this century directly affect the quality of life of all residents in San José. Over the past two years, across California, the United States, and worldwide, there have been more frequent and disruptive flooding events, degraded air quality from massive wildfires, and record-breaking extreme heat events. San José has been no stranger to such occurrences. Coyote Creek flooded in February 2017, affecting adjacent neighborhoods and causing an estimated \$73 million in property damage to San José homes and businesses, and forcing 14,000 residents to evacuate, some even by boat¹. Flooding and displaced residents, particularly in coastal zones, may also become a familiar site, according to a new study that declared tens of thousands of Bay Area homes are at risk of flooding from rising sea levels by 2050². This summer, the world experienced the hottest month (July 2019) ever recorded in human history³. Furthermore, the Bay Area experienced a record heat wave first in June 2019⁴ and then again in July 2019⁵, a trend that seems to be exacerbating rather than diminishing, considering that 2018 was previously dubbed the hottest year on record worldwide⁶. San José has been impacted by these events which affect the health of residents and visitors, the safety of neighborhoods, the success of businesses and institutions, and the viability of local plants and wildlife.

In response to the experienced and potential impacts of climate change, the City of San José was one of the first U.S. cities to adopt a Paris Climate Agreement-aligned climate action plan, Climate Smart San José. Approved by City Council in February 2018, Climate Smart includes the following goals and milestones to ensure the City can reduce GHG emissions on target:

- All new residential (by 2020) and commercial (by 2030) buildings as ZNE^{i,7}, in alignment with the State of California's ambitious ZNE goals⁸.
- 100 percent carbon-free base power from San José Clean Energy (SJCE) by 2021.
- 1 GW of solar installed in San José by 2040.
- 61 percent of passenger vehicles are EVs by 2030.
- Reimagining the "Good Life 2.0," that harnesses the benefits of sustainable actions and improves our quality of life.

In 2018, the California Legislature passed Senate Bill 1477 with strong support from the City. SB 1477 authorizes \$50 million in Cap and Trade funds for two pilot programs, the Building Initiative for Low Emission Development (BUILD) and Technology and Equipment for Clean Heating (TECH) programs, which will enable California to lead the way toward decarbonization of new and existing building stock. The California Public Utilities Commission is currently in proceedings to establish the parameters for providing this funding throughout California.

The CEC updates the California Building Energy Efficiency Standards every three years, in alignment with the California Code of regulations. Title 24 Parts 6 and 11 of the California Building Energy Efficiency Standards and the California Green Building Standards Code

ⁱ As defined in Climate Smart, a ZNE building is one which is zero net carbon emissions, meaning that it would need to be all-electric with a clean energy source (i.e. via the grid and/or on-site renewable energy).

(CALGreen) address the need for regulations to improve energy efficiency and combat climate change.

California State law and the Building Energy Efficiency Standards require new construction to meet certain energy efficiency and renewable energy criteria which is documented in the Building Code. There are two pathways, prescriptive and performance set forth in Section 100.0(e)2 of Part 6, to demonstrate compliance with the Building Code. The prescriptive path relies on employing specific measures to achieve compliance whereas the performance pathway is based on an energy budget allowance.

The California Building Energy Efficiency Standards apply to “residential” and “non-residential” building types. The residential category covers low-rise residential buildings with three or fewer habitable stories. The non-residential category covers all non-residential occupancies, as well as hotels/motels and high-rise residential buildings with four or more habitable stories. The 2019 California Building Energy Efficiency Standards includes some substantive changes to increase the energy efficiency of buildings and encourage the installation of solar and heat pump water heaters in low-rise residential buildings. PBCE staff will separately present the 2019 California Codes, with any related amendments, for Council adoption in October 2019 in order to allow for a January 1, 2020 implementation date.

Jurisdictions also have the authority to adopt “reach codes” that require development projects to exceed minimum requirements established in the 2019 California Energy Code’s Building Energy Efficiency Standards (Title 24, Part 6). In order to be approved by the CEC, a reach code must: 1) be at least as stringent as the statewide code; 2) be cost effective as defined by standards set by the CEC; 3) be submitted to and approved by the CEC; and 4) not preempt federal appliance regulations.

Nineteen cities, including eight in the Bay Area (e.g. San Francisco, Oakland, and Fremont), adopted reach codes in the current (2016) code cycle to encourage or require building electrification, increased building energy efficiency, the installation of electric vehicle infrastructure (EVCI), and/or solar installation. According to the CEC, over 50 cities are considering reach codes, with a focus on encouraging or requiring building and transportation electrification, for implementation in the 2019 building code cycle. In the Bay Area alone, more than 45 jurisdictions are pursuing a reach code including eight in Alameda County, 19 in San Mateo County, 14 in Santa Clara County, the City and County of San Francisco, and five in Sonoma County. Many cities, including San José, have been coordinating to support and encourage consistency of reach codes, particularly among those located in the same geographic area.

At the February 26, 2019 City Council meeting, City Council approved the City’s scope of work in its ACCC memorandum of understanding, which included a support package of in-kind services valued at \$2.5 million over a two-year period concluding at the end of 2020. As part of its ACCC commitment, the City agreed to pursue adoption of a reach code for EV and solar-readiness in new residential and commercial construction, aligned with Climate Smart goals. In

order to advance this initiative, the City has partnered with the NBI through the ACCC to facilitate the reach code development process, including stakeholder engagement.

In May 2019, staff included an update on the City's reach code initiative at the Transportation and Environment (T&E) Committee meeting (May 6, 2019) and a City Council meeting (May 21, 2019) as part of the Climate Smart semi-annual update. In addition, ESD and PBCE staff presented an update on the reach code work completed to-date at the June 24, 2019 Community and Economic Development Committee meeting.

ANALYSIS

There are several factors influencing: 1) whether San José should adopt a reach code, 2) what San José's reach code should consist of, and 3) when San José should adopt a reach code. The following sections provide context informing staff's proposed reach code.

Greenhouse Gas Emissions Reduction Benefits

One of the reasons why moving away from natural gas would have such a large impact on greenhouse gas emissions in San José is because natural gas is made up primarily of methane, a super pollutant that is 84 times more effective at trapping heat in the atmosphere than CO₂ over the short term⁹.

In order to further San José's Climate Smart GHG reduction goals, new construction in San José will need to be designed to exceed the requirements of the 2019 Building Energy Efficiency Standards and CALGreen Building Standards. Based on the City's latest five-year development forecast¹⁰, San José can conservatively expect approximately 350 single-family new residences, 2,400 new multi-family residences, and 2.4 million additional square feet of commercial/industrial construction per year over the next three years. If these buildings use natural gas, an estimated increase of 897,000 tons of greenhouse gas emissions would result over the expected life of the buildings (50 years for residential and 50 years for commercial). This equates to almost 300,000 Metric Tons of CO₂ emissions per year, equivalent to 1.7 trillion car miles¹¹, as shown in Table 1 below.

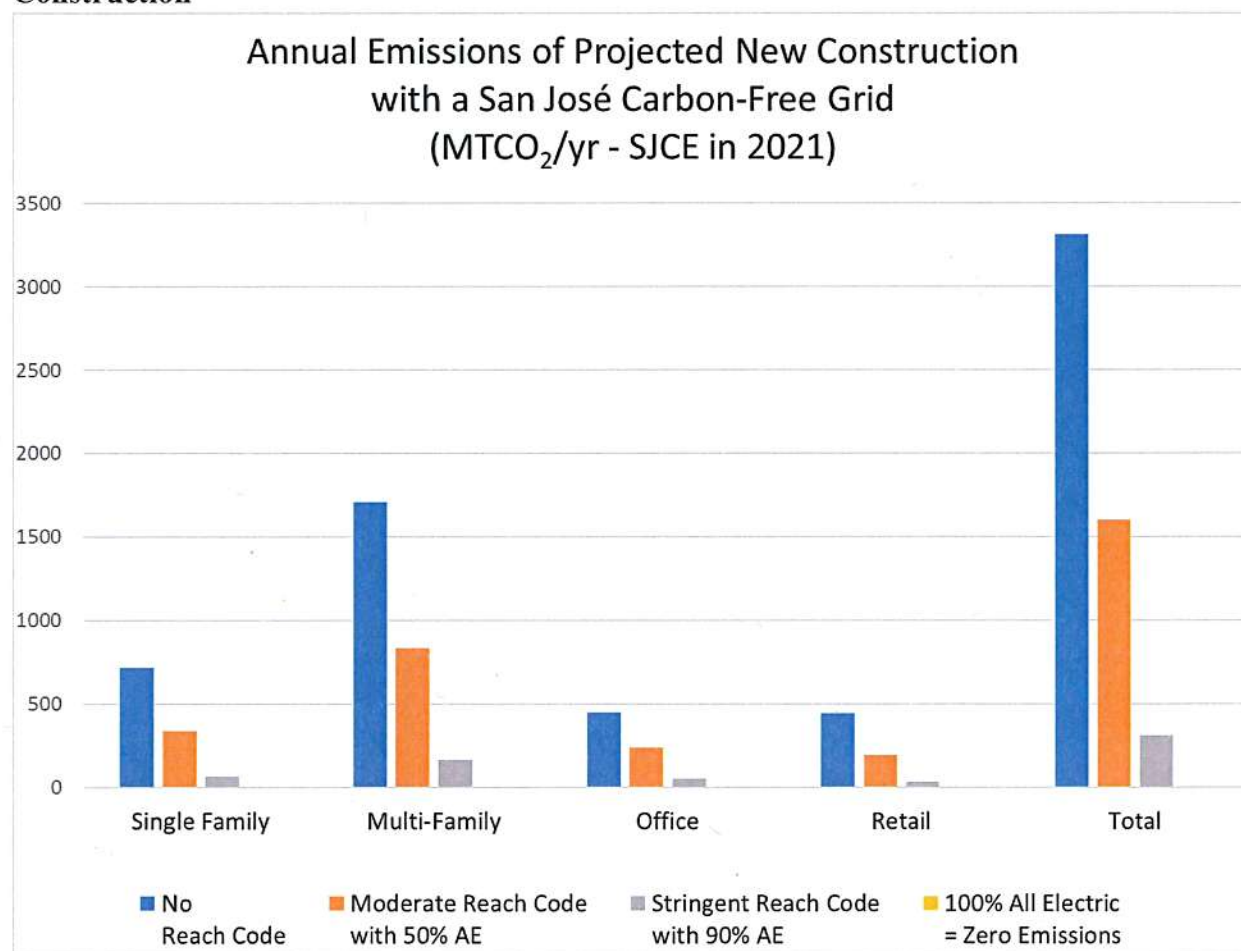
Table 1. Projected New Construction Development in San José and CO₂ Impact¹⁰

Building Type	Sq. Ft.	CO₂/Yr.	x	Units/Yr.	x	Years in service	Total tons of CO₂
Single-Family	2,700	2 tons	x	350	x	50	105,000 tons
Multi-Family	1,000	1 ton	x	2400	x	50	360,000 tons
Commercial/ Industrial	100,000	120 tons	x	24	x	50	432,000 tons
						Total CO₂:	897,000 tons

Graph 1 compares the potential GHG emissions offset by San José's proposed reach code when compared with the Title 24 Base Code (based on the development forecast as shown in Table 1).

The graph looks at the emissions impact for each building category for mixed fuel and all-electric buildings. It is important to note that this graph assumes 100 percent of electricity is carbon neutral and begins in 2021, in accordance with SJCE's scheduled delivery plans. The emissions offset by mixed fuel buildings come from increased efficiency requirements as required by the reach code. The graph shows emissions if no reach code is implemented (blue), if 50 percent (orange) and 90 percent (gray) of all new construction is all-electric. Emissions from all-electric buildings are zero or negligible and therefore are not shown. The emissions impact of the proposed reach code will largely depend on how much it incentivizes all-electric new construction, but it is estimated that staff's recommendation will reduce emissions from new construction to at least 1,500 MTCO₂/year.

