

CONTRA COSTA COUNTY

AGENDA

Sustainability Committee

Supervisor Ken Carlson, Chair Supervisor John Gioia, Vice Chair

Monday, September 8, 2025

1:00 PM

11780 San Pablo Ave., Ste. D, El Cerrito, CA 94530 |

2255 Contra Costa Blvd., Ste. 202 Pleasant Hill, CA 94523

ZOOM LINK https://cccounty-us.zoom.us/j/81614339223

| Dial: 888-278-0254 | ACCESS CODE: 841892

The public may attend this meeting in person at either above location(s). The public may also attend this meeting remotely via Zoom or call-in.

AGENDA ITEMS:: Items may be taken out of order based on the business of the day and preference of the Committee.

- 1. INTRODUCTIONS Call to Order and roll call.
- 2. PUBLIC COMMENT on any item under the jurisdiction of the Committee and not on this agenda (speakers may be limited to two (2) minutes.
- 3. APPROVE Record of Action of May 12, 2025, meeting of the Sustainability <u>25-3501</u> Committee.

Attachments: 5.12.25 Sust Cmte MINUTES DRAFT

4. APPROVE Record of Action from July 14, 2025, meeting of the Sustainability

Committee.

25-3502

Attachments: 7.14.25 Sust Cmte MINUTES DRAFT

5. RECEIVE REPORT on adoption of 2025 State Building Code and RECOMMEND APPROVAL to Board of Supervisors.

Attachments: 2025 CBSC Adoption Sustainability Committee 09.08.25 V2

6. ACCEPT public comments and CONSIDER recommending adoption of the Contra Costa County Clean Energy Roadmap for Existing Buildings to the Board of Supervisors.

25-3504

Attachments: Attachment 1 Summary of Public Comments Received

Attachment 2 350 Contra Costa Action Public Comment

Letter 4-21-25

County Clean Energy Roadmap for Existing Buildings FINAL DRAFT

CLEAN 9-2-25

7. RECEIVE Report on Contra Costa Asthma Initiative Grant Project and PROVIDE DIRECTION, if needed.

25-3505

Attachments: CC Asthma Initiative Report 7-2025

8. RECEIVE report from the Sustainability Commission Chair, or Designee.

25-3506

9. RECEIVE report on staff activities that support sustainability goals.

25-3507

Attachments: 2025 09 08 Sust. Staff Report to Sust. CMTE

10. ADJOURN until the next Sustainability Committee meeting to be held on Monday, November 10, 2025, at 1:00pm.

GENERAL INFORMATION

This meeting provides reasonable accommodations for persons with disabilities planning to attend a the meetings. Contact the staff person listed below at least 72 hours before the meeting.

Any public records subject to disclosure related to an open session item on a regular meeting agenda and distributed by the County to a majority of members of the Committee less than 96 hours prior to that meeting are available for public inspection at:

30 Muir Rd., 1st Floor, Martinez, CA 94553

HOURS:

Monday through Friday

8 a.m. to 5 p.m.

Staff reports related to items on the agenda are also accessible on line at www.co.contra-costa.ca.us.

HOW TO PROVIDE PUBLIC COMMENT

Persons who wish to address the Committee during public comment on matters within the jurisdiction of the Committee that are not on the agenda, or who wish to comment with respect to an item on the agenda, may comment in person, via Zoom, or via call-in. Those participating in person should offer comments when invited by the Committee Chair. Those participating via Zoom should indicate they wish to speak by using the "raise your hand" feature in the Zoom app. Those calling in should indicate they wish to speak by pushing *9 on their phones.

Public comments generally will be limited to two (2) minutes per speaker. In the interest of facilitating the business of the Board Committee, the total amount of time that a member of the public may use in addressing the Board Committee on all agenda items is 10 minutes. Your patience is appreciated.

Public comments may also be submitted to Committee staff before the meeting by email or by voicemail. Comments submitted by email or voicemail will be included in the record of the meeting but will not be read or played aloud during the meeting.

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

Jody London (925) 655-2815



CONTRA COSTA COUNTY

1025 ESCOBAR STREET MARTINEZ, CA 94553

Staff Report

File #: 25-3501 Agenda Date: 9/8/2025 Agenda #: 3.

SUSTAINABILITY COMMITTEE

Meeting Date: September 8, 2025

Subject: APPROVE Record of Action of May 12, 2025 Meeting of the Sustainability Committee

Submitted For: SUSTAINABILITY COMMITTEE

Department: DEPARTMENT OF CONSERVATION & DEVELOPMENT

Presenter: Jody London || Sustainability Coordinator | DCD

Contact: Jody London | (925) 655-2815

Referral History:

This is a standing item of the Committee.

Referral Update:

PLEASE SEE ATTACHMENT.

Recommendation(s)/Next Step(s):

APPROVE Record of Action of May 12, 2025 meeting of the Sustainability Committee.

Fiscal Impact (if any):

None.

SEAT OF

CONTRA COSTA COUNTY

Committee Meeting Minutes - Draft

Sustainability Committee

Supervisor Ken Carlson, Chair Supervisor John Gioia, Vice Chair

Monday, May 12, 2025

1:00 PM

11780 San Pablo Ave., Ste. D, El Cerrito, CA 94530 |

2255 Contra Costa Blvd., Ste. 202, Pleasant Hill, CA 94523

ZOOM LINK

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AGENDA ITEMS: Items may be taken out of order based on the business of the day and preference of the Committee.

1. INTRODUCTIONS Call to order and roll call.

Chair Carlson called the meeting to order at 1:00pm.

Staff Present: Jody London, Sustainability Coordinator, Dept. of Conservation and Development;

Emily Warming, Program Manager, Contra Costa Health;

Jeff Valeros, Senior Civil Engineer, Public Works;

Joe Smithonic, Associate Civil Engineer, Public Works;

Jamar Stamps, Principal Planner, Dept. of Conservation and Development;

Colin Clarke, Senior Transportation Planner, CCTA;

Danielle Elkins, Executive Director of Planning, Programs, and Policy, CCTA;

Mary Griswell, Sm. Business Enterprise Outreach Liaison, Tax Collector's Office;

Raquel De La Torre, Advance Level Secretary, Dept. of Conservation and Development;

Lia Bristol, Deputy Chief of Staff, Supervisor Carlson's Office;

Adam Scarbrough, Planner, Dept. of Conservation and Development;

Emily Groth, Planner, Dept. of Conservation and Development;

Robert Sarmiento, Planner, Dept. of Conservation and Development;

Samantha Harris, Planner, Dept. of Conservation and Development;

Salvador Morales, Planner, Dept. of Conservation and Development;

Ronda Boler, Executive Secretary, Tax Collector's Office

Attendees: Shoshana Wechsler (Sustainability Commission Chair)

OG Strogatz

Lisa Jackson Carol Mascali Allison Brown Andrea Bailey

Present: District I Supervisor John Gioia and District IV Supervisor Ken

Carlson

2. PUBLIC COMMENT on any item under the jurisdiction of the Committee and not on this agenda (speakers may be limited to two (2) minutes).

There was no public comment.

3. APPROVE Record of Action from March 10, 2025, meeting of the Sustainability Committee.

Attachments: Meeting Minutes 03.10.25

Record of Action approved.

There was no public comment.

4. RECEIVE report on County Progress in Achieving Active Transportation Goals and Implementing Programs and PROVIDE DIRECTION, as needed.

Attachments: Presentation on TR-1

The Committee received a presentation highlighting the County's progress in achieving its active transportation goals as part of the County's Climate Action and Adaptation Plan (CAAP) implementation. The presentation covered a range of topics beginning with an overview provided by Jody London, Sustainability Coordinator, of the CAAP transportation goals and the policy levers available to staff to advance these goals. The next update was given by Jamar Stamps, Principal Transportation Planner, on the County's Vison Zero Policy, the County's Active Transportation Plan, and the Complete Streets Program where Stamps highlighted four Complete Streets Project locations:

- Fred Jackson Way in North Richmond
- Danville Boulevard in Alamo
- Bailey Road/SR-4 Interchange in Bay Point
- Treat Boulevard in Walnut Creek (currently in planning phase)

Joe Smithonic, Associate Mechanical Engineer, shared the existing and planned paths, lanes, routes, and bikeways in the County, highlighting the regions of the County with high rates of bike/pedestrian collisions and the locations within each supervisorial district where grant funding is supporting active transportation projects. Smithonic discussed the Fred Jackson Way First Mile/Last Mile connection and a bike/pedestrian improvements project along the Treat Boulevard Corridor in Walnut Creek which is currently in the design phase with construction beginning in 2026. Also highlighted were the efforts by staff in developing an interactive web

map to view the County's Active Transportation Plan projects and their status.

Emily Warming, Program Manager for Contra Costa Health's Healthy Communities Program, share the program's goal to improve safety and promote active transportation in the County. Warming provided updates on the Safe Routes to School Programs in the County and the Slow Roads Save Lives marketing campaign. She also reinforced that the County continues working to integrate public health principles into transportation infrastructure planning through the County's Planning Integration Team for Community Health (PITCH) group. PITCH includes representatives from the County's Public Works, Conservation and Development, and Health Departments.

Staff concluded the presentation by highlighting the strategies that continue and accelerate this work which included continuing to leverage General Fund dollars for grant matching, strengthening the connection between the Capital Road Improvement and Preservation Program (CRIPP) and the Active Transportation Plan, and continued support from the Board of Supervisors for improved active transportation access.

COMMITTEE DISCUSSION:

The Committee asked what the measures for success for projects and plans around this work. Smithonic responded citing safety and pre/post counts of active transportation users as the primary metrics..

PUBLIC COMMENT:

There was no public comment.

5. RECEIVE update from Contra Costa Transportation Authority on Active Transportation Goals and Programs.

<u>Attachments:</u> <u>CCTA SustainabilityCommittee-BoS_ActiveTransportationUpdate</u>

The Committee received a presentation from Danielle Elkins, Executive Director of Planning and Colin Clarke, Senior Transportation Planner, both of the Contra Costa Transportation Authority (CCTA).

The presentation began with a general overview and timeline for the Integrated Transit Plan (ITP) and Countywide Transportation Plan (CTP). CCTA is working towards adoption for the ITP in Winter 2025 and for the CTP in early Summer, 2025. As part of this work, CCTA completed a needs assessment concurrently with the CTP development and the report identified transportation needs in the County and opportunities for CCTA to work to meet these needs. These opportunities include continuing to implement the County's Vision Zero Safety Action Plan, advancing Safe Routes to Schools programs, further building out the County's regional active transportation network, and utilizing the CCTA Countywide Toolbox for Designing Safer Travel policy framework. An additional needs assessment was conducted with a focus on Regional Routes of Significance (RORS) which resulted in the following conclusions RORS projects' success.

- Continue to progress the Countywide Smart Signals project
- Continue implementation of complete streets projects
- Taking a context-sensitive approach in some RORS by differentiating streets that are intended for moving people and goods from streets that are intended as places for people to

live, work, and enjoy

Elkins provided an overview of the Countywide Bicycle and Pedestrian Plan (CBPP) goals and objectives. The CBPP aims to encourage more people to walk and bicycle in by creating a safe, connected, and comfortable network of bikeways and walkways that increases livability in communities and districts with a focus on projects posing the greatest benefit. The CBPP includes objectives for tracking progress toward these goals which include:

- Percentage (%) increase of trips made by biking or walking
- Rate of pedestrian and bicycle injury/fatality per capita
- Miles of low-stress bikeway increase
- Number of jurisdictions with bicycle, pedestrian, or active transportation plans increase
- Integration of Complete Streets principles and best practices into CCTA funding and design guidance

CCTA staff have developed a Dashboards and Mapping webpage to convey the number of projects, project status, and location/project sponsor.

COMMITTEE DISCUSSION:

The Committee asked for clarification on the killed or seriously injured (KSI) rates mentioned on Slide 7. Do these always involve collisions with automobiles or does this capture both accidents involving automobiles and accidents not involving automobiles. Staff responded that the metric does include both types of collisions and clarified that the vast majority of these accidents do involve automobiles. The Committee also asked about the intended use for these low-stress safe biking routes, inquiring as to whether they were intended for recreation, commuting, or both. Staff indicated that there is precedent in other regions for utilizing trail systems for economic activity and that CCTA has been coordinating with the East Bay Regional Parks District (EBRPD) and other entities to reorient land-uses along these trails to be more compatible with trail access. In response, Chair Carlson highlighted that the Transportation Partnership and Cooperation Committee (TRANSPAC) has also been focusing on increasing accessibility for these active transportation networks.