Graph 1: Carbon Impact from Reach Code in Mixed Fuel vs All-Electric New Construction¹²



Based on the City and State goals to reduce GHG emissions, electrification retrofits will be necessary and ultimately required for existing buildings. Addressing electrification now in new buildings avoids hardships and retrofit costs for building owners in the future and acknowledges the GHG impacts of taking no action, particularly considering the benefits of building and

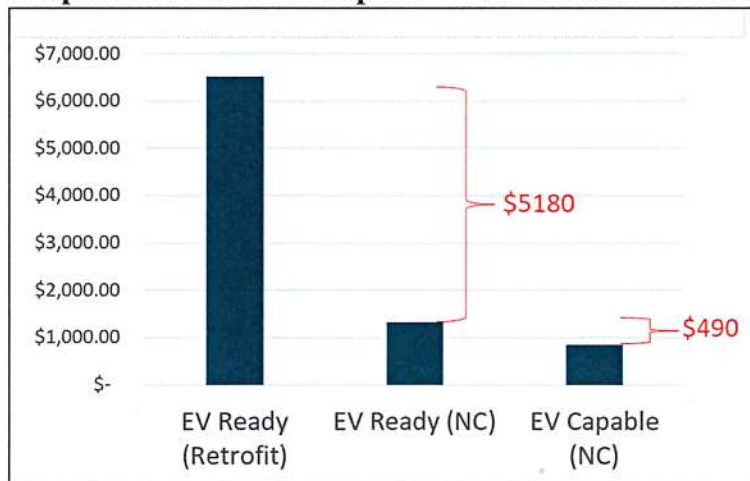
transportation electrification when paired with carbon-free electricity that will be provided by SJCE.

Promoting EV adoption and solar infrastructure represents further opportunity to reduce GHGs. Since EVs are powered by electricity, they have the potential for zero tailpipe emissions and, therefore, represent a significant potential to reduce GHGs in San José. SJCE purchases renewable energy from sources such as solar and wind, helping reduce GHG emissions dramatically from the electricity sector and reduce energy costs for consumers. Solar heating and cooling systems can provide about 80 percent of the energy used for space heating and water heating needs¹³, as well as provide clean emissions-free energy sources to charge EVs.

Financial Benefits

Adding additional amenities (e.g. conduit, wiring, breaker space) to accommodate building electrification or Electric Vehicle Charging Infrastructure (EVCI) during initial construction is more efficient and significantly more cost effective than retrofitting a building after it is constructed. There are three different levels of EVCI: 1) EV Capable: a parking space with conduit sized for a 40-amp, 208/240 Volt dedicated branch circuit and sufficient physical space on the service panel, 2) EV Ready (full circuit): a space with conduit and wiring for a 40-amp, 208/240 Volt circuit, electrical service capacity, and outlet, 3) Electric Vehicle Service Equipment (EVSE): a parking space with electric vehicle supply equipment capable of supplying current at 40amps at 208/240 volts. The amount of EVCI needed in each building will depend primarily on the type of building and occupant use. The importance of adding the right level of EVCI at the time of new construction is critical. The Graph 2 shows the EVCI cost differences in new construction (NC) versus building retrofits for EV Ready (essentially plug and play) and EV Capable (conduit and breaker space only) parking spaces. One of the reasons why requiring electrification-ready spaces at the time of new construction is so important is because the retrofit cost is often a barrier to installing EVSE.

Graph 2. Cost of EVCI/ Space – New Construction versus Retrofit¹⁴



Providing EVCI encourages the uptake of EVs and EVs offer owners a lower operating cost versus standard vehicles, which is particularly significant to our lower-income communities as detailed in the following section.

Benefits to Low-Income Communities

Promoting electrification of buildings and EV charging access is expected to have positive economic and health-related effects on low-income communities. A recent study by U.S. Environmental Protection Agency (EPA) scientists shows that low-income communities, particularly those of color, are disproportionately affected by air pollution¹⁵. It is therefore imperative that clean fuel options (i.e., electric) are incorporated into San José's low-income community housing to promote the reduction of indoor and outdoor air pollution.

EV charging can be perceived by some as incongruent with low-income housing needs, however recent studies suggest otherwise. EVs are becoming more affordable to purchase and their fuel costs are considerably lower than fossil fuel powered vehicles. While price point has traditionally been a barrier for low-income communities to purchase EVs or hybrids, recent market research suggests that prices are falling at a dramatic rate due to lowering battery costs and government rebate programs¹⁶. According to a recent CB Insights Report, the general industry consensus is that EVs will reach price analogy with fossil fuel vehicles within the next decade, possibly as soon as 2021¹⁷. Further lowering upfront costs, the California Clean Vehicle Rebate Project offers rebates of up to \$4,500, with additional rebates for low-income buyers, for the purchase or lease of new, eligible battery electric vehicles¹⁸. In terms of operational costs, compared with \$2,550 per year for similar fossil fuel vehicles¹⁹, an EV will save the average user an estimated \$10,000 in fuel costs over the course of 10 years at current fuel and SJCE utility rates. For these reasons, EV charging access, which would be facilitated by the proposed reach code, is therefore just as relevant if not more critical to low-income housing projects as market-based or commercial projects.

Public Health Benefits

Moving toward all-electric buildings will result in reduced GHG emissions and better indoor and outdoor air quality. When emissions from natural gas are compared with those from PG&E's electricity fuel mix, emissions from natural gas are almost double.

Another concern with using natural gas as a fuel source involves leaks associated with transmission. Since the majority of natural gas (84 percent) used in California is imported from other states and Canada, interstate pipelines must be operated in order to deliver natural gas to California²⁰. The EPA currently estimates the national methane leakage rate to be 1.4 percent²¹. However, a study conducted by the Environmental Defense Fund shows the methane leakage rate at 2.3 percent²². Recent studies exposing the leaks coming from the State's natural gas pipelines predict emissions to be a lot higher, about double, when accounting for the leaks²³.

In recent years, issues over natural gas safety have caused growing concern. In 2010, an underground gas pipe explosion killed eight people and destroyed or damaged more than 100 homes in San Bruno, California. The largest natural gas leak in U.S. history occurred just a few

years ago in Southern California at the SoCalGas Aliso Canyon Gas Storage Facility site. Between 2015 and 2016, a natural gas leak at Aliso Canyon was responsible for approximately 100,000 MT of methane and forced the evacuation of more than 8,300 households for more than 100 days²⁴.

Statewide Cost Effectiveness Study

The California Statewide Codes and Standards Program completed cost effectiveness residential²⁵ and non-residential studies²⁶ for use statewide in the current building code adoption cycle to justify the cost effectiveness of certain types of reach codes for new construction. Jurisdictions may also develop additional cost effectiveness studies, if needed, to proceed with their specific reach code. San José's proposal is based on data in the existing studies, so additional studies were not needed. EVCI requirements going beyond building code do not need a cost effectiveness study or separate CEC approval since they are not directly related to a building's energy efficiency.

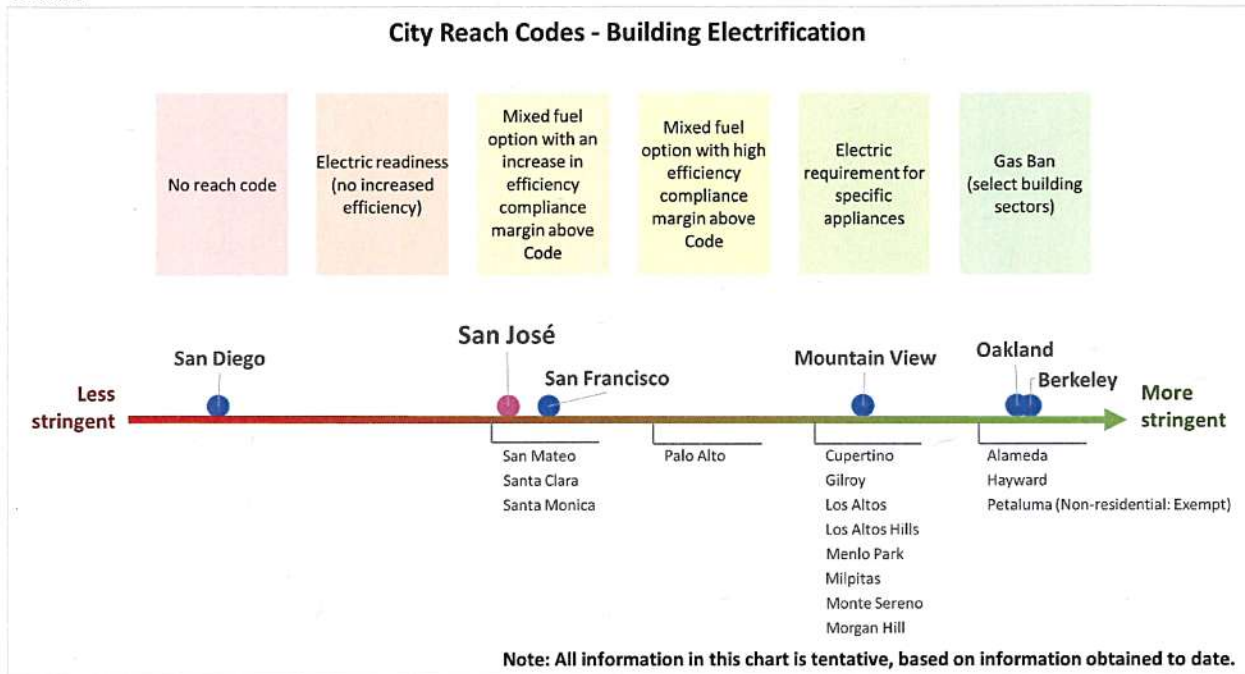
Regional Reach Code Efforts

Current regional reach code efforts are generally focused on both residential and non-residential new construction and EVCI, and incentivize or require:

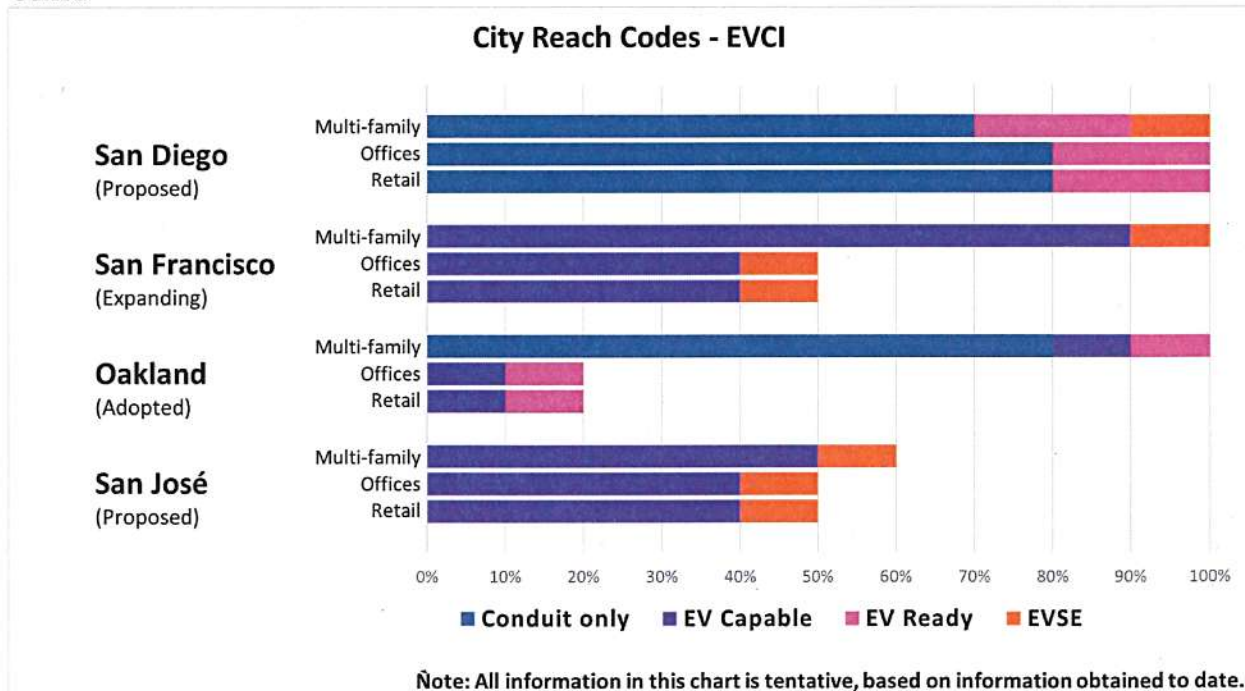
1. All-electric buildings for new construction; or
1. Mixed fuel (i.e. natural gas and electric) buildings, when allowed, go above building energy code (up to maximum limits set by existing cost effectiveness studies) and include electrification readiness in order to incentivize all-electric buildings; and
2. Additional EVCI requirements for all building types to further and prepare for current and anticipated future EV uptake.

While it is important to consider San José's unique building development characteristics, there is also a clear benefit on both the City implementation and development customer side to align as much as possible with regional reach codes for consistency. The proposed San José reach code built off of the draft reach code language released by regional partners representing jurisdictions in the rest of Santa Clara County and in San Mateo County²⁷. City staff also communicated with other California jurisdictions outside of the region to vet reach code options. Regional collaboration offers local municipalities the opportunity to collectively encourage building electrification that will be similarly implemented across Silicon Valley and/or the State, therefore reducing the risk of competitive disadvantage between municipalities. For reference, Attachment A explains the components and shows the current known status of reach codes planned or under consideration in the 2019 building code cycle by a variety of California jurisdictions. Based on the information that City staff has been able to obtain to-date, Image 1 and Graph 3 below provides visual summaries of the level of San Jose's proposed building and EVCI reach code requirements versus other California cities.

Image 1. San José Proposed Building Reach Code Requirements versus Other California Cities



Graph 3. San José Proposed EVCI Reach Code Requirements versus Other California Cities



Stakeholder Input

Throughout the reach code development process, PBCE and the ESD staff informed and coordinated with other City departments including the Departments of Community Energy, Housing, Public Works, San José Mineta International Airport, Department of Transportation, and the Office of Economic Development. With the assistance of various City departments, City staff developed a stakeholder engagement list including:

- Over 65 stakeholders, including developers, contractors, environmental and transportation or energy non-profits, industry organizations, business associations, realtor organizations, labor groups, technical experts, educational groups, EV and solar companies, construction management and engineering firms, and utilities.
- More than 200 Neighborhood Associations for all ten City Council Districts.

Reach code stakeholder engagement activities included:

- Four stakeholder engagement workshops covering:
 - Introduction to San José's reach code development process (May 29, 2019)
 - New non-residential construction focus (June 4, 2019)
 - New residential construction focus (June 25, 2019)
 - Final input on draft reach code language (July 10, 2019), with an extended public comment period through July 23, 2019.
- Presentation at the Silicon Valley Organization Housing & Development Policy Committee meeting (June 13, 2019)
- Presentation at the City's Developers and Construction Roundtable (June 21, 2019)
- Presentation to the City's Community and Economic Development Subcommittee (June 24, 2019)
- Individual meetings, as requested, with organizations representing the affordable housing and market-rate development community
- City Reach Code webpage (www.sanjoseca.gov/reachcode) to keep the public informed about the City's reach code development process and timeline, including key meeting dates, agendas and content for stakeholder meetings, and draft reach code language.

Cost Concerns

The primary concern raised by external stakeholders and other City departments is whether there is a cost increase to build and/or operate all-electric buildings. According to the statewide cost effectiveness studies, all-electric buildings offer savings on "first" construction cost for all building types when compared to mixed fuel buildings. Table 2 shows the first, annual utility, and life-cycle costs for all-electric buildings and mixed fuel buildings under a reach code compared to base code, and demonstrates that beyond the costs inherent to base code compliance, all-electric construction has no added costs for San José's proposed reach code. The cost effectiveness studies do however show an increase in the annual utility costs for all electric buildings, which is the primary reason why lifecycle costs for all electric buildings show an increase in certain building types. The life cycle costs in the table below include annual utility costs (over a 30-year period), maintenance, and the Net Present Value of building equipment. It is important to note that the costs presented below do not account for the projected change in fuel

costs for electricity and natural gas. These projections are based on the notion that a considerable amount of gas infrastructure is nearing the end of its life and will need to be replaced and/or seismically retrofitted. For example, in 2018, SoCalGas requested a rate increase from the CPUC on the cost of natural gas²⁸. If approved, SoCalGas ratepayers will see an increase of 19% in 2019, 8.1% in 2020 and 6.1% in 2021, which will be used to replace existing infrastructure, increase safety and cover transportation costs. If these factors are accounted for, the LCC and annual utility costs are reduced, relative to increasing gas costs, for all electric buildings.

Table 2. Costs of Reach Code All-Electric and Mixed Fuel Buildings over 2019 Base Code^{25, 26}

	Costs of a Reach Code All-Electric Building over 2019 Title 24 Base Code			Costs of a Reach Code Mixed Fuel Buildingⁱⁱ over 2019 Title 24 Base Code		
	First Cost	Annual Utility	Life-Cycle	First Cost	Annual Utility	Life-Cycle
Single-family	\$0/unit	\$0/unit	\$0/unit	+\$5,434/unit	-\$17.43/unit	+\$4,911/unit
Low-Rise Multi-family	\$0/unit	\$0/unit	\$0/unit	+\$2,429/unit	-\$9.60/unit	+\$2,141/unit
Office	\$0/sf	\$0/sf	\$0/sf	+1.24/sf	-\$0.10/sf	-\$1.78/sf
Retail	\$0/sf	\$0/sf	\$0/sf	+\$0.23/sf	-\$0.10/sf	-\$2.85/sf
Small Hotel	\$0/sf	\$0/sf	\$0/sf	+\$0.51/sf	-\$0.02/sf	-\$0.06/sf

Other recent studies found lower upfront and/or lifecycle costs for both residential and non-residential all-electric buildings^{29 30}. Multi-family, affordable housing, and non-residential development projects in California (including several in San José) are already building all-electric (see Attachment B for examples all-electric development projects in the Bay Area).

In terms of EVCI, increased construction costs will be incurred by requiring new construction to provide additional charging infrastructure. Table 3 provides a hypothetical scenario to illustrate how additional EVCI requirements could impact first construction costs under the proposed reach code. The costs represented in Table 3 are for a multi-family building and a commercial

ⁱⁱ Figures are based on the highest Energy Design Rating and compliance margins possible for mixed fuel buildings while still maintaining cost-effectiveness.

office building each with 100 parking spaces. The incremental costs are projected to be less than one percent of total project costs.

Table 3. EVCI Additional Construction Costs for Multi-family and Non-Residential Buildings Scenarios¹²

	Multi-family 2019 Base Code	Multi-family Reach Code	Non-Res 2019 Base Code	Non-Res Reach Code
EV Capable Spaces	0	50	0	40
EV Ready Spaces	10	0	10	0
EVSE Spaces	0	10	0	10
Total Cost of EV Capable (w/8A capacity)	\$ -	\$ 49,500	\$ -	\$ 39,600
Total Cost of EV Ready¹	\$ 13,300	\$ -	\$ 13,300	\$ -
Total Cost of EVSE	\$ -	\$ 23,300	\$ -	\$ 23,300
Total EVCI Cost	\$ 13,300	\$ 72,800	\$ 13,300	\$ 62,900
Total Project Cost²		\$ 23,000,000		\$ 30,000,000
Incremental Cost of reach code over 2019 base code		0.26%		0.17%

1. Pike, Ed P.E., (2018, June 20). *Opportunities to Support PEV Adoption, Roadmap 11, Portland, OR. Energy Solutions [PowerPoint Slides]* Retrieved from <http://roadmapforth.org/program/presentations18/EdPike.pdf>
2. Assumed \$250/sf for a 92,000 sf MF development and \$300/sf for a 100,000 sf non-res development.

San José Reach Code Components

Considering stakeholder input and the various benefits that can be achieved through a reach code, San José updated the draft reach code language (see Attachment C for a redlined version).




The proposed reach code, codified in the San José Reach Code Ordinance (Attachment D), includes the following:

1. Incentivizes all-electric buildings by requiring that mixed-fuel buildings achieve a higher energy efficiency (demonstrated through a higher Energy Design Rating or compliance marginⁱⁱⁱ) and be electrification ready for all building types;
2. Requires additional electric vehicle charging infrastructure requirements across all building types; and
3. Requires solar readiness for non-residential buildings.

The specific components of San José's proposed reach code are summarized in Table 4.

ⁱⁱⁱ Compliance Margin, applicable to non-residential buildings, is the percentage difference between the energy use of the proposed building project over the baseline requirement. An Energy Design Rating, applicable to low-rise residential projects, is a way to express the energy consumption of a building as a rating score index from 1-100 wherein a score of 0 represents a building that has zero energy consumption.

Table 4. Proposed Reach Code Components

		Proposed Reach Code Compliance Pathways	
Occupancy Type		All-Electric*	Mixed Fuel*
Single-family & Low-Rise Multi-family		Efficiency: To code	Efficiency: Energy Design Rating ≤ 10 , electrification-ready
High-rise Multi-family & Hotel		Efficiency: To code EVCI: Same as mixed fuel	Efficiency: 5% (compliance margin), electrification-ready EVCI: 10% EVSE, 50% EV Capable
Non-Residential		Efficiency: To code EVCI: Same as mixed fuel	Efficiency: 10% office/retail, 0% industrial/manufacturing, 5% all other occupancies, electrification-ready EVCI: 10% EVSE, 40% EV Capable

*Solar-readiness required for all buildings.

Both the mixed fuel building and EVCI requirements were reduced in response to concerns raised by other City departments and external stakeholders around construction costs. A comparison of the proposed components versus the draft components is included in Attachment E.

Reach Code Implementation

City staff intended for the reach code implementation timing to be aligned with the City's implementation of the 2019 California Code, which will go into effect on January 1, 2020. Due to the CEC's review and approval period for a reach code, the ordinance for the San José Reach Code should be approved by City Council and submitted to the CEC no later than September 2019, in order to align with the January 1, 2020 implementation date.

This implementation timing will allow for:

1. Simultaneous implementation of the updated California Code and the reach code requirements, streamlining the process for both City staff and for those submitting development projects;
2. An efficient process that maximizes the implementation period of the reach code since a reach code needs to be re-approved with each code update;
3. Maximization of the impact of the reach code by ensuring it applies to development in San José as soon as possible; and
4. City fulfillment of its commitment to the ACCC and furtherance of its Climate Smart goals.