PUBLIC COMMENT:

There was no public comment

6. RECEIVE report from the Sustainability Commission Chair, or Designee.

Shoshana Wechsler, Sustainability Commission Chair, gave an update on the Sustainability Commission's activities. At the last meeting of the Commission spent much of the session working to onboard 17 new members. The Commission also received a presentation from Jamar Stamps on the County's new tree protection ordinance which was well received. Wechsler ended her report by highlighting an upcoming presentation on native trees for the urban forest by the Native Plant Society at the City of Albany Library on May 18, 2025.

PUBLIC COMMENT:

There was no public comment

7. RECEIVE report on staff activities that support sustainability goals.

Attachments: Sustainability Staff Progress Report

Jody London gave an update on the County's Sustainability work. Staff are working to finalize contract agreements and starting to develop RFPs for two grants the County has been awarded; a grant to help the County prepare for Sea Level Rise as well as a grant to fund the development of the County's first Urban Forest Management Plan (UFMP). Staff are currently implementing the Energy Efficiency and Conservation Block Grant (EECBG). These grant funds will be used to complete an inventory of the County's existing building stock and an analysis of the costs related to transitioning the building to be all-electric, which is currently underway, as well as retrofitting licensed home-based daycare facilities to be more energy efficient and to run on clean energy. Staff are currently working to draft the RFP for the retrofit component of this work. Last week, staff received an official termination letter from the U.S. Environmental Protection Agency (EPA) for the \$19 million grant awarded in late 2024. The County is currently exploring options to dispute the termination.

In addition to grants, staff have begun organizing an All-Electric Working Group for Existing Buildings which is open to virtually any stakeholder interested in transitioning existing buildings to be all-electric. Staff continue to work on finalizing the Clean Energy Roadmap for Existing Buildings (Roadmap). The public comment period for the Roadmap ended on April 24, 2025 so staff is going through and addressing the comments received and preparing to bring the Roadmap back to the Sustainability Committee over the Summer for recommendation to the Board.

Staff have developed a new program in the City of Pittsburg based on the Pinole Energy Enhancements Program (PEER) model. This new program, dubbed the Bay Point/Pittsburg Energy Enhancement Program, is funded through the Keller Canyon Mitigation Fund and open to those in the community living near the Keller Canyon Landfill. Currently the program offers additional rebates for heat pumps to community members living in the program area.

London quickly highlighted a few additional items the Sustainability Team is working on:

- Staff continue to monitor the work related to the Green Empowerment Zone (GEZ)
- On May 1, 2025, the County's Energy Efficiency Ordinance (2024-17) went into effect
- The upcoming Sustainability Newsletter scheduled to be published at the end of May
- The latest Sustainability Exchange focused on the County's Green Business Program
- The Sustainability Team lost its AmeriCorps Fellow due to the Federal Governments' defunding of the AmeriCorps program

PUBLIC COMMENT:

There was no public comment

8. ADJOURN until the next Sustainability Committee Meeting to be held on, Monday, July 14, 2025, at 1:00pm.

Meeting adjourned at 2:11pm.

GENERAL INFORMATION

HOW TO PROVIDE PUBLIC COMMENT

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:





CONTRA COSTA COUNTY

1025 ESCOBAR STREET MARTINEZ, CA 94553

Staff Report

File #: 25-3502 Agenda Date: 9/8/2025 Agenda #: 4.

SUSTAINABILITY COMMITTEE

Meeting Date: September 8, 2025

Subject: APPROVE Record of Action of July 14, 2025 Meeting of the Sustainability Committee

Submitted For: SUSTAINABILITY COMMITTEE

Department: DEPARTMENT OF CONSERVATION & DEVELOPMENT

Presenter: Jody London | Sustainability Coordinator | DCD

Contact: Jody London | (925) 655-2815

Referral History:

This is a standing item of the Committee.

Referral Update:

PLEASE SEE ATTACHMENT.

Recommendation(s)/Next Step(s):

APPROVE Record of Action of July 14, 2025, meeting of the Sustainability Committee.

Fiscal Impact (if any):

None.

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CONTRA COSTA COUNTY

Committee Meeting Minutes - Draft

Sustainability Committee

Supervisor Ken Carlson, Chair Supervisor John Gioia, Vice Chair

Monday, July 14, 2025

1:00 PM

11780 San Pablo Ave., Ste. D, El Cerrito, CA 94530 |

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AGENDA ITEMS: Items may be taken out of order based on the business of the day and preference of the Committee.

1. INTRODUCTIONS Call to order and roll call.

Chair Carlson called the meeting to order at 1:03 pm. Carlson stated that Supervisor Gioia had to attend to an important matter that could keep him from attending this meeting.

Staff Present: Jody London, Sustainability Coordinator, Dept. of Conservation and Development;

Raquel De La Torre, Advance Level Secretary, Dept. of Conservation and Development; Demian Hardman-Saldana, Principal Planner, Dept. of Conservation and Development;

Lia Bristol, Deputy Chief of Staff, Supervisor Carlson's Office;

Blake McPherson, Student Intern, Dept. of Conservation and Development;

Joe Smithonic, Associate Civil Engineer, Public Works; Colin Clarke, Senior Transportation Planner, CCTA;

Attendees: Shoshana Wechsler, Sustainability Commission Chair

Marti Roach Denice Dennis Lisa Jackson Cheryl Sudduth Veronica Robles Carmen Cano Caitlin Powell Ogie Strogatz Lily Rahnema Jan Warren

Present: District IV Supervisor Ken Carlson

Absent: District I Supervisor John Gioia

2. PUBLIC COMMENT on any item under the jurisdiction of the Committee and not on this agenda (speakers may be limited to two (2) minutes).

There was no public comment.

3. APPROVE Record of Action of May 12, 2025, meeting of the Sustainability Committee.

Attachments: 5.12.25 Sust Cmte MINUTES DRAFT

This item was deferred to the Sustainability Committee meeting scheduled for September 11, 2025.

There was no public comment.

4. RECEIVE Report on Contra Costa Asthma Initiative Grant Project and PROVIDE DIRECTION, if needed.

Attachments: CC Asthma Initiative Report 7-2025

This item was deferred to the Sustainability Committee meeting scheduled for September 11, 2025.

There was no public comment.

5. RECOMMEND that the Board of Supervisors DIRECT staff to participate in CPUC Rulemaking 24-09-012 for the purpose of identifying communities that could potentially be designated to participate in pilot projects of neighborhood-level conversion to all-electric buildings.

Attachments: Attachment A - SB-1221 Gas corporations_ceasing service_priorit

neighborhood decarbonization zones

Attachment B - Article re Richmond Gas Line Removal

Attachment C - This Oakland Block Tried to Quit Fossil Fuels. Her

What They Learned KQED

Jody London, Sustainability Coordinator, introduced the item by providing background information on Senate Bill 1221, which directed the California Public Utilities Commission (CPUC) to authorize up to 30 pilot projects in which gas utility companies would remove an entire neighborhood's gas lines and convert each home to operate entirely on electricity. There is an ongoing CPUC proceeding to designate neighborhoods in California for this pilot program. London requested the Board to direct staff to participate in the proceeding to advocate for Impacted Communities in Contra Costa County's to have the option to participate in this program.

COMMITTEE DISCUSSION:

Chair Carlson expressed support for the County's participation in the CPUC Rulemaking proceeding and recommended bringing this item to the Board of Supervisors' meeting on July 22, 2025, as a consent item.

PUBLIC COMMENT:

There was no public comment.

6. RECEIVE report from the Sustainability Commission Chair, or Designee.

Shoshana Wechsler, Sustainability Commission Chair, did not have a report due to the cancellation of the Sustainability Commission meeting from a lack of quorum on June 23, 2025. Wechsler explained the Commission is in the process of rescheduling the meeting, with the same agenda, for the end of July.

Chair Carlson invited the Commission to reach out for any help the Committee can offer in achieving a quorum and expressed support for the Commission.

Chair Carlson highlighted the importance of guidance from the Commission and Committee in the coming months to direct the County's actions relating to air pollution reduction, increased educational outreach, and affordability of transitioning to all-electric appliances. One topic of discussion was Rule 9-7, a California State Regulation limiting the emissions of nitrogen oxides (NOx) and carbon monoxide from large boilers at industrial facilities. Another highlighted idea was the potential to bring manufacturing of "No NOx" appliances to Contra Costa County to aide in the transition to all-electric appliances for healthier communities.

Wechsler emphasized that affordability is crucial to consider in supporting this transition.

PUBLIC COMMENT:

There was no public comment.

7. RECEIVE report on staff activities that support sustainability goals.

Attachments: 2025 07 14 Sust. Staff Report to Sust. CMTE

Jody London, Sustainability Coordinator, provided a verbal update on the County's Sustainability work, in which staff members are making progress on the following topics:

- Staff have received bids for two Requests for Proposal (RFPs) to hire technical and community engagement consultants to aid in the development of a shoreline adaptation plan, funded by the Ocean Protection Council's Senate Bill 1 Sea Level Rise Adaptation Planning Grant.
- The County will be utilizing funding from the U.S. Department of Energy's Energy Efficiency and Conservation Block Grant to conduct research on the types of existing building stock in the unincorporated County to determine which types are most suitable for all-electric retrofits compared to appliance replacement.
- An RFP is being prepared to hire a technical consultant for all-electric retrofits for licensed family-based daycare facilities.
- The County has entered into contracts with community partners and the Workforce Development Board of Contra Costa County to develop an Urban Forest Management Plan, and is in negotiation with a technical consultant for the technical aspects of the project.

- Public comments regarding the Clean Energy Roadmap have been received and are being considered. Staff is planning to present the Roadmap to the Committee in September.
- On May 1, staff received a Notice of Termination Award cancelling the \$19 million Community Change Grant from the United States Environmental Protection Agency (EPA). The County is supporting a class action lawsuit to fight the unlawful termination of the EPA's Section 138 Environmental and Climate Justice Grant Program. The County also requests that staff at EPA need to be reinstated to administer the grant.
- Staff continues to implement the Bay Point/Pittsburg Energy Enhancement Pilot Program. London expressed gratitude to the Keller Canyon Mitigation Fund for trailblazing a new way to improve air quality for affected communities.
- Staff will soon issue a RFP for the development of the Just Transition Economic Revitalization Plan.
- The All-Electric Building Ordinance went into effect on May 1.
- Staff have attended and presented at regional conferences, including the Western Regional Meeting of the Urban Sustainability Directors Network and the California Climate and Energy Collaborative.
- Contra Costa Health continues to source funds and implement programs under the Building Healthy Communities Program, including helmet distribution events, bike rodeos, safety presentations and community engagement. This work is grant funded but would benefit from a stable funding source going forward.
- The Library has partnered with Sustainable Contra Costa and California Master Gardeners to host several educational and leadership-oriented events. This fall, the County will be updating the home energy efficiency toolkits available for check-out.

COMMITTEE DISCUSSION:

Chair Carlson noted difficulty in past experiences attempting to reach railroad owners and large industrial facilities for sea level rise planning purposes and asked if staff has ideas on how to engage them for subregional shoreline adaptation planning. London explained that the Sustainability team has a comprehensive outreach strategy for communities but may face similar difficulties with engaging industry partners and would like to strategize with the Board on increasing railroad and industry participation in planning for sea level rise adaptation.

The Committee discussed the prioritization of impacted communities when planning for air quality with daycare providers. Demian Hardman-Saldana, Principal Planner with the Department of Conservation and Development, explained the County is working with CocoKids to help the County prioritize implementation at daycare facilities in impacted communities, specifically those next to point source emissions.

The Committee discussed the potential for the County's Regional Transportation Planning Committees to become a source of funding for Safe Routes to School programs from Measure J funds, rather than the programs relying primarily on annual competitive grants.

PUBLIC COMMENT:

Jan Warren commented on the topic of sea level rise planning and difficulty from personal experience with obtaining participation from railroads and large industrial facilities. Warren suggested requesting support from a State legislator to introduce legislation that would require the industrial facilities along the shoreline to participate in sea level rise adaptation planning.