Next Steps

Pending City Council approval of the proposed reach code, the reach code would be implemented with existing staff and resources with the following next steps:

1. Submit reach code to the CEC for review and approval.
2. File the CEC-approved reach code with the California Buildings Standards Commission.
3. Work with NBI and regional cities to develop implementation resources, such as trainings and checklists, for City staff.
4. Implement San José 's reach code starting January 1, 2020.
5. Continue to provide building and transportation electrification educational opportunities to both City staff and the public.
6. Pursue funding opportunities to incentivize all-electric buildings and transportation in San José, such as the SB 1477 BUILD program funding for decarbonization efforts in new construction.
7. Collect and document data on the reach code impact to consider for future reach code updates

EVALUATION AND FOLLOW-UP

Staff will provide progress updates to T&E Committee and City Council on Climate Smart San José activities, including the reach code, on a semi-annual basis.

POLICY ALTERNATIVES

Alternative #1: Adopt a reach code that requires all-electric buildings while maintaining all other proposed reach code provisions.

Pros: An all-electric building requirement would significantly reduce GHG emissions from new construction and supports the State and City GHG emissions reduction goals. All-electric new construction is also supported by the State's cost effectiveness studies. There would be no incremental costs associated with efficiency performance requirements since all-electric buildings would not be required to go further than the base 2019 Building Code.

Cons: This approach would rapidly transition construction to all-electric with no flexibility.

Reason for not recommending: This approach would offer less flexibility for development as it continues to transition to all-electric in a still emerging and developing marketplace.

Alternative #2: Adopt a reach code that increases energy efficiency requirements for non-residential mixed fuel buildings to the maximum allowable under the 2019 Non-residential New Construction Cost Effectiveness Study and increases EVCI requirements for non-residential and multi-family developments while maintaining all other proposed reach code provisions.

Pros: Increased energy efficiency requirements for non-residential mixed fuel buildings would have a greater impact on GHG emissions due to increased efficiency. Requiring increased energy

efficiency requirements for mixed fuel buildings would also send a stronger signal to more rapidly transition to all-electric buildings.

Cons: This would result in an increased construction cost for mixed fuel buildings.

Reason for not recommending: There are concerns about increasing construction costs for mixed fuel buildings.

PUBLIC OUTREACH

The City established its Reach Code webpage (www.sjenvironment.org/reachcode) in May 2019, which includes FAQs as well as a pathway to receive updates and to sign up for stakeholder meetings. City staff reached out to over 250 stakeholders and presented at seven public meetings since May 2019.

This memorandum will be posted on the City's website for the September 9, 2019 T&E agenda as well on the September 17, 2019 City Council's Agenda website.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office, the Department of Transportation, Department of Community Energy, Housing Department, Office of Economic Development, and Public Works.

FISCAL/POLICY ALIGNMENT

The reach code components align with the Climate Smart San José strategies and the City's Envision 2040 General Plan approved by City Council.

CEQA

Categorically Exempt, File No. PP19-067, CEQA Guidelines Section 15308, Actions by Regulatory Agencies for Protection of the Environment.

/s/
ROSALYNN HUGHEY
Director, Planning, Building, and Code Enforcement

/s/
KERRIE ROMANOW
Director, Environmental Services

For questions, please contact Ken Davies, Deputy Director, at (408) 975-2587.

HONORABLE MAYOR AND CITY COUNCIL

August 21, 2019

Subject: Building Reach Code for New Construction

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Attachments:

Attachment A – Reach Code Efforts in Other Jurisdictions

Attachment B – Bay Area All-Electric Development Projects

Attachment C – Redlined Draft Reach Code Components

Attachment D – San José Reach Code Ordinance

Attachment E – Summary of San José Reach Code Components

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HONORABLE MAYOR AND CITY COUNCIL

August 21, 2019

Subject: Building Reach Code for New Construction

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CITY OF SAN MATEO
Regular Meeting Agenda
September 3, 2019
7:00 PM

City Hall Council Chamber
330 W. 20th Avenue
San Mateo CA 94403



COUNCIL MEMBERS
Diane Papan, Mayor
Maureen Freschet, Deputy Mayor
Rick Bonilla
Joe Goethals
Eric Rodriguez

AGENDA ITEM

4. Local Amendments to the California Energy and Green Building Code – Ordinance Adoption

Adopt an Ordinance to amend San Mateo Municipal Code Chapter 23.24, "Energy Code," and an ordinance to amend Chapter 23.70, "Green Building Code," to make local amendments to the State Energy and Green Building Codes.

Ordinance Introduced on August 19, 2019

Agendas are posted on the City's website on the Friday preceding each Council Meeting. Background material can be viewed at City Hall or on the City's website www.cityofsanmateo.org. Any supplemental material distributed to the Council after the posting of the agenda will be available for review in the City Clerk's Office.

City Council meetings are broadcast live at 7:00 p.m. on Cable Channel 27 for Comcast, Channel 26 for Astound, and Channel 99 for AT&T customers. For transmission problems during the broadcast, please call (650) 522-7099.

For all other broadcast comments, call (650) 522-7040, Monday-Friday, 8 a.m. - 5 p.m.

In compliance with the Americans with Disabilities Act, those with disabilities requiring special accommodations to participate in this meeting may contact the City Clerk's Office at (650) 522-7040 or polds@cityofsanmateo.org.

Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

**CITY OF SAN MATEO
ORDINANCE NO. 2019-__**

AMENDING CHAPTER 23.24, "ENERGY CODE," OF TITLE 23, "BUILDING AND CONSTRUCTION," OF THE SAN MATEO MUNICIPAL CODE TO ADOPT THE CALIFORNIA ENERGY CODE, 2019 EDITION, WITH LOCAL AMENDMENTS

WHEREAS, the California Energy Code, 2019 Edition, Title 24, Part 6 of the California Code of Regulations has been released by the State and needs to be adopted by local jurisdictions; and

WHEREAS, The City's Climate Action Plan recommended that the City review local amendments to the California Energy Code to promote increased energy efficiency and the use of renewable energy sources; and

WHEREAS, The City has completed an analysis and has determined that the requirements of the local amendments to the California Energy Code would provide a positive cost benefit to new construction within the City of San Mateo; and

WHEREAS, California Health and Safety Code Section 17958 requires that the City, in order to make local amendments, find that the local amendments are reasonably necessary due to local climatic, geographical, or topographical conditions; and

WHEREAS, The City's Section 17958 findings are attached as Exhibit A to this Ordinance;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAN MATEO CALIFORNIA ORDAINS AS FOLLOWS:

Section 1. Chapter 23.24, Energy Code," of the San Mateo Municipal Code is hereby amended to read:

Chapter 23.24 – Energy Code

Sections:

23.24.010	Adoption.
23.24.020	Local Amendment to Definitions.
23.24.030	Local Amendment Regarding Mandatory Solar Installations.
23.24.040	Local Amendment Regarding All-Electric Buildings or Energy Efficiency Standards for Mixed-Fuel Office Use Buildings.
23.24.050	Local Amendment Regarding All-Electric Buildings or Energy Efficiency Standards for Mixed-Fuel Single Family and Duplex Buildings.
23.24.060	Modifications.
23.24.070	Expiration.

23.24.010 Adoption

(a) The California Energy Code, 2019 Edition, Title 24, Part 6 of the California Code of Regulations, as adopted and amended by the State of California, hereinafter called "Energy Code," is adopted as the rules, regulations and standards within this City as to all matters therein except as hereinafter modified or amended for so long as the 2019 Edition of the Building Code is in effect;

(b) One copy of the Energy Code shall at all times be kept on file in the office of the City Clerk.

23.24.020 Local Amendment to Definitions

Subchapter 1, “All Occupancies – General Provisions,” Section 100.1(b), of the state Energy Code is amended to include the following definitions:

All-Electric building or all-electric design is a building or building design that uses a permanent supply of electricity as the only source of energy for space conditioning (including heating and cooling), water heating (including pools and spas), cooking appliances, and clothes drying appliances, and has no natural gas or propane plumbing installed at the building.

Mixed-fuel building or mixed-fuel design is a building or building design that uses natural gas or propane as fuel for space heating, water heating (including pools and spas), cooking appliances or clothes drying appliances or is plumbed for such equipment.

Accessory building, shall have the meaning set forth in Section 27.04.010 of the City of San Mateo Municipal Code.

23.24.030 Local Amendment Regarding Mandatory Solar Installations

Subchapter 5—“Nonresidential, High-rise Residential, and Hotel/Motel Occupancies – Performance and Prescriptive Compliance Approaches for Achieving Energy Efficiency,” Section 140.0(b), of the state Energy Code is amended to include:

A. Solar photovoltaic systems shall be installed as follows:

1. New residential buildings four stories or more shall provide a minimum of a 3-kilowatt photovoltaic system.
2. New non-residential buildings with less than 10,000 square feet of gross floor area shall provide a minimum of a 3- kilowatt photovoltaic system.
3. New non-residential buildings greater than or equal to 10,000 square feet of gross floor area shall provide a minimum of a 5-kilowatt photovoltaic system.

Exception to Section A: As an alternative to a solar photovoltaic system, all of the building types listed above may provide a solar hot water system (solar thermal) with a minimum collector area of 40 square feet.

23.24.040 Local Amendment Regarding All-Electric Buildings or Energy Efficiency Standards for Mixed-Fuel Office Use Buildings

- (a) All-electric buildings with office use are required to meet the established energy efficiency standards in Subchapter 5, “Nonresidential, High-rise Residential, and Hotel/Motel Occupancies – Performance and Prescriptive Compliance Approaches for Achieving Energy Efficiency,” of the state Energy Code.

- (b) Mixed-fuel buildings with office use shall comply with increased energy efficiency standards. Subchapter 5, “Nonresidential, High-rise Residential, and Hotel/Motel Occupancies – Performance and Prescriptive Compliance Approaches for Achieving Energy Efficiency,” of the state Energy Code is amended to require increased energy efficiency standards in the performance or prescriptive compliance approaches as follows:

- (1) Performance Approach: Energy Code Section 140.1 “Performance Approach: Energy Budgets” is amended to include the following performance standards for mixed-fuel buildings with office use:

A newly constructed mixed-fuel building complies with the performance approach if the energy budget calculated for the Proposed Design Building under Subsection (b) has a compliance margin exceeding the energy budget calculated for the Standard Design Building under Subsection (a) of at least the value specified for the corresponding occupancy type in Table 140.1-A below.

Table 140.1-A Mixed-fuel Building Energy Budgets Adjustments

Occupancy Type	Compliance Margin Exceeding State Code
Office	10%
All Other occupancies	0%

- (2) Prescriptive Approach: Energy Code Section 140.2 “Prescriptive Approach” is amended to include the following prescriptive standards for mixed-fuel buildings with office use:
- (A) Install fenestration with a solar heat gain coefficient no greater than 0.22.
 - (B) Limit the fenestration area on east-facing and west-facing walls to one-half of the average amount of north-facing and south-facing fenestration.
 - (C) Design Variable Air Volume (VAV) box minimum airflows to be equal to the zone ventilation minimums.
 - (D) Include economizers and staged fan control in air handlers with a mechanical cooling capacity $\geq 33,000$ Btu/h
 - (E) Reduce the total lighting power density (Watts/ft²) by ten percent (10%) from that required from Table 140.6-C.
 - (F) Improve lighting without claiming any Power Adjustment Factor credits:
 - (i) Control to daylight dimming plus off per Section 140.6(a)2H, and
 - (ii) Install Occupant Sensing Controls in Large Open Plan Offices per Section 140.6(a)2I, and

Perform Institutional Tuning per Section 140.6(a)2J.