Marti Roach, a member of 350 Contra Costa Action, mentioned the East Contra Costa Healthy Homes project that is performing work on homes in Pittsburg and Antioch, and suggested collaborating with the County to align efforts would increase efficiency in the region. Roach inquired if the County's planned work to improve air quality at daycare facilities includes installing all-electric appliances. Demian Hardman-Saldana, Principal Planner, explained that the County must first determine the implementing contractor through the RFP process. Reducing asthma risk and making daycare homes all-electric will be prioritized, but cost will be a factor in the implementation strategy.

Colin Clarke, Senior Transportation Planner at Contra Costa Transportation Authority, submitted an online comment confirming that Safe Routes to School funds are annual competitive grants and that multi-year funding for the program will be critical for SRTS to be successful long-term and short-term. The One Bay Area Grant 3 program will also fund the expansion of Safe Route to School to become county-wide.

Chair Carlson suggested that the County could maintain a list of related air quality enhancement programs in the Bay Area to provide information to those who may not qualify for a certain program, but may qualify for a program through a different organization, like the Bay Area Air District.

8. ADJOURN until the next Sustainability Committee Meeting to be held on, Monday, September 8, 2025, at 1:00pm.

Meeting adjourned at 1:46pm

GENERAL INFORMATION

HOW TO PROVIDE PUBLIC COMMENT

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:



CONTRA COSTA COUNTY

1025 ESCOBAR STREET MARTINEZ, CA 94553

Staff Report

File #: 25-3503 Agenda Date: 9/8/2025 Agenda #: 5.

SUSTAINABILITY COMMITTEE

Meeting Date: September 8, 2025

Subject: Adoption of the 2025 California Building Standards Code

Submitted For: John Kopchik | Director | DCD

Department: DEPARTMENT OF CONSERVATION & DEVELOPMENT

Presenter: Jason Crapo || Deputy Director | DCD

Contact: Jason Crapo | (925) 655-2800

Referral History:

This subject was referred to the Sustainability Committee by the Board of Supervisors on August 4, 2025.

Referral Update:

Triennial Building Code Cycle and Adoption of the 2025 California Building Code

Since 2007, the State of California has adopted a new statewide building code every three years, known as the California Building Standards Code (CBSC). The California Building Standards Commission has now adopted and released the 2025 CBSC, replacing the 2022 CBSC. The 2025 CBSC includes the California Building, Residential, Electrical, Mechanical, Plumbing, Energy, Wildland-Urban Interface, Historical Building, Existing Building and Green Building Standards Codes. These statewide codes will become effective January 1, 2026. The Department of Conservation and Development is responsible for enforcing the CBSC within the unincorporated area of Contra Costa County.

Local jurisdictions such as the County have the authority to adopt amendments to the statewide code under conditions specified in State law. Such amendments must be more restrictive than statewide code requirements and must be accompanied by findings that the changes and modifications to the statewide code are reasonably necessary because of local climatic, topographical, geological or environmental conditions. Local amendments to the California Energy Code must also be approved by the California Energy Commission and must be accompanied by a finding that such amendments are cost effective.

Contra Costa County has a history of adopting a limited number of amendments to the CBSC in past code cycles. Some of the County's local amendments were established decades ago and address local health and safety concerns such as seismic risks and soil conditions.

Over the past decade the Board of Supervisors has also adopted local building code amendments addressing concerns related to climate change. These include increasing requirements for the installation of electric vehicle chargers and increasing energy efficiency standards for new residential and non-residential buildings.

File #: 25-3503 Agenda Date: 9/8/2025 Agenda #: 5.

Recent Changes to State Law concerning Local Amendments to the State Building Code

Recent changes to State law have placed new additional restrictions on the authority of local jurisdictions to amend the CBSC as it relates to the construction of new residential housing units. As part of a package of reforms to encourage housing construction in California, Governor Newsom recently signed into law changes to the Health and Safety Code that limit the authority of local jurisdictions to adopt building code amendments related to the construction of new housing to those amendments already in effect as of September 30, 2025, with a few narrow exceptions. These changes to local authority will remain in effect from October 1, 2025, until June 1, 2031. This means the County is restricted in its authority to adopt any new code amendments related to new residential construction in the 2025 CBSC. Local jurisdictions retain broader discretion to adopt code amendments related to non-residential construction, subject to making the required findings.

Development of 2025 Building Code Adoption Ordinance

Staff in the Department of Conservation and Development, working closely with County Counsel, are currently in the process of developing an ordinance for the Board of Supervisors to consider that would adopt the 2025 CBSC with local amendments. This process involves reviewing the new statewide code and determining which existing local code amendments should be eliminated or modified based on changes to the statewide code and which are still needed in their current form. In some areas, changes to the statewide code have made the State building code more restrictive, resulting in some of the County's existing local amendments no longer being necessary.

Staff are giving special attention to two areas of the 2025 CSBC that have been amended by the Board of Supervisors in recent code cycles: electric vehicle charging and the energy efficiency requirements in the energy code. These two areas are discussed in more detail below.

Electric Vehicle Charging

In the last code cycle, the Board of Supervisors amended the 2022 CBSC to increase the requirements for electric vehicle chargers for new multifamily residential and new non-residential construction. The current local amendments now in effect require 10% of parking spaces in both new multifamily residential and new non-residential developments to have an electric vehicle charger installed.

The County's existing local amendment for multifamily developments remains necessary to ensure that all new multifamily developments are required to have at least 10% of parking spaces served by an electric vehicle charger under the 2025 CBSC. Therefore, staff recommend this local amendment be retained as part of the local adoption of the 2025 CBSC.

Similarly, the County's existing local amendment for new non-residential construction continues to be necessary to ensure all such developments are required to have at least 10% of parking spaces served by an electric vehicle charger under the 2025 CBSC. However, the requirements in the 2025 CBSC now exceed the requirements of the County's current local code amendment for office and retail developments specifically. The 2025 CBSC will require all new office and retail developments to have up to 15% of all parking spaces served by electric vehicle chargers. Staff recommend the Board retain the current local amendment to ensure at least 10% of parking spaces are equipped with an electric vehicle charger for all new non-residential developments.

File #: 25-3503 Agenda Date: 9/8/2025 Agenda #: 5.

The County has the authority to consider new local amendments to the electric vehicle charging requirements for non-residential construction in the 2025 CBSC.

Energy Code Amendment

The current local amendments to the California Energy Code adopted by the Board of Supervisors in 2024 increase the energy efficiency requirements for new residential and non-residential buildings above the minimum requirements of the 2022 CBSC, which remains in effect until the end of 2025. However, the requirements in the new 2025 California Energy Code, which will become effective January 1, 2026, exceed the requirement of the County's current local code amendments. Therefore, the County's existing local amendments will no longer be needed under the new code and staff recommend these amendments be removed from the County's code adoption ordinance.

As described above, State law now restricts the County's authority to make new amendments that impact residential construction. The Board of Supervisors retains broader authority to consider new code amendments impacting non-residential construction. However, any new Energy Code amendments would require approval from the California Energy Commission and would need to be supported by a finding that the requirements imposed by local amendments are cost effective. Currently, no cost effectiveness studies exist that would support such a finding. In past code cycles, the California Public Utilities Commission funded cost effectiveness studies of energy code amendments to assist local jurisdictions to determine if such amendments were cost effective, but such studies are not yet available for the 2025 code. Therefore, staff cannot recommend any amendments to the 2025 California Energy Code at this time. Local amendments to the California Energy Code impacting non-residential construction could be considered in the future once cost effectiveness data becomes available. Staff recommend the Board direct staff to monitor this issue and report back to the Committee in early 2026.

2025 California Building **Code Adoption**

Jason Crapo, Deputy Director Department of Conservation and Development



Presentation Outline

Triennial California Building Code Adoption Process

Recent changes to State Law Restricting Local Code Amendments

Status of County's Existing Local Amendments

Next Steps

Triannual Code Adoption Process

- State releases a new California Building Code every 3 years
- Cities and Counties have authority to adopt local code amendments
- Amendments adopted by ordnance and require certain findings
- County has historically adopted a limited number of local code amendments
- Notable Amendments: Electric Vehicle Charging and Energy Efficiency

Changes to State Law Regarding Local Amendments

- Recent State Budget Legislation (AB 130) limits local amendment authority until June 1, 2031
- Limitations apply to new local code amendments affecting residential construction

Purpose is to encourage housing construction

Conditions Where Local Amendments to Residential Constructions are Allowed (Language from AB 130)

- (1) The changes or modifications are substantially equivalent to changes or modifications that were previously filed by the governing body of the city or county and were in effect as of September 30, 2025.
- (2) The commission deems those changes or modifications necessary as emergency standards to protect health and safety.
- (3) The changes or modifications relate to home hardening.
- (4) The building standards relate to home hardening and are proposed for adoption by a fire protection district pursuant to Section 13869.7.
- (5) The changes or modifications are necessary to implement a local code amendment that is adopted to align with a general plan approved on or before June 10, 2025, and that permits mixed-fuel residential construction consistent with federal law while also incentivizing all-electric construction as part of an adopted greenhouse gas emissions reduction strategy.
- (6) The changes or modifications are related to administrative practices, are proposed for adoption during the intervening period pursuant to Section 18942, and exclusively result in any of the following:
 - (A) Reductions in time for a local agency to issue a postentitlement permit.
 - (B) Alterations to a local agency's postentitlement fee schedule.
 - (C) Modernization of, or adoption of, new permitting platforms and software utilized by the local agency.
 - (D) Reductions in cost of internal operation for a local agency.
 - (E) Establishment, alteration, or removal of local programs related to enforcement of building code violations or complaints alleging building code violations.

County's Local Amendments

- Longstanding local amendments address seismic, soil and other local conditions particular to the County
- In more recent code cycles, new local amendments have primarily addressed climate concerns
- Two main areas of local amendments in past decade have been electric vehicle charging and energy efficiency

Electric Vehicle (EV) Charging

• The Couty's current code amendments require 10% of parking spaces for new multifamily residential and new non-residential developments to be equipped with an EV charger

 While statewide requirements have increased, the County's local requirements are still greater than those in the new statewide code, and therefore the County's amendments are still necessary to maintain current standards

Example #1 100 2-Bedroom Multi-Family Dwelling Units

Requirements Per Zoning Table 6-49

200 Parking Spaces for Dwelling Units

25 Parking Space for Common Use

Total: 225 Parking Spaces

EV Ready Type	Old (2022 CGBSC as Amended)	New (2025 CGBSC State Code)
With Receptacle	90	100
With Charger	23	32

Example #2 100 Studio Multi-Family Dwelling Units

Requirements Per Zoning Table 6-49

100 Parking Spaces for Dwelling Units

25 Parking Space for Common Use

Total: 125 Parking Spaces

EV Ready Type	Old (2022 CGBSC as Amended)	New (2025 CGBSC State Code)
With Receptacle	50	100
With Charger	13	7

Electric Vehicle Charging (Non-residential)

	Old 2022 CGBSC as Amended		New 2025 CGBSC State Code		
Number of Parking Spaces	EV Capable	EVCS w/ EVSE	EV Capable	EVCS w/ EVSE	EVCS w/EVSE if Office or Retail
1-9	0	0	0	0	0
10 – 20	4	3	4	2	3
26 – 50	8	5	8	4	6
51 – 75	13	8	13	6	8
76 – 100	17	10	17	8	13
101 – 150	25	15	25	12	19
151 – 200	35	20	35	18	26
201 and over	20% of total	10% of total	20% of total	50% of EV Capable	75% of EV Capable

2025 Energy Code and Local Amendments

- In 2024, The Board of Supervisors adopted local amendments to the 2022 California Energy Code increasing energy efficiency requirements for new residential and non-residential construction
- The requirements for new residential and non-residential construction in the 2025 California Energy Code have increased, and now meet or exceed the requirements of the County's local amendments
- Local Energy Code amendments adopted last year will no longer be needed once 2025 Code goes into effect on January 1, 2026

Future Energy Code Amendments

- State law (AB 130) restricts new local amendments affecting residential construction until June 1, 2031
- Local governments retain broader authority to adopt local code amendments related to non-residential construction, subject to required findings
- All Energy Code amendments require a finding that the requirements of such amendments are cost effective. This requires new cost effectiveness studies, which currently do not exist.