23.24.050 Local Amendment Regarding All-Electric Buildings or Energy Efficiency Standards for Mixed-Fuel Single Family and Duplex Buildings

- (a) Accessory buildings and low-rise multifamily buildings are required to meet the established energy efficiency standards in Subchapter 8, “Low-rise Residential Buildings – Performance and Prescriptive Compliance Approaches,” of the state Energy Code.

- (b) All-electric single-family and duplex buildings are required to meet the established energy efficiency standards in Subchapter 8, “Low-rise Residential Buildings – Performance and Prescriptive Compliance Approaches,” of the state Energy Code.
- (c) Mixed-fuel single family and duplex buildings shall comply with increased energy efficiency standards. Subchapter 8, “Low-rise Residential Buildings – Performance and Prescriptive Compliance Approaches,” of the state Energy Code is amended to require increased energy efficiency standards in the performance and prescriptive compliance approaches as follows:

- (1) Performance Approach: Section 150.1.b. “Performance standards” is amended to include the following performance standard for mixed-fuel single family and duplex buildings:

The Energy Efficiency Design Rating calculated for the Proposed Design Building shall be at least 2.5 EDR points less than the Energy Efficiency Design Rating calculated for the Standard Design Building.

- (2) Prescriptive Approach: Section 150.1.c. “Prescriptive standards/component packages” is amended to include the following prescriptive standards for mixed-fuel single-family and duplex buildings:
 - (A) Duct System Sealing and Leakage Testing. The duct systems shall exceed the minimum mandatory requirements of Section 150.0(m)11 A and B such that the total duct system leakage shall not exceed 2 percent of the nominal system air handler air flow.
 - (B) Slab floor perimeter insulation shall be installed with an R-value equal to or greater than R10. The minimum depth of concrete-slab floor perimeter insulation shall be 16 inches or the depth of the footing of the building, whichever is less.
 - (C) The hot water distribution system shall be designed and installed to meet minimum requirements for the basic compact hot water distribution credit according to the procedures outlined in the 2019 Reference Appendices RA4.4.6.
 - (D) Central Fan Integrated Ventilation Systems. The duct distribution system shall be designed reduce external static pressure to meet a maximum fan efficacy equal to:
 - (i) Gas Furnaces: 0.35 Watts per cfm
 - (ii) Heat Pumps: 0.45 Watts per cfm, according to the procedures outlined in the 2019 Reference Appendices RA 3.3.
 - (E) For buildings with either space heating or water heating systems fueled by gas or propane, also include:
 - (i) 5 kWh battery of battery storage, OR
 - (ii) A solar water heating system with a minimum solar savings fraction of 0.20.

23.24.060 Modifications

If an applicant for a Covered Project believes that circumstances exist that make it infeasible to meet the requirements of this Chapter, the applicant may request a modification as set forth in Section 23.06.015 of the Municipal Code. In applying for the modification, the burden is on the Applicant to demonstrate infeasibility to the City’s Building Official.

23.24.070 Expiration

These local code amendments shall sunset when the California Energy Code, 2019 Edition, is no longer in effect.

Section 2. The Council adopts the findings supporting the local amendments to the California Energy Code, 2019 Edition, attached hereto as Exhibit A and incorporated herein by reference.

Section 3. Environmental determination. In accordance with CEQA Guidelines Section 15308, adoption of this Ordinance is categorially exempt from CEQA, because it imposes stricter energy efficiency requirements and is a regulatory action authorized by state law and intended to protect the environment.

Section 4. Severability. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it should have adopted the ordinance and each section, subsection, sentence, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

Section 5. Publication. This ordinance shall be published in summary in the San Mateo Daily Journal, posted in the City Clerk's Office, and posted on the City's website, all in accordance with Section 2.15 of the City Charter.

Section 6. Legislative history and effective date. This ordinance was introduced on August 19, 2019, and adopted on [Click or tap to enter a date.](#), and shall be effective on January 1, 2020

Exhibit A**FINDINGS SUPPORTING LOCAL AMENDMENTS TO
CALIFORNIA ENERGY CODE, 2019 EDITION**

Section 17958 of the California Health and Safety Code provides that the City may make changes to the provisions in the uniform codes that are published in the California Building Standards Code. Sections 17958.5 and 17958.7 of the Health and Safety Code require that for each proposed local change to those provisions in the uniform codes and published in the California Building Standards Code which regulate buildings used for human habitation, the City Council must make findings supporting its determination that each such local change is reasonably necessary because of local climatic, geological, or topographical conditions.

Local building regulations having the effect of amending the uniform codes, which were adopted by the City prior to November 23, 1970, were unaffected by the regulations of Sections 17958, 17958.5 and 17958.7 of the Health and Safety Code. Therefore, amendments to the uniform codes which were adopted by the City Council prior to November 23, 1970, and have been carried through from year to year without significant change, need no required findings. Also, amendments to provisions not regulating buildings used for human habitation, including amendments made only for administrative consistency, do not require findings.

Code: California Energy Code

Section(s)	Title	Add	Deleted	Amended	Justification (See below for keys)
Subchapter 1, Section 100.1	Definitions and Rules of Construction	X			A, B
Subchapter 5, Section 140.0	Performance and Prescriptive Compliance Approaches	X		X	A, B
Subchapter 8, Section 150.1	Performance and Prescriptive Compliance Approaches for Low-Rise Residential Buildings	X		X	A, B

Key to Justification Supporting Amendments to Title 24 of the California Code of Regulations

- A. This amendment is justified on the basis of a local **climatic** condition. Failure to address and significantly reduce greenhouse gas (GHG) emissions could result in rises in sea level, including in San Francisco Bay, that could put at risk City homes and businesses, public facilities, and Highway 101 (Bayshore Freeway), particularly the mapped Flood Hazard areas of the City. Energy efficiency and the use of renewable energy sources are key components in reducing GHG emissions, and construction of more energy efficient buildings with dedicated renewable energy installations can help the City of San Mateo reduce its share of the GHG emissions that contribute to climate change. The burning of fossil fuels used in the generation of electric power and heating of buildings contributes to climate change, which could result in rises in sea level, including in San Francisco Bay, that could put at risk City homes and businesses, public facilities, and Highway 101.
- B. Energy efficiency enhances the public health and welfare by promoting the **environmental** and economic health of the City through the design, construction, maintenance, operation and deconstruction of buildings and sites by incorporating green practices into all development. The provisions in this Chapter are designed to achieve the following goals:
- (a) Increase energy efficiency in buildings;
 - (b) Increase resource conservation;
 - (c) Provide durable buildings that are efficient and economical to own and operate;
 - (d) Promote the health and productivity of residents, workers, and visitors to the city;
 - (e) Recognize and conserve the energy embodied in existing buildings; and
 - (f) Reduce disturbance of natural ecosystems.

CITY OF SAN MATEO
ORDINANCE NO. 2019-__

**AMENDING CHAPTER 23.70, "GREEN BUILDING CODE," OF TITLE 23, "BUILDING AND CONSTRUCTION," OF THE
SAN MATEO MUNICIPAL CODE TO ADOPT THE CALIFORNIA GREEN BUILDING STANDARDS CODE, 2019
EDITION, WITH LOCAL AMENDMENTS**

WHEREAS, the California Green Building Standards Code, 2019 Edition, Title 24, Part 11 of the California Code of Regulations has been released by the State and needs to be adopted by local jurisdictions; and

WHEREAS, the City's Climate Action Plan recommended that the City review local amendments to the California Green Building Standards Code to promote clean transportation fuels and increase electric vehicle adoption; and

WHEREAS, California Health and Safety Code Section 17958 requires that the City, in order to make local amendments, find that the local amendments are reasonably necessary due to local climatic, geographical, or topographical conditions; and

WHEREAS, the City's Section 17958 findings are attached as Exhibit A to this Ordinance;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAN MATEO CALIFORNIA ORDAINS AS THAT:

Section 1. Chapter 23.70, "Green Building Code," is hereby amended to read:

Chapter 23.70 -Green Building Code

23.70.010	Adoption
23.70.020	Local Amendments to Definition
23.70.030	Local Amendment Regarding Electric Vehicle Charging for New One- and Two-family Dwellings and Town-houses
23.70.040	Local Amendment Electric Vehicle Charging for New Multifamily Residential
23.70.050	Local Amendment Regarding Electric Vehicle Charging for New Non-Residential
23.70.060	Local Amendment Regarding Electric Vehicle Space Design Requirements
23.70.070	Modifications
23.70.080	Expiration

23.70.010 Adoption

(a) The California Green Building Standards Code, 2019 Edition, Title 24, Part 11 of the California Code of Regulations, as adopted and amended by the State of California, hereinafter called "Green Building Code," is adopted as the rules, regulations and standards within this City as to all matters therein except as hereinafter modified or amended;

(b) One copy of the Green Building Code shall at all times be kept on file in the office of the City Clerk.

23.70.020 Local Amendments to Definitions

(a) The definitions contained Chapter 2, "Definitions" of the state Green Building Code are adopted.

- (b) The most commonly used definitions are set forth below:

Electric Vehicle (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For purposes of the *California Electrical Code*, off-road, self-propelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included.

Electric Vehicle Charging Space (EV Space). A space intended for future installation of EV charging equipment and charging of electric vehicles.

Electric vehicle supply equipment (EVSE). The conductors, including the undergrounded, grounded, and equipment grounding conductors and the electric vehicles connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between premises wiring and the electric vehicle.

- (c) Chapter 2 “Definitions,” Section 202 of the state Green Building Code is amended to include the following definition:

Level 2 EVSE. An EVSE capable of charging at 30 amperes or higher at 208 or 240 VAC. An EVSE capable of simultaneously charging at 30 amperes for each of two vehicles shall be counted as two Level 2 EVSE.

23.70.030 Local Amendment Regarding Electric Vehicle Charging For New One- and Two-Family Dwellings and Town-Houses

- (a) Green Building Code Section 4.106.4.1, “New one- and two-family dwellings and town-houses with attached private garages,” is amended to require the Tier 1 and Tier 2 requirement per Section A4.106.8.1 and A4.106.8.1.1 of the Green Building Code as follows:

- (1) Tier 1 and Tier 2. For each dwelling unit, a dedicated 208/240-volt branch circuit shall be installed in the raceway required by Section 4.106.4.1. The branch circuit and associated overcurrent protective device shall be rated at 40 amperes minimum. Other electrical components, including a receptacle or blank cover, related to this section shall be installed in accordance with the *California Electrical Code*.

A4.106.8.1.1 Identification. The service panel or sub-panel circuit directory shall identify the overcurrent protective device designated for future EV charging purposes as “EV READY” in accordance with the *California Electrical Code*. The receptacle or blank cover shall be identified as “EV READY.”

23.70.040 Local Amendment Regarding Electric Vehicle Charging For New Multifamily Residential Construction

- (a) Green Building Code Section 4.106.4.2, “New multifamily dwellings,” is amended to require the Residential Voluntary Tier 1 Measure for EV charging space calculation per Section A4.106.8.2, “New multifamily dwellings,” as follows:

Tier 1: 15 percent of the total number of parking spaces on a building site, provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces) capable of supporting future electric vehicle supply equipment (EVSE). Calculations for required number of EV spaces shall be rounded up to the nearest whole number.

Requirements related to EV spaces for multifamily residential projects can be found in Green Building Code Sections 4.106.4.2.3 “Single EV space required” and 4.106.4.2.4 “Multiple EV spaces required.”