Next Steps and Schedule

- Report out to Board of Supervisors on October 7
- Staff will continue to draft code adoption ordinance
- Ordinance introduced on October 21 Board agenda
- Public Hearing to adopt Ordinance on November 4
- 2025 California Building Code and local amendments contained in code adoption ordinance effective January 1, 2026



CONTRA COSTA COUNTY

1025 ESCOBAR STREET MARTINEZ, CA 94553

Staff Report

File #: 25-3504 Agenda Date: 9/8/2025 Agenda #: 6.

SUSTAINABILITY COMMITTEE

Meeting Date: September 8, 2025

Subject: ACCEPT public comments and CONSIDER recommending adoption of the Contra Costa County

Clean Energy Roadmap for Existing Buildings to the Board of Supervisors

Submitted For: SUSTAINABILITY COMMITTE

Department: DEPARTMENT OF CONSERVATION & DEVELOPMENT

Presenter: Demian Hardman-Saldana || Principal Planner | DCD

Contact: Demian Hardman-Saldana | (925) 655-2816

Referral History:

On May 15, 2023, the Sustainability Committee directed staff to develop a roadmap for converting existing buildings to be all-electric.

On November 5, 2024, the County Board of Supervisors adopted the Contra Costa County 2045 General Plan and Updated 2024 Contra Costa County Climate Action and Adaptation Plan (CAAP). The CAAP establishes greenhouse gas (GHG) reduction goals to be 40% below 1990 levels by 2030, and to achieve net carbon neutrality by 2045, consistent with the State's goals.

CAAP Strategy BE-2 includes an implementation action calling for the creation of a detailed County roadmap to convert existing homes and businesses to use low-carbon or carbon-free appliances. It also states that the roadmap shall prioritize equity to minimize the risk of displacement or significant disruptions to existing tenants.

Referral Update:

On March 10, 2025, the Sustainability Committee received a report on the Draft Clean Energy Roadmap for Existing Buildings (Roadmap) released for public review on March 5, 2025. A proposed timeline was provided recommending a 30-day public comment review period with a final draft of the Roadmap planned for consideration by the Committee later in the year for a recommendation to the Board of Supervisors. The Committee also provided feedback on the draft Roadmap, requesting that the Roadmap include how it will support the Bay Area Air District (BAAD) Rules 9-4 and 9-6, which ban the purchase of nitrogen oxide (NOx) emitting water heaters (i.e., gas water heaters) for residential buildings or standard commercial and industrial spaces starting in 2027, ban the purchase of furnaces that emit NOx (i.e., gas burning furnaces) starting in 2029, and ban the purchase of larger commercial water heaters that emit NOx beginning in 2031.

Public Outreach on Draft Roadmap

After the March 10, 2025, Sustainability Committee meeting, staff created a dedicated Clean Energy Roadmap webpage with information about the draft Roadmap and how to submit public comments. Public comments

File #: 25-3504 Agenda Date: 9/8/2025 Agenda #: 6.

were received for 30 days, from March 25, 2025, through April 24, 2025, with the public able to submit written comments via email to staff or through an online form on the Clean Energy Roadmap website.

The website also included information about two virtual information sessions available for the public to attend via ZOOM on April 9th and April 16th. Information about how to review and submit comments on the Draft Roadmap was also included in the Spring 2025 edition of County's Sustainability Newsletter.

In addition, staff also presented an overview of the draft Roadmap at the Contra Costa All-Electric Working Group meeting in April, a quarterly meeting that includes industry professionals, non-profit leaders, and local government staff within the County interested in transitioning buildings to be all-electric.

Summary of Public Comments Received

The main themes emerging from the public outreach conducted included stakeholder collaboration, questions around timelines and goal setting, and community engagement. 350 Contra Costa Action provided both verbal and written comments. A full summary of public comments received is included in Attachment 1.

Edits to Draft Clean Energy Roadmap

Based on comments received the public comment review period and final review of the draft Clean Energy Roadmap from staff, the following is a summary of the major changes made to the draft Roadmap:

- 1. Added a new Section, a Roadmap Implementation Action Plan Section (Section 11). This section was added to address general comments received from the public about timelines, setting goals, and provide more details on how the Roadmap will be implemented moving forward. It outlines a timeline for completing some of the key next steps recommended and outlines an implementation action plan framework to create a Roadmap Implementation Action Plan. The Implementation Action Plan also requires, among other things, specificity on how the Roadmap will support current State and Regional initiatives, such as BAAD rules on building appliances. Additionally, it requires that a Clean Energy Roadmap webpage be maintained with regularly updated information on the topic of converting buildings to be all-electric. Both the Implementation Action Plan and website are to be completed within 12 months of when the Roadmap is adopted by the County. Furthermore, it specifies that the Implementation Action Plan be examined on an annual basis to allow for any adjustments, as needed.
- 2. All Sections. Made language edits to improve accuracy and clarity, including adding images and illustrations.
- 3. Executive Summary. Added new opening paragraph, reordered recommendations and next steps section, and added summary information on the new Section added, Roadmap Implementation Action Plan.
- 4. Section 3, Existing All-Electric Policies and Programs. Updated language reflects summary of overall changes to the State's Building Code (Title 24), adds information about new Assembly Bill (AB 130), related to building code standards for new residential construction and includes more information about specific local energy efficiency pilot/rebate or grant programs being offered in the County.

File #: 25-3504 **Agenda Date: 9/8/2025 Agenda #:** 6.

- 5. Section 5, Cost Analysis. Added language that locally generated clean energy with battery storage could benefit County residents and businesses.
- 6. Section 6, Funding and Financing Opportunities. Updated content related to various programs and incentives being offered.
- 7. Section 10, Next Steps. Reordered the listed Action Items and Recommendations included in report.

Recommendation(s)/Next Step(s):

ACCEPT public comments and CONSIDER recommending adoption of the Contra Costa County Clean Energy Roadmap for Existing Buildings to the Board of Supervisors

Fiscal Impact (if any):

Measure X funding is allocated to cover the staff time associated with the development and implementation of the Roadmap.

If the Roadmap and its Implementation Action Plan are adopted by the County, other funding sources will also need to be identified to facilitate all-electric building conversions.

Summary of Public Comments Received for Draft Clean Energy Roadmap for Existing Buildings

County staff received comments from the public regarding the Clean Energy Roadmap from the following venues:

- 1. Draft Roadmap Information Session #1 (4/9)
- 2. Draft Roadmap Information Session #2 (4/16)
- 3. All-electric Working Group (4/15)
- 4. Comments submitted through Roadmap website (3/25 4/24)
- 5. Written Comments Received via Email

Summary of Comments Received

- 1. Information Session #1 (4/9)
 - 8 attendees
 - Salvatore Harkins, Office of Senator Jesse Arreguin
 - Question about whether 19% stat is for whole county vs unincorporated county
 - For staff getting grants on their own, is that agendized already for the BOS?
 - Is there a specific area in unincorporated CCC that has more GHG emissions than others?
- 2. Information Session #2 (4/16)
 - 2 attendees
 - Lisa Jackson, 350 Contra Costa
 - Lisa's comments were a preview of what was provided in the written comment letter sent to County staff on 4/21/2025 except for the following additional question:
 - Does the Roadmap contain any pilot projects aside from Pinole Pilot Project?
- 3. All-Electric Working Group Feedback (4/15)
 - 8 attendees
 - Anonymous Feedback
 - What is the goal for the number of buildings upgraded in 2025?
 - Is there interest in a collaboration between the County and some or all cities?
 How do we bring in GRID?
 - o What is the timeline for adoption of the local ordinance requiring all-electric?
 - How can we leverage programs offered by other groups such as MCE, BayREN, etc.?
 - Goals are apparently aspirational without necessarily having funding to implement.
 - I appreciate the emphasis on community engagement within the Roadmap!

 For education/outreach, would it be realistic to create permitting checklists for building electrification for the different building types?

4. Comments submitted through Roadmap website

Ching Leung - Would it make sense to prioritize helping homeowners with SFH HVAC upgrades, such as heat pump? For instance, a home built in 1996-1997 can have 3 gas appliances: range stove, dryer and furnace. There is a 240V dryer outlet, ready for electric dryer. With the EV charger, the electric panel is close to maxing out for an electric stove, whereas the building should already be wired for an AC unit that can be used for heat pump without panel upgrades.

5. Written Comments from 350 Contra Costa

Clarifying the Roadmap's Purpose

We suggest including a vision statement and clear goals in line with the Climate Action plan's directive in BE-2 to create a <u>detailed pathway</u> for converting existing buildings to carbon-free energy sources. Showing how this can be achieved against the timelines of 2030 and 2045 could help build momentum.

<u>Strengthening Implementation Strategies (Section 10)</u>

- The roadmap effectively outlines focus areas for building electrification, but additional detail on specific strategies, deliverables, and timelines would enhance clarity.
- Clearly defining the County's role versus that of other organizations would provide greater transparency.
- Would the County consider using a structured format, similar to the Climate Action Plan, to improve readability? A visual representation of how different strategies interconnect could also be valuable.

Accelerating Policy Implementation (Section 9)

The roadmap discusses potential policy options. Please consider prioritizing one or two of the report's proposed action items for review and relatively quick enactment. Demonstrating quick wins would reinforce the County's commitment to a clean energy transition. Examples of policies that could be implemented.

- Home modernization at point of sale through an escrow account (see City of Berkeley's BESO program)
- Time of Major Renovation Requires homeowners to replace gas appliances with the electric equivalent when performing major home renovations.

Incorporating Existing State and Local Policies

- The roadmap does not currently mention key policies that could support its efforts, such as Governor Newsom's 2022 directive to the CPUC setting ambitious electrification targets.
- Additionally, would the County consider highlighting existing local programs such as Richmond's zonal electrification project, the East Contra Costa Healthy Homes Collaborative, and community electrification fairs—as potential models for implementation?

Expanding Funding and Financing Options (Section 6.0)

 The roadmap presents valuable financing ideas but could be strengthened by including additional funding sources, such as the Equitable Building Decarbonization Program, SB 1212's 2024 zonal decarbonization pilot, and the New Climate Fund. Has the County explored these opportunities for funding?

Tailoring Strategies for Market-Based vs. Equity-Based Approaches

- The roadmap could better differentiate strategies for market-driven electrification versus equity-focused efforts. Would the County consider addressing these distinctions more explicitly, and show how the county role may differ with these different approaches.
- Specifically, for Community Engagement: Will the engagement approach be applied uniformly across all unincorporated communities, or will strategies vary based on income level and impact status?
- Can the plan specify how the County will tailor engagement for households that may need additional support beyond market-based incentives?

Technical Clarifications and Policy Considerations

- Page 36 states that over half of single-family homes require panel upgrades. What data supports this estimate? Does it refer to homes with electrical service below 100 amps?
 There is ample evidence that homes under 3200 square feet can be electrified on 100 amps.
- Page 40, Section 9.0, does not currently mention education and norm-shifting. We are still behind in community understanding of the need for, and benefits of, electrifying appliances. The County, as a trusted messenger, is important to this education task. Toward that end, consider including strategies to increase public awareness and encourage cultural shifts toward electrification.
- Refining Terminology on Energy Sources The term "low-carbon fuels" appears in several places (Page 9, Paragraphs 2 and 3, and first bullet on Page 41). Since this phrase is often associated with natural gas, which is low in carbon but high in methane emissions, please replace 'low carbon' with a term such as "zero-GHG emission energy sources".
- Page 43 Other Actions: Should an action be added to evaluate the need for, and encourage the addition of, EV charging infrastructure at existing multi-family

Summary of Public Comments Received for Draft Clean Energy Roadmap Page 3 of 4 communities. The availability of EV charging capability is an important aspect of "building" electrification.

Expediting Implementation and Leveraging Expertise

- Early-stage electrification projects could proceed in parallel with roadmap finalization. Specify any projects that are in discussion.
- Specify where consultants with specific knowledge are required or could be considered. This will help identify clear areas with a need for funding.

Corrections and Technical Edits

- Page 12: "Many gas appliances still require electricity to power fans and function."
 Suggested correction: "Most gas appliances require electricity in order to operate."
- Page 13: The description of Building Energy Efficiency Standards needs revision. The current (2022) code prescribes heat pump space conditioning in Climate Zone 3 (West Contra Costa County) and allows gas or heat pump space conditioning in Climate Zone 12 (East Contra Costa County). Heat pump water heating is required in Climate Zone 12.



April 21st, 2025

Demian Hardman-Saldana and Adam Scarbrough Contra Costa Dept. of Conservation and Development

Subject: Public Comment on Contra Costa County Clean Energy Roadmap for Existing Buildings.

Dear Demian and Adam,

We appreciate the opportunity to provide feedback on the Clean Energy Roadmap for Existing Buildings and commend the County for its leadership in advancing sustainability efforts. While the roadmap lays a strong foundation, we would like to offer suggestions to enhance its clarity, impact, and effectiveness in achieving building electrification goals.

Clarifying the Roadmap's Purpose

We suggest including a vision statement and clear goals in line with the Climate Action plan's directive in BE-2 to create a <u>detailed pathway</u> for converting existing buildings to carbon-free energy sources. Showing how this can be achieved against the timelines of 2030 and 2045 could help build momentum.

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 Zone 3 (West Contra Costa County) and allows gas or heat pump space
 conditioning in Climate Zone 12 (East Contra Costa County). Heat pump water
 heating is required in Climate Zone 12.

In closing, we appreciate the County's leadership in shaping this roadmap and encourage refinements to ensure the plan is actionable, equitable, and effective. We look forward to seeing a revised version that integrates these considerations and strengthens the County's commitment to a clean energy future.

Thank you for your time and consideration.

Lisa Jackson, Denice Dennis, Marti Roach and Gary Farber - 350 Contra Costa Action

County of Contra Costa, California

Clean Energy Roadmap for Existing Buildings



Prepared By:

County of Contra Costa

Department of Conservation and Development

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Table of Contents

Execu	utive Summary	5
1.0	Introduction	8
2.0	Benefits of All-Electric Buildings	10
2.1	Health	10
2.2	Safety	11
2.3	Climate Resilience	
3.0	Existing All-Electric Policies and Programs	13
3.1	Statewide Policies and Plans	
3.2	Regional Programs, Plans, and Studies	15
3.3	California Jurisdictions with Adopted All-Electric Building Plans	16
3.4	Contra Costa County Programs and Plans	
4.0	Building Inventory Analysis	21
5.0	Cost Analysis	24
6.0	Funding and Financing Opportunities	
6.1	Rebate Opportunities	26
6.2	Inflation Reduction Act Rebates and Tax Credits	29
6.3	Financing Options	29
6.4	Existing Funding Models to Explore	31
7.0	Centering Equity	32
7.1	Community Engagement Approach	34
7.2	Workforce Development	36
8.0	Facilitating an Equitable Transition	37
9.0	Policy Options and Other Strategies	42
10.0	Next Steps	44
10.1	Action Items and Recommendations	44
11.0	Roadmap Implementation Action Plan	46
11.1	Implementing Action Items and Recommendations	46
11.2	P Roadmap Implementation Action Plan	47

GLOSSARY

ABAG: Association of Bay Area Governments

AC: Air Conditioning

AEA: Association for Energy Affordability

BAAD: Bay Area Air District

BayREN: Bay Area Regional Energy Network

BOS: Board of Supervisors

CARB: California Air Resources Board

CAP: 2015 Climate Action Plan

CAAP: Updated 2024 Climate Action and Adaptation Plan

CAISO: California Independent System Operator

CCA: Community Choice Aggregator

CCHS: Contra Costa Health Services

CEC: California Energy Commission

CO2: Carbon Dioxide

CPUC: California Public Utilities Commission

DER: Distributed Energy Resources

EPA: Environmental Protection Agency

EV: Electric Vehicle

GHG: Greenhouse Gas

HPWH: Heat Pump Water Heater

HVAC: Heating, Ventilation, and Air Conditioning

IOU: Investor-Owned Utility

LEED: Leadership in Energy and Environmental Design

MCE: Community choice energy provider for most of Contra Costa County.

NOx: Nitrogen Oxide
NO2: Nitrogen Dioxide

PSPS: Public Safety Power Shutoff

Executive Summary

Contra Costa County is a leader in adopting policies and programs that improve indoor air quality for residents. The County's General Plan and Climate Action and Adaptation Plan (CAAP) include a number of policies, goals, and actions on this topic.

Energy usage from existing buildings is one of the largest contributors of greenhouse gas (GHG) emissions, responsible for approximately 30 percent of all the annual GHG emissions in unincorporated Contra Costa County. Transitioning existing buildings to use clean energy to reduce GHG emissions is a complex issue that requires a thoughtful, strategic approach that will not overburden our population. The most common approach to reducing GHG emissions in buildings is to transition buildings away from using gas as the building's fuel source.

The Clean Energy Roadmap for Existing Buildings (Roadmap) is an action item specified in Strategy BE-2 of the County's CAAP 2024 Update, adopted on November 5, 2024, by the County Board of Supervisors. The Roadmap provides an initial assessment of the existing landscape in California for transitioning buildings to all-electric and highlights existing all-electric policies and plans at the local, regional, and State levels. The Roadmap also highlights the many benefits that come with all-electric homes such as enhanced health and safety in homes as well as improved community resilience to the impacts of climate change. This Roadmap also outlines a strategic community engagement strategy that centers on equity to inform our impacted communities in the County on the benefits of buildings operating on clean energy.

Below is a summary of the research and analysis conducted as well as a summary of the recommendations and next steps included in the County's Clean Energy Roadmap.

INITIAL RESEARCH RESULTS

The research and analysis conducted by County staff for the Roadmap is preliminary and serves as a framework for more comprehensive analyses in the future on the existing building stock characteristics, the costs associated with transitioning buildings to be all-electric, the current challenges and barriers to evaluate, and the policies that have been deployed successfully in other jurisdictions. Each research topic summarized below provides insight into the factors that influence the transition of existing buildings to all-electric and supports efforts to have buildings use clean energy that reduces or eliminates cardon dioxide emissions, therefore reducing GHG emissions and improving health.

<u>Building Inventory</u> – An initial building inventory was conducted for all the residential buildings in unincorporated Contra Costa County. It identified key characteristics such as building typology, vintage, and total square footage. The initial assessment found that 93

percent of all the residential buildings in the County are single-family homes and that 56 percent of those homes were constructed prior to 1978.

<u>Cost Analysis</u> – A brief overview of the issues around the cost of transitioning a building to all-electric is provided. This includes the factors that influence the cost of transitioning buildings to all-electric, such new equipment, operational costs, and other unique factors. A comprehensive study specific to the County's region will need to be conducted to better understand how all these variables impact the cost of transitioning a home to be all-electric.

<u>Facilitating an Equitable Transition</u> –The Roadmap highlights a number of issues to resolve to be equitable for County residents. This includes insufficient electrical panel capacity or outdated panel compatibility, outdated wiring in the home, prohibitive costs of adding solar panels and battery storage, and different priorities for landlords and renters, also known as the "landlord/tenant dilemma," for making tenant improvements.

<u>Policy Options and Other Strategies</u> – A brief overview of the policy options and other approaches other jurisdictions have implemented is provided. This includes actions that trigger, through permitting, and require an upgrade to all-electric (e.g., major renovations) as well as a discussion on how these options through permitting are no longer feasible due to a 2024 court ruling. Also included is a strategy on decommissioning the gas distribution system through collaboration with investor-owned utilities (IOUs), community choice aggregators (CCAs), and others.

RECOMMENDATIONS AND NEXT STEPS

This Roadmap includes specific recommendations and next steps based on the research and information collected for this report. Below is a summary of the recommendations and next steps. All recommended actions are intended to support staff in the ongoing effort to transition existing buildings to all-electric, where feasible, so that the County can reach the emission reduction goals outlined in its CAAP.

Outreach and Engagement

A specific outreach and engagement strategy is needed to communicate and collaborate with the residents of Contra Costa County that ensures that historically marginalized and unrepresented communities have a voice in planning for a clean energy transition. The Roadmap outlines a specific framework for staff to follow to ensure that efforts around transitioning existing buildings to all-electric extend to all unincorporated communities throughout the County. This includes working with community-based organizations to engage and collaborate with our communities to further develop the various strategies that will provide better health outcomes and a more resilient future.

<u>Additional Analysis</u>: Conduct additional analysis to expand on the work presented in this Roadmap. This includes an expanded building inventory that will provide more data on the condition of the existing building stock and more research on the costs of transitioning existing buildings to all-electric in the County.

Regional and State Collaboration: Work with the County's Legislation Committee and Board of Supervisors (BOS) to develop a policy framework that allows staff to establish new and/or expand existing relationships with regulatory agencies to support the goal of transitioning existing buildings to all-electric. This framework would enable staff to formally participate in public hearings, provide comments during the regulatory decision-making process, and petition for rulemaking from regulatory agencies like the California Energy Commission (CEC) and California Public Utilities Commission (CPUC). It also includes collaborating with the IOUs, such as PG&E, and CCAs, such as MCE, that service our region to gain a better understanding of the existing gas distribution system as well as explore the process and feasibility of decommissioning gas lines at a neighborhood/community scale.

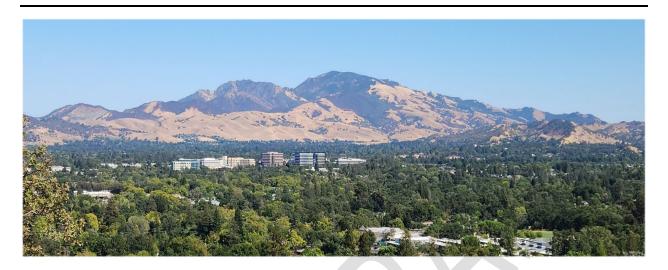
Other Actions

There are other actions included in the Roadmap that will strengthen the County's ability to succeed in this transition. These actions include seeking approval from the BOS to continuously pursue funding for this effort as well as further analysis of the policy options and issues related to facilitating an equitable transition for converting existing buildings to all-electric. It also includes implementing pilot projects, where appropriate.

ROADMAP IMPLEMENTATION ACTION PLAN

To implement the recommendations and next steps detailed in the Roadmap, this section includes a framework to develop and maintain an Implementation Action Plan for the Roadmap and provides direction for the creation of a dedicated Clean Energy Roadmap website to include relevant content in the Roadmap that is likely to change over time. The webpage will also house information on the Roadmap Implementation Action Plan. Both the Implementation Action Plan and clean energy webpage are to be completed within 12 months of the Roadmap's adoption by the County Board of Supervisors.

1.0 Introduction



Climate change is one of the greatest challenges the world faces today. The continued use of fossil fuels as an energy source has caused a build-up of greenhouse gases (GHG) such as carbon dioxide, nitrous oxide, and methane in the atmosphere. These gases and others are altering the chemical composition of the atmosphere and leading to a rise in the overall global temperature.

In 2015, Contra Costa County adopted its first Climate Action Plan (CAP)² for the unincorporated areas of the County. The 2015 CAP states that the County is expected to experience more extreme heat events, reduced air quality, changes in sea level, less predictable water supply, and an increase in storm severity and frequency of flood events.

Since the adoption of its first CAP, the County has actively been working to mitigate its GHG emissions to reduce the severity of these expected impacts as well as help meet State and County climate goals. The County has made progress in meeting the goals of the 2015 CAP. Some major activities include providing marketing and outreach support for Bay Area Regional Energy Network (BayREN) programs to promote energy efficiency and all-electric retrofits, ongoing implementation of the County's low-income Weatherization Program, and piloting programs like the County's Asthma Initiative that links health impacts with energy efficiency. The County also has three LEED Gold certified County Administration Buildings, one of which also has a Total Resource Use and Efficiency (TRUE) building certification. In 2018, the County received grant funding through the California Strategic Growth Council to conduct a renewable resource potential study to identify more opportunities for renewable energy in the County and in 2020 adopted a solar overlay zone

¹ www.nrdc.org/stories/what-are-effects-climate-change#weather

² www.contracosta.ca.gov/DocumentCenter/View/39791/Contra-Costa-County-Climate-Action-Plan?bidId=

which allows ground-mounted solar in certain areas outside of the urban limit line. In addition, the County has installed solar and is upgrading to energy efficient lighting in County facilities on an ongoing basis.