23.70.050 Local Amendment Regarding Electric Vehicle Charging for New Non-residential Construction

- (a) Green Building Code Section 5.106.5.3.3, “EV charging space calculation,” is amended to require increased standards for new non-residential buildings with ten parking spaces or more as follows:
- (1) Ten percent of the total number of parking spaces provided for all types of parking facilities shall be EV spaces capable of supporting future EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.
 - (2) Five percent of the total number of parking spaces provided for all types of parking facilities shall be equipped with Level 2 EVSE. Calculations for the required number of spaces with Level 2 EVSE shall be rounded up to the nearest whole number.

Requirements related to EV spaces for nonresidential projects can be found in Green Building Code Sections 5.106.5.3.1 “Single charging space requirements” and 5.106.5.3.2 “Multiple charging space requirements.”

23.70.060 Local Amendment Regarding Electric Vehicle Space Design Requirements

Green Building Code Section 4.106.4.2, “New multifamily dwellings,” and Section 5.106.5.3.3, “EV charging space calculation” are amended to require EV space design requirements as follows:

For all projects subject to Title 24, Part 2, Chapter 11B, construction documents shall indicate how many accessible EV spaces would be required under the California Code of Regulations Title 24, Chapter 11B, if applicable, in order to convert EV spaces to include EVSE. Construction documents shall also demonstrate that the facility is designed such that compliance with accessibility standards, including Chapter 11B accessible routes, will be feasible for the required accessible EV Space at the time of EVSE installation. Surface slope for any area designated for accessible EV Space shall meet slope requirements in Chapter 11B and vertical clearance requirements in Chapter 11B at the time of original building construction.

23.70.070 Modifications

If an applicant for a Covered Project believes that circumstances exist that make it infeasible to meet the requirements of this Chapter, the applicant may request a modification set forth in Section 23.06.015 of the Municipal Code. In applying for the modification, the burden is on the Applicant to show infeasibility. The Building Official may grant a modification to exempt the applicant from these requirements if he or she makes either of the following findings:

1. Where there is insufficient electrical supply.

Where there is evidence substantiating that additional local utility infrastructure design requirements, directly related to the implementation of these requirements, may have a significant adverse impact the construction cost of the project.

23.70.080 Expiration

These local code amendments shall sunset the when the California Green Building Standards Code, 2019 Edition, is no longer in effect.

Section 2. The Council adopts the findings supporting the local amendments to the California Green Building Standards Code, 2019 Edition, attached hereto as Exhibit A and incorporated herein by reference.

Section 3. Environmental determination. In accordance with CEQA Guidelines Section 15308, adoption of this Ordinance is categorically exempt from CEQA because adoption of these green building standards is authorized by the state and is intended to assure the protection of the environment by reducing greenhouse gas emissions.

Section 4. Severability. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it should have adopted the ordinance and each section, subsection, sentence, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

Section 5. Publication. This ordinance shall be published in summary in the San Mateo Daily Journal, posted in the City Clerk's Office, and posted on the City's website, all in accordance with Section 2.15 of the City Charter.

Section 6. Legislative history and effective date. This ordinance was introduced on August 19, 2019, and adopted on [Click or tap to enter a date.](#), and shall be effective on January 1, 2020..

Exhibit A**FINDINGS SUPPORTING LOCAL AMENDMENTS TO CALIFORNIA GREEN BUILDING STANDARDS CODE, 2019 EDITION**

Section 17958 of the California Health and Safety Code provides that the City may make changes to the provisions in the uniform codes that are published in the California Building Standards Code. Sections 17958.5 and 17958.7 of the Health and Safety Code require that for each proposed local change to those provisions in the uniform codes and published in the California Building Standards Code which regulate buildings used for human habitation, the City Council must make findings supporting its determination that each such local change is reasonably necessary because of local climatic, geological, or topographical conditions.

Local building regulations having the effect of amending the uniform codes, which were adopted by the City prior to November 23, 1970, were unaffected by the regulations of Sections 17958, 17958.5 and 17958.7 of the Health and Safety Code. Therefore, amendments to the uniform codes which were adopted by the City Council prior to November 23, 1970, and have been carried through from year to year without significant change, need no required findings. Also, amendments to provisions not regulating buildings used for human habitation, including amendments made only for administrative consistency, do not require findings.

Code: California Green Building Standards Code					
Section(s)	Title	Add	Deleted	Amended	Justification (See below for keys)
Chapter 4, Section 4.106.4.1	New one- and two-family dwellings and town-houses with attached private garages			X	A
Chapter 4, Section 4.106.4.2	New multifamily dwellings			X	A
Chapter 5, Section 5.106.5.3.3	EV charging space calculation			X	A

Key to Justification Supporting Amendments to Title 24 of the California Code of Regulations

- A. This amendment is justified on the basis of a local **climatic** condition. Failure to address and significantly reduce greenhouse gas (GHG) emissions could result in rises in sea level, including in San Francisco Bay, that could put at risk City homes and businesses, public facilities, and Highway 101 (Bayshore Freeway), particularly the mapped Flood Hazard areas of the City. Electric vehicle charging infrastructure is a key component in reducing GHG emissions, and EV charging installations can help the City of San Mateo reduce its share of the GHG emissions that contribute to climate change. Electric vehicle charging infrastructure will contribute to the reduction of GHG emissions by supporting the demand for electric vehicles and the associated EV chargers. The burning of fossil fuels used in the generation of electric power and heating of buildings contributes to climate change, which could result in rises in sea level, including in San Francisco Bay, that could put at risk City homes and businesses, public facilities, and Highway 101. However, electric power will become cleaner over time as utilities achieve more stringent Renewable Portfolio Standard requirements, and translate the clean energy benefits to electric vehicles.



Contra Costa County Board of Supervisors

Subcommittee Report

SUSTAINABILITY COMMITTEE

Meeting Date: 12/09/2019
Subject: RECOMMEND SUPPORT for the federal Green Act.
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:

N/A

Referral Update:

Contra Costa County has demonstrated its commitment to addressing the changing climate through adoption of its Climate Action Plan, joining the We Are Still In coalition, taking the Carbon Free by 2033 pledge, and related actions. The County is in the process of updating its Climate Action Plan to reflect current State policies and goals and to align the Climate Action Plan with the County's General Plan.

The House of Representatives has released a set of bills, the Green Act, that take action on climate issues. They include: an extension of the electric vehicle tax credit; a new energy storage tax credit; expansion of energy financing; an offshore wind tax credit; energy efficiency incentives; and wind and solar tax credits. These incentives are for residential, commercial, and utility-scale investments. All except for the offshore wind tax credit would be helpful for Contra Costa County and its residents and businesses. The energy financing measure is co-authored by Representative Thompson. Attachment A is a summary memo of the Green Act. Attachment B is summary bill language.

Recommendation(s)/Next Step(s):

RECOMMEND SUPPORT for the federal Green Act.

Fiscal Impact (if any):

While there is no direct fiscal impact to the County, passage of the Green Act would potentially make available to County residents and businesses tax credits for investments in a range of technologies that will reduce the impacts of climate change.

Attachments

Item 11. Attachment A - Green Act Overview Memo

Item 11. Attachment A - Green Act Overview Memo



Background Memo on Clean Energy Tax Credit Package

Request:

- (1) Reach out to Speaker Pelosi's office and request that the Speaker prioritize key clean energy tax incentives in a government funding bill that must pass by December 20th.
- (2) Additionally, we are recommending outreach to targeted Senators and Representatives asking them to weigh in directly with Senate and House leadership respectively to encourage them to prioritize clean energy tax incentives in end-of-year government funding legislation.

Timing: Outreach to members of Congress needs to happen as soon as possible - ideally by early-mid December. Congress must pass a government funding bill by December 20th.

For detailed outreach information, please contact Meredith Epstein at mepstein@ceres.org

Background:

The House Committee on Ways and Means released on November 19 the [GREEN Act](#), which is a discussion draft of clean energy tax incentive bills that would renew or extend climate-friendly tax incentives. We see the opportunity to get a clean energy tax credit package through Congress as the best near-term chance to pass legislation that will significantly help to reduce greenhouse gas emissions. **In fact - passing a version of this bill could be the most significant piece of climate-related legislation to go through Congress in close to 10 years. As such, it is an enormous priority for BICEP and climate advocates.**

The GREEN Act will likely not go through regular committee markup, but will rather serve as a [menu of options](#) for Congressional leadership to pick from and bargain over. Ultimately, whether the package (and individual provisions) becomes law will come down to whether it gets included in an end of the year deal that gets brokered by Congressional leadership. **This is where businesses and investors come in. We think our best shot of getting the package into the end of the year deal is if leadership makes it a priority for the package to be included.**

Impact of the GREEN Act:

Recent [analysis from the Rhodium Group](#) has found that the GREEN Act would help contribute to a decrease of 100 million metric tons of greenhouse gas emissions by 2030. Enacting the provisions of the draft bill would spur deployment of up to nearly 60 gigawatts (GW) of new non-hydro renewable generation by 2030. The market share of these clean energy resources can at least double to 19-26% of total generation, up from 10% today. By extending the EV tax credit, 3.4 to 5.7 million more electric vehicles could be sold between today and 2030. This would accelerate EVs to 38% of all light-duty vehicle sales in 2030, up from just 3% in 2018.



Some Key Pieces of the GREEN Act:

Driving America Forward Act (H.R. 2256)

The Driving America Forward Act (with 102 cosponsors), is a bill to modify the electric vehicle tax credit by raising the volumetric cap from 200,000 to 600,000 vehicles eligible for a \$7000 consumer credit for each manufacturer. This modification to the EV tax credit is critical to continue the growth of a promising new manufacturing sector. As battery costs continue to decline, electric vehicles are projected to be cost competitive on an upfront cash basis with internal combustion engine vehicles by the mid 2020's. In the meantime, it is critical to ensure that this burgeoning industry remains strong. The Senate version of the bill has bipartisan support and is cosponsored by Senator Stabenow, Senator Alexander, Senator Peters, and Senator Collins. One stumbling block to the bill is that it has a high price tag and full-throated opposition from Senator Barrasso.

Energy Storage Tax Incentive and Deployment Act of 2019 (H.R. 2096)

Energy storage can improve electric grid flexibility, reliability, and resilience and allow for the shift of electricity supply during periods of peak-demand. It also reduces risk by increasing resource options and helping the grid to react to unexpected changes in the system. In addition, energy storage enables greater renewable energy integration by increasing full-time availability of intermittent resources, providing emergency backup power, and aiding in stability during times of high energy use.

Currently, energy storage can only qualify for the federal investment tax credit (ITC) when coupled with a solar power project. This restriction makes it difficult for businesses and investors to take advantage of the range of energy storage applications across different energy-producing technologies, and ultimately it limits energy storage deployment. Making energy storage independently eligible for a 30% ITC (as proposed in this bipartisan legislation) would have a transformative impact; resolving the uncertainty facing businesses and energy storage providers, spurring private sector investment, creating jobs, and accelerating the transition to renewable energy.

Offshore WIND Act (H.R. 3473)

Extending the ITC for offshore wind would help provide policy certainty at this critical time in offshore wind development and spur capital investment to harness the abundant energy available offshore. The ITC will enable the offshore wind energy to create tens of thousands of clean energy jobs and produce renewable domestic energy. Offshore wind remains more expensive than onshore wind, but has significant benefits, including higher capacity factors and proximity to load centers (especially along the East Coast). The recent delay in the permitting process for a major offshore wind farm by the Bureau of Ocean Energy Management raises specific concerns about the ability of first-mover projects to take advantage of the existing tax credit for wind energy - providing further justification for a dedicated tax incentive structure targeted at offshore wind.