On September 22, 2020, the Contra Costa County BOS passed Resolution 2020/256 which endorsed a declaration of a climate emergency in Contra Costa County, formally addressing the need for immediate action to combat climate change. The Climate Emergency Resolution included a range of initiatives, including that the County prioritize the implementation of its CAP and that the County should develop policies to require all new construction to be fully electric through the adoption of reach building codes. The Climate Emergency Resolution also acknowledges the process of updating its General Plan, Climate Action Plan (now the Climate Action and Adaptation Plan, or CAAP, and zoning codes, which provide an opportunity to follow State guidance for reducing greenhouse gas emissions for the unincorporated areas of Contra Costa County.

On November 5, 2024, the County BOS adopted the Contra Costa County 2045 General Plan and Contra Costa County CAAP 2024 Update. Consistent with the State's GHG emission reduction goals, the County's updated 2024 CAAP includes GHG reduction goals to 40 percent below 1990 levels by 2030 and achieve net carbon neutrality by 2045.³

The purpose of this Roadmap is to facilitate the implementation of CAAP Strategy BE-2, which includes an implementation action to create a detailed County Roadmap to convert existing homes and businesses to use low-carbon or carbon-free appliances. It also states that the Roadmap should include steps to support converting buildings to rely on low-carbon or carbon-free energy using an equitable framework that minimizes the risk of

Contra Costa County
Climate Action and Adaptation Plan
2024 Update

Adopted | November 5, 2024

displacement or significant disruptions to existing tenants.

Although the goal of the Roadmap is to convert existing homes and businesses to use low-carbon or carbon-free appliances, such as having buildings be all-electric, the initial focus will be on residential buildings because they comprise a majority of the existing structures in the unincorporated areas of the County. This Roadmap includes an overview of the

³ www.contracosta.ca.gov/8683/Update-of-the-Climate-Action-Plan

benefits and challenges, an examination of what buildings have low-carbon or carbon-free appliances at the local and state level, and a preliminary analysis of the costs associated with converting existing buildings to be all-electric. It also includes ways to center equity in all aspects of a transition to all-electric buildings and explore policy options and next steps to meet the County's CAAP goals for existing buildings.

2.0 Benefits of All-Electric Buildings

Existing buildings are responsible for approximately 30 percent of all the annual GHG emissions for unincorporated Contra Costa County, 19 percent of which come from residential buildings and 11 percent from non-residential buildings. Transitioning away from the use of fossil fuel infrastructure, such as gas in residential, commercial, and industrial buildings, has many health, safety, and climate resiliency benefits.

2.1 Health

The County has approximately 300,000 residents living in census tracts that rank in the 95th percentile or higher statewide for asthma-related emergency department visits; these census tracts are located primarily along the County's northern waterfront.⁴ This is higher than any other county in California.

On average, Californians spend approximately 90 percent of their time indoors where the air quality can be more polluted than outdoors. Gas appliances emit harmful amounts of carbon dioxide (CO₂) and nitrogen dioxide (NO₂) which become trapped in the home, causing lasting health ramifications to occupants. For example, gas stoves in homes produce NO₂ concentrations that are 50-400 percent higher than homes with electric stoves.⁵ These spikes often cause indoor air quality to far exceed the standards for outdoor air pollution. Children living in homes with gas stoves are 42 percent more likely to suffer asthma symptoms than those living in homes with electric stoves.⁶ Particularly for those with moderate to severe asthma, eliminating the use of gas stoves and other appliances that use gas in the home are known to improve health outcomes.

⁴ www.greenandhealthyhomes.org/publication/contra-costa-asthma-initiative/

⁵ www.rmi.org/press-release/health-air-quality-impacts-of-cooking-with-gas/

⁶ www.rmi.org/indoor-air-pollution-the-link-between-climate-and-health/

2.2 Safety

California has one of the oldest gas distribution infrastructures in the United States. As the system continues to age, it becomes more vulnerable to gas leaks or complete failure. The U.S. Environmental Protection Agency (EPA) found that unplanned gas leaks, also known as fugitive gas leaks, occur in all parts of the gas distribution infrastructure. The majority of the gas lost through leakage is methane, which is 25 times more potent in its impact to the atmosphere than carbon dioxide. Another safety risk associated with the gas infrastructure is accidental explosions caused during maintenance or excavation near gas pipelines.

Contra Costa County is also located in an area at high risk for earthquakes, near numerous earthquake faults including the San Andreas Fault, and all or portions of the Hayward, Calaveras, Concord, Antioch, Mt. Diablo, and other lesser faults. A study released in 2015 by the Working Group of California Earthquake Probabilities predicts that for the San Francisco region, the 30-year likelihood of at least one earthquake or more measuring/ 6.7 or larger magnitude is 72 percent. Scientists, therefore, believe that an earthquake of a magnitude 6.7 or larger is now slightly more than twice as likely to occur as to not occur in, approximately, the next 30 years. The California Seismic Safety Commission reported that 20-50 percent of post-earthquake fires can be directly attributed to leaks in the gas infrastructure. The elimination of gas infrastructure in buildings would reduce the hazards associated with gas leaks during seismic events.

Fire is also a risk. Highly combustible dry grass, weeds, and brush are common in the hilly and open space areas in the County for 6 to 8 months of each year. Many of these combustible areas are adjacent to developed locations and are shown in the lates Fire Hazard Severity Zone Maps published in April 2024 by the California Department of Forestry and Fire Protection. These areas are more prone to wildland fires, which threaten nearby buildings, particularly those with wood roofs, or sidings. This condition can be found throughout Contra Costa County, especially in developed and developing areas of the County. Earthquake gas fires due to gas line ruptures can ignite grasslands and stress resources to combat fires. The elimination of gas infrastructure in buildings would also reduce fire hazards of buildings located near highly combustible dry land areas.

⁷ www.epa.gov/natural-gas-star-program/primary-sources-methane-emissions

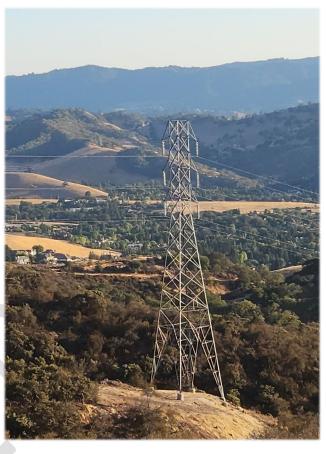
⁸ www.epa.gov/ghgemissions/overview-greenhouse-gases#methane

⁹ www.ssc.ca.gov/wp-content/uploads/sites/9/2020/08/cssc_2002-03_natural_gas_safety.pdf

¹⁰ www.osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-maps

2.3 Climate Resilience

As temperatures in Contra Costa County increase in the coming decades, so will our demand for energy. Air conditioning systems will run more frequently and for longer periods of time. Transitioning buildings to be all-electric will lead to an overall increase in electricity consumption. Increasing the level of community resilience to the various impacts associated with climate change is imperative and working to identify solutions that address multiple problems and present multiple benefits is a clear way to accomplish this. Converting all appliances to electricity enhances resiliency to climate change through improved health and comfort in homes. Adding distributed energy resources (DERs), such as battery storage and solar



panels also helps mitigate the impacts from an increased electricity load on the grid and furthers resiliency by adding protection against loss of power and public safety power shutoff (PSPS) events during high wildfire risk events. This is especially important for those in the community that are medically dependent on power. A common misconception with gas is that it serves as a redundant system during power loss events, however many gas appliances still require electricity to power fans and function. Back-up generators that operate on diesel are a convenient option during loss of power; however, they cause more air pollution and create additional fire risk, further exacerbating climate change.

Eliminating the use of gas in existing buildings is a key strategy to reinforce community resiliency against climate change. Including battery storage and solar panels only serves to add to a household's overall resiliency. Unfortunately, many members in the community, especially those who live in areas disproportionately burdened by pollution, don't have adequate funding or resources to make these investments. Most also lack the authority to initiate the transition to all-electric due to different

¹¹ www.peninsulacleanenergy.com/electrification/gas-appliances-during-outage/

motivations for tenants and landlords to invest in these upgrades.¹² For the purposes of this Roadmap and consistent with the County's General Plan, these burdened communities will be referred to as "impacted communities." To improve resiliency in the unincorporated County, especially our impacted communities, focus must be given to addressing these barriers so that these communities can experience the benefits that come with all-electric buildings.

3.0 Existing All-Electric Policies and Programs

There are numerous policies and programs in place at the state, regional, and local levels that are either planned or are currently being implemented that support local agencies in adopting policies or initiatives to help convert existing buildings to all-electric. Below is an overview of the government actions being taken throughout the State and in Contra Costa County.

3.1 Statewide Policies and Plans

Transitioning existing buildings to all-electric is a strategy being deployed by California. These efforts, some of which are provided below, work collectively to position the State and the jurisdictions within it to convert our sources of electricity and the building stock to be less carbon intensive.

Building Energy Efficiency Standards (Title 24) (1978): California's building code for all new construction. The energy code is updated every three years and sets the requirements around energy efficiency and electrification. The most recent code became effective in January 2023 with updates that include requiring new homes installed with gas infrastructure to be electric-ready as well as standardizing electric heat pumps for water and space heating. The new 2025 building code requirements will become effective January 1, 2026 requiring even higher energy efficiency standards making the install of heat pumps for water and space heating

¹² The "split incentive" or "tenant-landlord dilemma" refers to the situation where building owners do not directly benefit from increased comfort, better indoor air quality, and utility bill savings that can result from investments in energy efficiency upgrades. Tenants, who would benefit, usually lack the authority and the financing to make these investments.

¹³ www.dgs.ca.gov/BSC/About/History-of-the-California-Building-Code--Title-24-Part-2

the typical baseline standard for new construction of single-family homes as well as increasing some efficiency standards for multi-family and non-residential buildings.

Assembly Bill 130 (2025): Signed by the Governor on June 30, 2025, it reforms some housing laws and temporarily imposes a six (6) year moratorium on new building standards on new construction of residential buildings. In general, it prohibits local building code amendments from being adopted that are more stringent than the State building code for residential buildings until the 2031 Building Code is adopted (effective January 1, 2032).

Assembly Bill 32 (2006): The California Global Warming Solutions Act of 2006 formed the basis for subsequent policy, both through executive orders and legislation. Assembly Bill (AB) 32 required California to reduce its GHG emissions to 1990 levels by 2020. This is a reduction of 15 percent below emissions expected under a "business as usual" scenario with reductions coming from virtually all sectors of the economy through policies, planning, direct regulations, market approaches, incentives, and voluntary efforts. AB 32 was a success as target reductions across the state were achieved in 2016.¹⁴

Senate Bill 350 (2015): The Clean Energy and Pollution Reduction Act, which is implemented by the California Energy Commission (CEC), establishes more stringent clean energy and GHG reduction targets, including reducing GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. ¹⁵

Senate Bill 32 (2016): The California Global Warming Solutions Act of 2016 builds on AB 32 by requiring the California Air Resources Board (CARB) to reduce GHG emissions to 40 percent below the 1990 levels by 2030. ¹⁶

Executive Order B-55-18 (2018): Governor Brown issued Executive Order B-55-18, which established an additional statewide goal of achieving carbon neutrality (no net GHG emissions) by 2045. Under this goal, any GHGs that are emitted by California must be fully offset by other activities by 2045. Though this goal does not yet have the force of law, it does indicate the direction in which the State is moving and may be a reference point for future legislative action.¹⁷

Assembly Bill 3232 (2018): The Low Carbon Buildings bill directs the CEC to prepare a Building Decarbonization Assessment in conjunction with the California Public Utilities Commission (CPUC), CARB, and the California Independent System Operator

¹⁴ www.ww2.arb.ca.gov/resources/fact-sheets/ab-32-global-warming-solutions-act-2006

 $^{^{15}}$ www.energy.ca.gov/rules-and-regulations/energy-suppliers-reporting/clean-energy-and-pollution-reduction-act-sb-350

¹⁶ www.clear.ucdavis.edu/explainers/how-california-working-reduce-greenhouse-gas-emissions

¹⁷ www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf

(CAISO). This report, which was published in August 2021, assesses the potential for California to reduce GHG emissions from buildings by 40 percent below 1990 levels by 2030.¹⁸

Senate Bill 100 (2018): The 100 Percent Clean Energy Act requires renewable energy and zero-carbon resources to supply 100 percent of electric retail sales to end-use customers by 2045. To help accomplish this, the bill updated the State's Renewables Portfolio Standard to ensure that at least 60 percent of California's electricity is renewable by 2030. The bill also established a requirement for the CEC, CPUC, and CARB to use programs under existing laws to achieve 100 percent clean electricity and issue a joint policy report which includes an initial assessment of additional energy resources and resource building rates needed to achieve 100 percent clean electricity. The first report was issued in 2021, and subsequent reports will be released every four years.¹⁹

Senate Bill 1477 (2018): The Clean Homes to Californians bill requires the CPUC to allocate \$50 million per year from cap-and-trade revenue until 2023 to support the Building Initiative for Low-Emissions Development (BUILD) and the Technology and Equipment for Clean Heating (TECH) pilot programs.²⁰

3.2 Regional Programs, Plans, and Studies

The San Francisco Bay Area has always been proactive in addressing climate change. The Bay Area Air District (BAAD), the regional authority for setting rules and planning around air quality in the Bay Area, routinely sets regulations to improve air quality and reduce GHG emissions. Below are some of the agency's recent actions focused on reducing GHG emissions.