Energy Efficiency Incentives

Energy efficiency improvements reduce emissions, save businesses and residential customers money, and create jobs. In fact, in the U.S. low carbon economy, energy efficiency has created



more jobs than any other sector. The GREEN Act contains important updates to longstanding efficiency incentives for residential units, commercial buildings, and manufactured homes. These updates increase the value of the incentives and make them easier to access. In particular, the commercial buildings incentive is a great opportunity for companies to earn tax credits in return for key efficiency upgrades.

Financing Our Energy Future Act (H.R.3249/S.1841)

Master limited partnerships (MLPs) are a business structure that is taxed as a partnership at the shareholder level as opposed to the shareholder and corporate level. MLPs are appealing to investors and attract new capital. Currently, the tax code only makes MLPs available to energy projects that rely on fossil fuels. The bipartisan *Financing Our Energy Future Act*, introduced by Senators Coons and Moran and Representatives Thompson and Estes, would level the playing field and make MLPs available to all sources of domestic energy, including renewable energy sources such as wind, solar, and hydropower as well as energy technologies such as energy storage, carbon capture, and energy efficient buildings. This change to the tax code would spur new private capital investments in clean energy by giving clean energy businesses the same advantages already given to fossil fuel businesses.

Extending Tax Credits for Solar and On-shore Wind

The Green Act includes a five year extension for solar and onshore wind before the tax credit begins to phase down over two years. These extensions will ensure that clean electricity continues to be deployed at scale over the coming half decade - a decade in which the IPCC tells us we must reduce emissions by 45 percent.

The Republican Caucus is only likely to agree to this extension in return for the inclusion of technical corrections to the recently passed tax reform bill - the [Tax Cuts and Jobs Act](#). This would significantly aid in deployment of renewable energy and greatly aid in reducing carbon emissions. It is also the biggest lift and will be the hardest piece to negotiate with Senate Majority Leader McConnell. Our intelligence suggests that Democrats in Congress would be willing to allow passage of the technical corrections in return for inclusion of the tax credits for solar and wind power.

The GREEN Act also includes numerous other clean energy incentives including tax credits for previously owned EVs, commercial vehicles, and buses as well as [many others](#).

Ways to Engage:

Outreach to Speaker Pelosi: Making the clean energy tax credit package a priority for Democratic leadership will be essential to getting the package included in end-of-year horse-trading. It is especially critical that Speaker Pelosi makes it a top priority. Therefore, we recommend that companies and trade associations reach out directly to Speaker Pelosi's office through meetings, phone calls, or emails to ask her to prioritize the package. The Speaker is also more likely to make the case for the package if she hears from her caucus that this is important to them.



Request for Speaker Pelosi & House Leadership: Include as robust a package of clean energy tax incentives as possible in an end-of-year government funding bill. If the negotiations over tax provisions between Republicans and Democrats includes technical corrections to the recently passed tax reform bill (an extremely high priority for Republicans), it is critical to also include an extension of the existing solar and on-shore wind tax credits.

Outreach to House Democrats asking them to weigh in with Speaker Pelosi: Another helpful avenue for engagement would be to reach out to other House Democrats (especially in purple districts) to request that they ask Speaker Pelosi in member to member interactions to make the package a priority.

Outreach to targeted Senate Republicans asking them to weigh in with Majority Leader McConnell and Senate Finance Chairman Grassley: Softening the ground with Senate Majority leadership will help pave the way for negotiations that are favorable for clean energy incentives. Hearing from their caucus in support of bipartisan provisions could help ease the way for a deal with the broadest possible array of clean energy incentives.

Request for Majority Leader McConnell and Senate Finance Chairman Grassley: Support as many clean energy incentives as possible in an end-of-year government funding bill.

Risks of Engagement:

The outreach that we are suggesting is all private with no media or public-facing component and it is our assessment that there is little to no risk involved. There is opposition to the EV tax credit from Sen. Barrasso and the Heritage Foundation, but strong bipartisan support for it as well.

Opportunities for Engagement:

In addition to the clean energy and climate benefits of getting clean energy tax credit bills passed, there is an opportunity to build positive relationships with lawmaker offices. Supporters of the clean energy tax credit package include environmental groups, renewable energy businesses, and many major companies including the BICEP Network. Auto companies also support the EV tax credit.

Questions?

Feel free to reach out to Meredith Epstein (mepstein@ceres.org) if you have any questions.



**GROWING RENEWABLE ENERGY AND EFFICIENCY NOW (“GREEN”) ACT
DISCUSSION DRAFT -- SECTION BY SECTION DESCRIPTION
November 19, 2019**

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TITLE I – RENEWABLE ELECTRICITY AND REDUCING CARBON EMISSIONS

Sec. 101. Extension of credit for electricity produced from certain renewable resources (§§ 45 and 48(a)(5)).

The provision extends the production tax credit (PTC), which allows energy producers to claim a credit based on electricity produced from renewable energy resources. In most cases, including producers electing into the § 48 investment tax credit, these credits are extended for facilities for which construction begins by the end of 2024.

Most facilities: The PTC for the following facilities is revived and extended through the end of 2024:

- closed loop biomass,
- open loop biomass,
- landfill gas (municipal solid waste),
- trash (municipal solid waste),
- qualified hydropower, and
- marine and hydrokinetic renewable energy facilities.

Geothermal: The PTC for geothermal energy is revived and extended through the end of 2019. Separately, geothermal is made eligible for a higher investment tax credit under § 48 starting in 2020. *See* sec. 102 of the discussion draft.

Wind: The PTC for wind energy is preserved at the current phaseout levels for 2018 and 2019 (60% and 40%, respectively), and then is extended at 60% through the end of 2024.

Sec. 102. Extension and modification of energy credit (§ 48).

The provision extends the investment tax credit (ITC), which allows taxpayers to claim a credit for up to 30% of the cost of qualified energy property. In most cases, the provision extends the credit at full value for property for which construction begins by the end of 2024, and then phases down over two years.

Solar: The ITC for solar energy property is extended at 30% through the end of 2024. The ITC then phases down to 26% in 2025, 22% in 2026, and 10% thereafter.

Geothermal: The ITC for geothermal energy property is modified to match the credit timeline for solar energy property. Therefore, the ITC for geothermal energy property is 30% through the end of 2024. The ITC then phases down to 26% in 2025, 22% in 2026, and 10% thereafter. Geothermal will not be eligible for the PTC after 2019. *See* § 101 of this discussion draft.

Other currently eligible property: The ITC for fiber-optic solar equipment, fuel cell property, microturbine property, combined heat and power property, and small wind energy property is extended at 30% through the end of 2024. The ITC then phases down to 26% in 2025 and 22% in 2026.

Newly eligible property: The ITC is expanded to include energy storage technology, waste energy recovery property, qualified biogas property, and linear generators. These technologies are eligible for the 30% ITC through the end of 2024. The ITC then phases down to 26% in 2025 and 22% in 2026. These technologies are briefly described as follows:

- Energy storage technology uses batteries and other such technology to store energy for conversion to electricity and has a minimum capacity of 20 kWh, or to store energy to heat or cool a structure.
- Waste energy recovery property generates electricity solely from heat (such as exhaust heat) from buildings or equipment the primary purpose of which is not the generation of electricity and has a maximum capacity of 50 MW. If property would qualify as both waste energy recovery property and combined heat and power property, the taxpayer elects between the two.
- Biogas property converts biomass into a gas (which is at least 52% methane) for productive use, such as generating electricity. Electricity produced from property receiving an ITC under this provision is not also eligible for benefit under the PTC.
- Linear generators convert fuel into electricity through electromechanical means using a linear generator assembly without the use of rotating parts. The credit for linear generators is limited to systems with a nameplate capacity of at least 200 kW.

Sec. 103. Extension of credit for carbon oxide sequestration (§ 45Q).

The provision extends the credit for carbon oxide sequestration facilities that begin construction before the end of 2024, a one-year extension.

Sec. 104. Elective payment for energy property and electricity produced from certain renewable resources, etc. (§ 6431).

The provision allows taxpayers to elect to be treated as having made a payment of tax equal to 85% of the value of the credit they would otherwise be eligible for under the ITC or the PTC. Rather than opting to carry forward credits to years when their credits exceed their tax liability, taxpayers can take a reduced credit and request a refund of any resulting overpayment of tax. This allows entities with little or no tax liability to accelerate utilization of these credits.

Tribal governments are treated as making a payment equal to the full value of the credit, instead of 85%.

Sec. 105. Extension of energy credit for offshore wind facilities (§ 48(a)(5)).

The provision exempts offshore wind facilities that elect into the ITC (rather than the PTC) from reductions in the credit from the onshore wind facility phaseout. The credit expires for facilities that begin construction after the later of 1) the end of 2024 *or* 2) the end of the year that national offshore wind capacity is 3,000 MW above the capacity at the start of 2020. The provision directs the Secretary of the Treasury to issue an annual report starting in January 2024 of the status of the increase in offshore wind capacity.

Sec. 106. Green energy publicly traded partnerships (§ 7704).

The provision would expand the definition of qualified income for publicly traded partnerships from certain income derived from minerals and natural resources to include income derived from green and renewable energy. These additions include income from certain activities related to energy production eligible for the PTC, property eligible for the ITC, renewable fuels, and energy and fuel from certain carbon sequestration or gasification projects eligible for credits under §§ 48B or 45Q.

TITLE II – RENEWABLE FUELS**Sec. 201. Biodiesel and renewable diesel (§§ 40A, 6426, and 6427).**

The provision extends the income and excise tax credits for biodiesel and biodiesel mixtures at \$1.00 per gallon through 2021 and phases the credit down to \$0.75 in 2022, \$0.50 in 2023, and \$0.33 in 2024. The credit expires at the end of 2024.

The provision also extends the \$0.10-per-gallon small agri-biodiesel producer credit through the end of 2024. The provision provides a retroactive extension of these credits for qualified sales occurring between January 1, 2018, and the date of enactment of the provision, and requires the Secretary of the Treasury to issue guidance to provide for a one-time submission of claims related to these credits.

Sec. 202. Extension of excise tax credits relating to alternative fuels (§§ 6426 and 6427).

The provision extends the excise tax credits for alternative fuels and alternative fuel mixtures at the pre-expiration level of \$0.50 per gallon through 2021 and phases the credit down to \$0.38 in 2022, \$0.25 in 2023, and \$0.17 in 2024. The credit expires at the end of 2024.

The provision clarifies that for purposes of the alternative fuel mixtures credit, an alternative fuel mixture does not include a mixture that includes liquefied petroleum gas, p-series fuels, compressed or liquefied natural gas, liquefied hydrogen, fuel derived from coal gasification and sequestration, and biomass fuel. The provision provides a retroactive extension of these credits for qualified sales occurring between January 1, 2018, and the date of enactment of the provision, and requires the Secretary of the Treasury to issue guidance to provide for a one-time submission of claims related to these credits.

Sec. 203. Extension of second generation biofuel incentives (§ 40).

The provision extends the second generation biofuel income tax credit through 2024. It also extends the 50% special allowance for depreciation of second generation biofuel plant property placed in service by the end of 2024.

TITLE III – GREEN ENERGY AND EFFICIENCY INCENTIVES FOR INDIVIDUALS

Sec. 301. Extension, increase, and modifications of nonbusiness energy property credit (§ 25C).

The provision extends the § 25C nonbusiness energy property credit to property placed in service by the end of 2024. For expenditures and property placed in service starting in 2020, the provision modifies and expands the credit, including by:

- increasing the percentage of the credit for installing qualified energy efficiency improvements from 10% of the cost to 15%,
- increasing the lifetime cap on credits allowed under this section from \$500 to \$1,200 and restarting the lifetime limit beginning in 2020,
- updating various standards and associated limits to reflect advances in energy efficiency and removing eligibility of roofs and advanced main air circulating fans, and
- expanding the credit to cover the costs of home energy audits, allowing a credit of 30% of such costs up to a maximum credit of \$150.