Clean Air Plan (2017): BAAD developed the Clean Air Plan as a regional strategy to protect public health and address climate change. The plan defines a vision for transitioning the region to a post-carbon economy so that the region can meet identified GHG reduction targets for 2030 and 2050. Specific to all-electric buildings, the plan addresses ways to accelerate low carbon buildings, eliminate methane leaks, increase building energy efficiency, and convert space and water heating in buildings to all-electric.²¹

¹⁸ www.leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill id=201720180AB3232

¹⁹ www.energy.ca.gov/sb100

²⁰ www.nrdc.org/bio/merrian-borgeson/governor-signs-sb-1477-delivers-clean-homes-californians

 $^{^{21}}$ www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf

BAAD Rules 9-4 and 9-6 Amendments (March 2023): BAAD adopted amendments to appliance rules 9-4 and 9-6 which govern nitrogen oxide (NOx) emissions from fan type residential central furnaces and gas-fired boilers and water heaters. The 9-4 rule changes aim to lower the NOx emission limits in central furnaces in the short term and expand applicability of the rule to include non-residential settings. The rule bans the purchase of NOx emitting water heaters (i.e. gas water heaters) in the BAAD territory for residential buildings or standard commercial and industrial spaces starting in 2027. The ruling also bans the purchase of NOx emitting furnaces (i.e. gas burning furnaces) starting in 2029 with a ban on the purchase of NOx emitting larger commercial water heaters beginning 2031.²²

3.3 California Jurisdictions with Adopted All-Electric Building Plans

While state and regional policies help support transitioning existing buildings to be allelectric, local government policy actions also have a key role in shaping future State and regional policy. This includes the adoption of local codes that either encourage or require buildings to become all-electric as well as other actions, such as the adoption of a local plan or initiative to reduce GHG emissions from existing buildings. Provided below are some of the jurisdictions in California that have already adopted these types of plans or policies that support this effort.

Alameda: The City of Alameda adopted an Equitable Building Decarbonization Plan in January 2023. The plan presents a phased approach to shifting existing buildings from gas to all-electric in alignment with the City's climate, equity, and housing efforts.²³

Berkeley: The City of Berkeley adopted an Existing Building Electrification Strategy in November 2021. This plan lays out research and recommendations to transition gas appliances in existing buildings to all-electric alternatives to benefit all residents, especially members of historically marginalized communities.²⁴

²² www.baaqmd.gov/rules-and-compliance/rule-development/building-appliances

²³ www.alamedaca.gov/files/assets/public/city-manager/documents/building-electrification/building-decarb-plan_jan-2023_final.pdf

²⁴ www.berkeleyca.gov/your-government/our-work/adopted-plans/berkeley-existing-buildings-electrification-strategy

Half Moon Bay: In February 2022, the City of Half Moon Bay adopted an ordinance requiring all gas lines to be capped or decommissioned in existing buildings by 2045.²⁵

Piedmont: In October 2021, the Piedmont City Council adopted a Reach Code Ordinance that requires electrical panel replacement to include sufficient capacity to allow for the transition to all-electric appliances.²⁶

San Jose: The City of San Jose launched the Electrify San Jose: Framework for Existing Building Electrification in May 2022. The plan includes strategies to encourage and expand awareness of and access to existing incentive programs for homes and businesses to become all-electric.²⁷

San Mateo: In November 2022, the City of San Mateo adopted a Reach Code Ordinance that includes a variety of requirements related to increased electric panel capacity to prepare for future electrification, the installation of electric-readiness outlets in kitchen and laundry renovations, the installation of heat pump air conditioning and water heaters, and the prohibition of new gas infrastructure for outdoor equipment.²⁸

Santa Monica: The City of Santa Monica released a high-level Existing Building Electrification Roadmap in February 2023. The plan includes a building stock inventory, an analysis of the associated costs, and it outlines policy options to convert existing buildings to all-electric with a focus on equity.²⁹

²⁵ www.half-moon-bay.ca.us/761/Building-Electrification

²⁶ www.piedmont.ca.gov/services___departments/planning___building/about_building_/reach_code_information

²⁷ www.sanjoseca.gov/home/showpublisheddocument/90625/638017000335100000

²⁸ www.cityofsanmateo.org/3363/Reach-Codes

²⁹ www.santamonica.gov/press/2023/02/27/city-of-santa-monica-releases-existing-building-electrification-roadmap

3.4 Contra Costa County Programs and Plans

The actions taken by the County to reduce GHG emissions started in 2005 with the Contra Costa County Climate Protection Report, which presented the County's first GHG emissions inventory. In 2015, the County adopted its first CAP, laying the groundwork for future and ongoing efforts to reduce GHG emissions in the unincorporated County. The County's current CAAP includes additional strategies to retrofit existing buildings and facilities to reduce energy use for conversion to low-carbon or carbon-neutral fuels. Below are County specific policies, programs, and plans that support this effort.

Building Ordinance Reach Codes: In January 2022, the County BOS approved an All-Electric Buildings Ordinance (Ordinance No. 2022-02), also known as a reach code, because it requires more stringent standards than that of the state, requiring all new construction of residential, office, retail, and hotels to be all-electric. On February 27, 2024, the County BOS suspended its All-Electric Buildings Ordinance because of a decision on January 2, 2024, by the U.S. Court of Appeals 9th Circuit that invalidated the City of Berkeley ordinance that prohibited gas infrastructure in new buildings. The court held that the federal Energy Policy and Conservation Act ("EPCA"), a federal statute that regulates the energy efficiency of several consumer products including water heaters, furnaces, stoves, and heating, ventilation, and air conditioning (HVAC) systems, precludes cities and counties from adopting ordinances that prohibit the installation of gas plumbing in buildings. To ensure the County could meet its CAAP goals, on October 1, 2024, the County BOS adopted Ordinance 2024-17 which amends the County's energy code to require higher energy efficiency for new residential and commercial construction.

Contra Costa County Asthma Initiative (2019 – 2023): The Asthma Initiative was developed through a technical assistance grant provided by Green and Health Homes Initiative (GHHI), in coordination with Contra Costa Health Services (CCHS), the County Weatherization Program, The Association for Energy Affordability (AEA), BayREN, and MCE (the County's community choice energy provider) to develop a business plan to implement a comprehensive home-based asthma program. After completion of the business plan in late 2019, CCHS was awarded grant funding from the Sierra Health Foundation (on behalf of the State's Health Division) and BAAD to implement and administer the Contra Costa Asthma Initiative. Program services include an assessment of the home to identify the primary asthma triggers and establish a remediation scope, including asthma trigger remediation, and energy efficiency and weatherization services to lower utility bill costs and improve comfort in the home. Program grant funding for this project ended in 2023., The County is

³⁰ https://www.contracosta.ca.gov/8536/All--Electric-Buildings

exploring how to implement a similar program on a long-term basis through the County's Health Plan or other funding sources.³¹

Contra Costa County Weatherization Program: The County weatherization program is a federal and state funded program designed to assist low and/or fixed income homeowners and renters in making their homes more energy efficient. The program provides a home evaluation and overview of potential energy efficiency measures needed, as well as gas appliance testing, at no cost to determine whether the test appliances are operating properly and safely. Core energy efficiency measures offered by the program include building envelope improvements and monitoring equipment such as programmable thermostats and carbon monoxide detectors. Gas appliances in the home that fail inspection are either repaired or replaced, potentially with an electric replacement.³²

PeakFLEX Demand Response Program: In 2022, the Board approved participation in MCE's PeakFLEX Demand Response program for County facilities. The program incentivizes building-level electric load shifting and shedding during critical times of peak energy demand in California. The County successfully implemented a Demand Response strategy the Summer of 2022, when the California Independent System Operation called 9 consecutive "Flex Alert" days. By participating in the program, the County reduced electric usage across 20 office facilities by adjusting each building's operating hours, which in turn provided critical relief to California's burdened electric grid. The County received a program incentive of \$15,000 on top of an estimated \$3,000 utility bill cost reduction. The County will continue to participate in the program and increase the number of Demand Response tactics employed.

Strategic Energy Management Program: In 2022, the BOS approved participation in MCE's Strategic Energy Management program. The program incentivizes any measured or modeled energy savings resulting from County actions taken to reduce energy use in County buildings. The County Public Works Department is working with program implementers and County consultants, to draft a comprehensive Strategic Energy Management (SEM) program to govern, manage, report, and evaluate energy use from County operations. County SEM program strategies will reflect all Board-approved energy-related plans and initiatives through proactive management and continuous improvement.

Strategic Energy Management Plan: In January 2025, the BOS adopted the 2025-2035 Strategic Energy Management Plan for the County. This plan serves to direct and organize the County's energy investments to be aligned with the newly adopted

³¹ www.greenandhealthyhomes.org/publication/contra-costa-asthma-initiative/

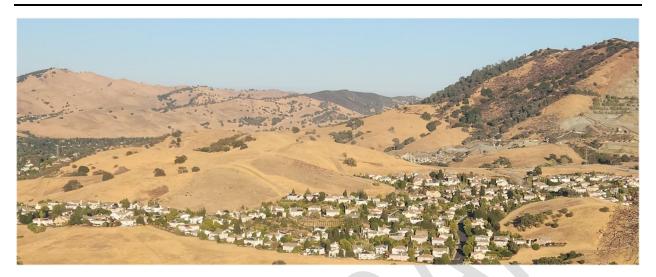
³² www.contracosta.ca.gov/4336/Weatherization

Envision 2040 General Plan, CAAP, and other County plans, track performance related to energy investment at County facilities and promote stakeholder engagement both internally and externally.

Local Energy Efficiency Pilot/Rebate or Grant Programs: The County routinely obtains outside funding from other agencies or grants to implement various small scale energy efficiency programs throughout the County. Below is a list of the current programs being offered/administered by the County:

- Energy Efficiency Conservation Block Grant: Federal Department of Energy grant that allocates approximately \$200,000 to provide one-time funding for energy efficiency and all-electric building upgrades for home-based childcare facilities in impacted communities in unincorporated County.
- <u>Pinole Energy Enhancement Rebate Program</u>
- <u>Bay Point / Pittsburg Energy Enhancement Pilot Program</u>

4.0 Building Inventory Analysis



A comprehensive building inventory analysis is needed to enable the County to identify the specific building types that are less complex and costly to transition to all-electric and better understand the barriers to a cost-effective transition for all-electric buildings in the County.

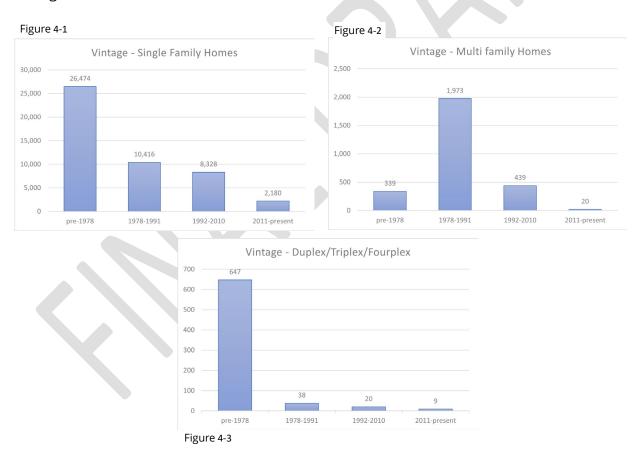
The initial building inventory analysis conducted in this report focuses on residential buildings, which comprise a majority of building use types in unincorporated Contra Costa County. The analysis includes the number of residential structures, residential building vintages, and square footage of these buildings. Maps were also created to highlight the existing makeup of home building types in the County's most impacted communities, referred to by the State as "disadvantaged communities" (DACs), as defined by Senate Bill (SB) 535. The specific impacted community maps can be found in Appendix A. Below is a summary analysis of the existing residential building landscape in unincorporated County.

For unincorporated Contra Costa County, there are approximately 51,715 residential structures, with over 90 percent identified as single-family homes. The remaining residences, which include smaller multifamily housing like duplexes, triplexes, and quadplexes alongside the typical 5+ unit multi-family buildings, account for less than 10 percent of the remaining housing stock. A detailed summary of this is provided in Table 4-1 on Page 22.

Table 4-1 Residential Building Types

Building Typologies	Total Buildings	Percentage of Buildings
Single-family Homes	47,970	93%
Small Multi-family (Duplex, Triplex, and		
Quadplex)	916	2%
5+ Multi-family, up to 3 floors	2,829	5%
Total Residential	51,715	100%

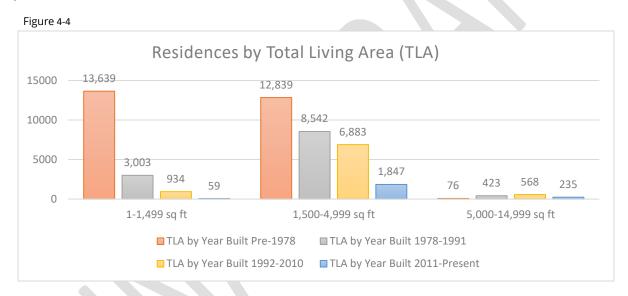
Figures 4-1, 4-2, and 4-3 below divide the age of homes built in unincorporated Contra Costa County into the following four categories: (1) pre-1978, (2) 1978-1991, (3) 1992-2010, and (4) 2011-present. These building age ranges were selected because they are often used in evaluating cost-effectiveness for existing energy efficiency programs operating throughout the State.



The year homes were built varies depending on housing type. For single-family homes, 56 percent were constructed prior to 1978, 22 percent between 1978-1991, 18 percent between 1992-2010, and only 5 percent in 2011 or later. Like single-family homes, the majority of duplexes, triplex, and quadplexes in the unincorporated County were

constructed before 1978, accounting for 91 percent of all structures in this housing category. Of the multi-family housing in the unincorporated County, only 12 percent was built before 1978, with most of the multifamily housing, 71 percent, being built between 1978-1991. Multi-family homes built between 1992-2010 account for roughly 6 percent and homes built after 2010 account for less than 1 percent.

Another criterion used in this preliminary building inventory is the home's square footage, or total living area (TLA). Figure 4-4 below shows the breakdown of single-family homes by the TLA as well as when the homes were built and how many were constructed. For homes that were built prior to 1978, 52 percent are 1,500 sq ft or less and 48 percent are between 1,500 sq ft and 4,999 sq ft. Homes built post-1978 generally fall in the 1,500 – 4,999 sq ft category with homes of this size built between 1978-1991 at 71 percent, homes built between 1992-2010 representing 82 percent, and homes built after 2011 representing 86 percent.



The year, size, and type of homes built are all important factors in determining an approach to what types of homes should be targeted first for conversion to all-electric. These factors help with understanding what the building requirements are based on the age of the home, the expected electrical panel size and needs for upgrading if the home were to be made all-electric, as well as other barriers for certain building ages that may make it difficult for specific home configurations to make an all-electric transition. Additional analysis is needed to determine what building configurations are best suited for a cost-effective all-electric retrofit. A more detailed building inventory will also need to be conducted for other building types (i.e., commercial, and industrial buildings). This is especially important for specific impacted communities, such as North Richmond, Bay Point, Pacheco, Rodeo, and Vine Hill.

5.0 Cost Analysis

A key component in determining the feasibility of transitioning existing buildings to allelectric is cost. There are various factors that impact cost, such as the cost of the new equipment, operational costs, and other unique factors.

Since the mid-1900s, domestic appliances have been commonplace in homes. These appliances include water heaters, gas furnaces, clothes washers, clothes dryers, and cooking stoves. Historically, both gas and electricity have been used as a fuel source for home appliances with some appliances, such as a gas furnace, requiring both to operate. However, in



recent years, more options for all-electric appliances have become available. To adequately prepare for this transition, an in-depth cost analysis specific to the County's geographic region is needed. This will inform the County on what resources may be needed or could be provided to better support a cost-effective all-electric transition that retrofits existing buildings and facilities to reduce energy use for conversion to low-carbon or carbon-neutral fuels. Specific information is needed on the cost differences between new gas and new electric appliances, the motivation of homeowners to stay with gas appliances or embrace all-electric appliances, and how incentive programs influence the cost of this transition.



Capital cost and operating costs of appliances also impact the overall cost of transitioning existing buildings to all-electric. Operating costs are influenced by utility rates, the efficiency of the appliance(s), heating and cooling loads, and resident behavior. Conducting a comparative analysis on the utility rates for gas versus electricity (including time-of-use rate programs) and the efficiency of the appliances would allow a better understanding of the benefits of all-electric buildings. Insufficient building insulation and inefficient appliances can also make it more costly to operate due to the space not retaining the desired temperature as well as resulting in more frequent heating and cooling appliance use.

Capital cost considerations that are specific to transitioning a building to be all-electric are the home's wiring configuration, the capacity of the electrical panel, and the addition of solar panels and battery storage. Though not all homes will require an upgraded electrical panel and wiring, most will likely need to be replaced because most single-family homes in the unincorporated areas of the County were constructed prior to 1978, when the building code was first adopted. The cost of needing a panel upgrade is expected to be a substantial barrier for transitioning buildings to be all-electric. Solar panels and battery storage present a different challenge because these additions are not required for a home to transition to all-electric. However, when paired with all-electric appliances, solar panels and battery storage result in higher energy cost savings. Like electrical panel and wiring upgrades, there are few incentives for solar and most of the available incentives are financing programs, which are less accessible to residents of impacted communities.

It will also be important to understand whether and how locally generated clean energy with battery storage, such as rooftop solar or community scale solar, could benefit County residents and businesses, both in terms of reducing air pollution and stabilizing energy costs.

To better understand how all these variables impact the cost of transitioning a home to be all-electric, a comprehensive study will need to be conducted. A cost study will also be needed for other types of buildings, such as commercial and industrial.

6.0 Funding and Financing Opportunities

Funding and financing opportunities will need to be leveraged to assist property owners with the cost of upgrading gas equipment to all-electric equipment. Understanding what funding opportunities are available to property owners, the incomes to which they are applicable, and the type of buildings that qualify are important considerations to determine where gaps in resources exist and where additional funding or resources need to be prioritized.

Below is an overview of the current rebate opportunities, tax credits, and financing mechanisms available for property owners located in unincorporated Contra Costa County that support or assist with converting buildings to be all-electric. Using these existing resources will be very important to determine where resources should be prioritized to meet the County's all-electric building(s) goals. The County may also determine if it wishes to develop its own financing program to assist its residents.

6.1 Rebate Opportunities

There are numerous rebate programs available that will reduce the cost of transitioning existing buildings to all-electric. These programs come from both the State and regional level and apply to a variety of appliance upgrades and energy efficient retrofits. This section includes an overview of the programs that are currently available.

Bay Area Regional Energy Network (BayREN)

BayREN is a network of local governments consisting of the nine Bay Area counties that work in collaboration to promote energy and water efficiency with the goal of reducing greenhouse gas emissions. BayREN is funded by utility ratepayer funds through the CPUC and led by the Association of Bay Area Governments (ABAG).

BayREN programs³³ provide the Bay Area with rebates, funding, technical assistance, education and more. BayREN manages 10 programs spanning four sectors: residential, cross-cutting, commercial and public sector.

TECH

The TECH Clean California³⁴ initiative works to accelerate the adoption of clean space and water heating technology across California homes in order to help California meet its goal of being carbon-neutral by 2045. TECH operates statewide and offers incentives for HVAC systems and can be layered with other incentive programs such as BayREN.

Self-Generation Incentive Program (SGIP)

The SGIP program³⁵ provides incentives for customer-side battery storage installation serving residential, small businesses, non-profit organizations, government agencies and educational institutions. The program is regulated by the CPUC and administered by the IOUs in California as well as the Center for Sustainable Energy (CSE), a non-profit organization. Since its creation in 2001, the program has evolved to include provisions that target low-income customers and disadvantaged communities as well as communities with an elevated risk of PSPS events due to wildfires. In April 2022, the program was expanded further to include incentives for heat pump water heater (HPWH) installations with half of the \$40 million allocated to be reserved for low-income utility customers.³⁶

³³ www.bayren.org/how-we-work/our-programs

³⁴ www.techcleanca.com/

³⁵ www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/self-generation-incentive-program

³⁶ www.selfgenca.com/

MCE



MCE became California's first CCA in 2010, procuring and providing electricity produced by renewable sources for the County of Marin and its jurisdictions. Since then, MCE has expanded to Napa County, parts

of Sonoma County, and most of Contra Costa County, including 15 of the County's 19 jurisdictions as well as the unincorporated County³⁷. In total, MCE provides service to over 540,000 customers with Contra Costa County accounting for the largest portion. In addition to serving as a clean energy provider, MCE offers a suite of customer programs to incentivize local renewable energy development, grow the energy economy, and support energy equity across its communities. The incentives offered through MCE include energy efficiency and electrification retrofits for residential and commercial properties, electric vehicles and charging, as well as workforce development programs.

MCE provides a wide range of resources ³⁸ for residential, commercial and industrial buildings, as well as supporting workforce development and other offerings related to the clean energy industry.

Pacific Gas and Electric (PG&E)

PG&E is the investor-owned utility that provides gas and electricity to the San Francisco Bay Area as well as a large portion of northern and central California. PG&E also provides various energy efficiency programs and resources. Below is a list with web links on information on the PG&E energy efficiency program offerings:



<u>Energy Savings Assistance (ESA) Program</u>³⁹: Free energy efficiency upgrades and appliance replacement for low-income homeowners and renters living in a home that is at least 5 years old.

³⁷ The City of Hercules has been approved for membership in MCE. The enrollment of Hercules is expected to occur in spring 2025, after completion of regulatory approvals by the California Public Utilities Commission.

³⁸ www.mcecleanenergy.org/explore-programs-and-offers/

³⁹ www.pge.com/en/save-energy-and-money/energy-saving-programs.html

Generator and Battery Rebate Program⁴⁰: In response to the increasing frequency of PSPS events, PG&E has started offering a \$300 rebate for the purchase of a qualifying product (battery or generator) to prepare for power outages. An additional \$200 rebate is included if the customer participates in PG&E's California Alternate Rates for Energy (CARE) or Family Electric Rate Assistance (FERA) utility bill assistance programs.

<u>Portable Battery Program</u>⁴¹: In response to the increasing frequency of PSPS events, PG&E provides backup batteries for customers who rely on medical devices.

California Golden State Rebate

Program⁴²: The ratepayer-funded
California Golden State Rebate
program is authorized by the CPUC
and supported by the major IOUs in
California, including PG&E. The
program offers rebates (via
coupons) for HPWH and room air
conditioner installations.



⁴⁰ www.pge.com/en/outages-and-safety/outage-preparedness-and-support/general-outage-resources/generator-and-battery-rebate-program.html

⁴¹ www.pge.com/en/account/billing-and-assistance/financial-assistance/portable-battery-program.html

⁴² www.goldenstaterebates.clearesult.com/

6.2 Inflation Reduction Act