Sec. 302. Residential energy efficient property (§ 25D).

The provision extends the credit for the cost of qualified residential energy efficient property expenditures, including solar electric, solar water heating, fuel cell, small wind energy, and geothermal heat pumps. The provision extends the full 30% credit for eligible expenditures through the end of 2024. The credit then phases down to 26% in 2025 and 22% in 2026. The credit expires after the end of 2026.

The provision also expands the definition of eligible property to include battery storage technology and energy efficient biomass fuel property. Correspondingly, biomass stoves are removed from § 25C to prevent a double benefit.

Sec. 303. Energy efficient commercial buildings deduction (§ 179D).

The provision extends the 179D energy efficient commercial building deduction through 2024. Starting in 2020, the provision also updates and expands the deduction by increasing the maximum deduction from \$1.80 per square foot to \$3.00 per square foot (with corresponding increases for the partial deduction). It also changes this maximum from a lifetime cap to a three-year cap.

The provision updates the eligibility requirements so that property must reduce associated energy costs by 30% or more in comparison to a building that meets the ASHRAE standards as of two years prior to the date of construction. Under the currently expired provision, property must reduce energy costs by 50% in comparison to the 2007 ASHRAE standard.

In the case of state or local government buildings, this provision removes the ability to allocate the deduction to the designer. Instead, the bill treats the governmental entity as having made a payment of tax equivalent to 10% of the value of the amount otherwise eligible for a deduction.

Sec. 304. Extension, increase, and modifications of new energy efficient home credit (§ 45L).

The provision extends the § 45L new energy efficient home credit through 2024.

Starting in 2020, the provision expands the maximum credit for eligible new energy efficient homes from \$2,000 to \$2,500 and makes eligible units with energy expenditures at least 15% below the expenditures of a comparable unit based on the 2018 International Energy Conservation Code standards. It also replaces the eligibility requirements for units eligible for

the \$1,000 credit to correspond with the Energy Star Labeled Homes program.

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Sec. 305. Modifications to income exclusions for conservation subsidies (§ 136).

The provision excludes from gross income water conservation and storm water management subsidies provided by public utilities, state or local governments, or storm water management providers. This provision applies to payments received starting in 2020.

TITLE IV -- GREENING THE FLEET AND ALTERNATIVE VEHICLES

Sec. 401. Modification of limitations on new qualified plug-in electric drive motor vehicle credit (§ 30D).

The provision expands the qualified plug-in electric drive motor vehicle credit under § 30D to apply a new transition period for vehicle sales of a manufacturer between 200,000 and 600,000 electric vehicles (EVs), under which the credit is reduced by \$500. The provision replaces the current phaseout period (which begins at 200,000 vehicles) with a phaseout period that instead begins during the second calendar quarter after the 600,000-vehicle threshold is reached. At the start of the new phaseout period, the credit is reduced by 50% for one quarter and terminates thereafter. For manufacturers that pass the 200,000-vehicle threshold before the enactment of this bill, the number of vehicles sold in between 200,000 and those sold on the date of enactment are excluded to determine when the 600,000-vehicle threshold is reached.

The provision extends the 2-wheeled plug-in electric vehicle credit through 2024. Starting in 2020, it also extends the 3-wheeled plug-in electric vehicle credit through 2024.

Sec. 402. Credit for previously-owned qualified plug-in electric drive motor vehicles (§ 25E).

The provision creates a new credit for buyers of used plug-in electric cars from date of enactment through 2024. Buyers can claim a base credit of \$1,250 for the purchase of qualifying used EVs, with additional incentives for battery capacity. The credit is capped at the lesser of \$2,500 credit or 30% of the sale price.

To qualify for this credit, used EVs must generally meet the eligibility requirements in the existing § 30D credit for new EVs, not exceed a sale price of \$25,000, and be a model year that is at least two years earlier than the date of sale.

Buyers with up to \$30,000 (\$60,000 for married couples filing jointly) in adjusted gross income can claim the full amount of the credit. The credit phases out so that buyers with below \$40,000 (\$70,000 for married couples) in AGI may be eligible for a reduced credit. Buyers must purchase the vehicle from a dealership for personal use and cannot claim the credit more than once every three years. The credit only applies to the first resale of a used EV and includes restrictions on sales between related parties.

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Sec. 403. Credit for zero-emission commercial vehicles and zero-emission buses (§ 45T).

The provision creates a manufacturer credit for the sale of heavy, zero-emission vehicles starting after the date of enactment through the end of 2024. Eligible manufacturers may claim a credit of 10% of the sale price of an eligible vehicle, capped at a credit of \$100,000. To be eligible, vehicles must be for domestic use, must weigh no less than 14,000 pounds, must not include an internal combustion engine, and must be propelled solely by an electric motor which draws electricity from a battery or fuel cell.

Sec. 404. Qualified fuel cell motor vehicles (§ 30B).

The provision extends the credit for the purchase of a qualified fuel cell motor vehicle through 2024.

Sec. 405. Alternative fuel refueling property credit (§ 30C).

The provision extends the alternative fuel vehicle refueling property credit through 2024. Starting in 2020, it also expands the credit for electric charging infrastructure by allowing a 20% credit for expenses above \$100,000 (i.e., it allows a credit for expenses beyond the current limit if certain requirements are met). To qualify for this uncapped credit, the property must: 1) be intended for general public use and either accept credit cards as a form of payment or not charge a fee, or 2) be intended for exclusive use by government or commercial vehicle fleets.

TITLE V – INVESTMENT IN THE GREEN WORKFORCE

Sec. 501. Extension of the advanced energy project credit (§ 48C).

The provision revives the § 48C qualified advanced energy property credit, allowing the Secretary to allocate an additional \$2.5 billion in credits for each year from 2020 through and including 2024.

Similar requirements to the original credit apply, with a few notable changes. The Secretary will determine allocations to projects each year with a requirement that property is placed in service

within 4 years of the date of the allocation. Projects will be given priority if the manufacturing is not for assembly of parts. The Secretary will provide a progress report to Congress by 2025 on the domestic job creation, and wages associated with such jobs, attributable to these projects.

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Sec. 502. Labor costs of installing mechanical insulation property (§ 45U).

The provision provides a credit for up to 10% of the labor costs incurred by a taxpayer in installing mechanical insulation property into a mechanical system which was originally placed in service not less than 1 year before the date on which such mechanical insulation property is installed. The credit is available for costs paid starting in 2020 through the end of 2024.

TITLE VI – ENVIRONMENTAL JUSTICE

Sec. 601. Qualified environmental justice program credit (§ 36C).

The provision creates a capped refundable competitive credit of \$1 billion for each year from 2020 through and including 2024 to institutions of higher education for environmental justice (EJ) programs.

The base credit is 20% of costs to be spent within five years by the receiving institution. Programs with material participation from Historically Black Colleges and Universities (HBCUs) and Minority Serving Institutions (MSIs) are eligible for a higher credit of 30%.

Qualifying EJ programs shall be designed to address or improve data about environmental stressors for the primary purpose of improving or facilitating the improvement of health and economic outcomes of individuals residing in low-income areas or areas populated disproportionately by racial or ethnic minorities.

Institutions receiving allocations shall make publicly available the application submitted to the Secretary and submit annual reports describing the amounts paid for and expected impact of the projects. The Secretary shall publicly disclose the identity of the institutions receiving the allocation and the amount of the allocation.

TITLE VII – TREASURY REPORT ON DATA FROM THE GREENHOUSE GAS REPORTING PROGRAM

Sec. 701. Report on greenhouse gas reporting program.

The provision requires the Secretary of the Treasury to assess and report on the utility of the data from the Environmental Protection Agency's Greenhouse Gas Reporting Program for determining the amount of greenhouse gases emitted by each taxpayer for the purpose of imposing a fee on such taxpayers with respect to such emissions.

TITLE VIII – REVENUE RAISERS

To be provided.



Contra Costa County Board of Supervisors

Subcommittee Report

SUSTAINABILITY COMMITTEE

Meeting Date: 12/09/2019

Subject: RECEIVE Report from Sustainability Commission Chair.

Department: Conservation & Development

Referral No.: N/A

Referral Name: N/A

Presenter: Howdy Goudy, Chair **Contact:** Jody London (925)674-7871

Referral History:

This is a standing item of the Commission.

Referral Update:

The Sustainability Commission Chair provides an update at each meeting of the Sustainability Committee on the work of the Commission.

At its August meeting the Sustainability Commission adopted the attached environmental justice assessment tool and recommends its use in updating the County's General Plan.

Recommendation(s)/Next Step(s):

RECEIVE report from Sustainability Commission Chair.

Fiscal Impact (if any):

None.

Attachments

No file(s) attached.



Contra Costa County Board of Supervisors

Subcommittee Report

SUSTAINABILITY COMMITTEE

Meeting Date: 12/09/2019
Subject: RECEIVE REPORT from Sustainability Coordinator.
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:

The Ad Hoc Committee on Sustainability has requested an update at each meeting on sustainability work by County staff.

Referral Update:

This report provides an update to the Sustainability Committee on the work of the County's Sustainability staff since the Committee last met on September 23, 2019. Key activities during this period are listed below.

- The Climate Action Plan update is a major focus of work right now for sustainability staff. Over the last several months, sustainability staff worked with Sustainability Commission members and community partners to host four community meetings to obtain input on draft goals and strategies for the Climate Action Plan (CAP). The meetings were held on September 19 in Central County (Walnut Creek), September 26 in West County (Crockett), October 1 in North Richmond, and October 15 in East County (Antioch). Sustainability staff are now meeting with County staff across departments to begin discussions about CAP goals and strategies.
- Hosted the quarterly meeting of the Sustainability Exchange, a venue for local government staff to network and exchange best practices. The focus of the November 21 meeting was climate action planning. Over 30 local government staff members from across the County, as well as other Bay Area counties, the Bay Area Air Quality Management District, and the California Department of Health, came together to discuss opportunities to align climate documents, goals, and projects.
- Developed a draft solar overlay zoning ordinance, as directed by the Board of Supervisors in December 2018, when it received the Renewable Resource Potential Study.
- Prepared for and supported the October 21 meeting of the Sustainability Commission.
- Hosted four (4) single-family homeowner workshops promoting Bay Area Regional Energy Network Programs for the cities of Antioch, San Pablo and Walnut Creek as well as one workshop in the unincorporated area of Martinez.
- The County's Sustainability Coordinator presented with Contra Costa Transportation

Authority (CCTA) on the Electric Vehicle Readiness Blueprint at the Northern California meeting of the American Public Works Association. The Sustainability Coordinator presented on the importance of local government advocacy before state energy policy makers at the Urban Sustainability Directors Network annual meeting.

- Coordinated with CCTA and MCE on opportunities for funding to support implementation of the Electric Vehicle Readiness Blueprint.
- Developed a draft ordinance that streamlines permitting for installing electric vehicle chargers in the unincorporated County, in compliance with AB 1236. The draft ordinance will come to the Board of Supervisors later this month. Having an AB 1236 ordinance is important for eligibility for certain grants for electric vehicles and EV infrastructure.
- Collaborated with County staff working on topics including land use and transportation, hazardous materials, green business program, the County's state and federal legislative platforms, economic development, health, codes, solid waste, energy, and related.
- Participated in regional activities.

Recommendation(s)/Next Step(s):

RECEIVE REPORT from County Sustainability Coordinator.

Fiscal Impact (if any):

None.

Attachments

No file(s) attached.
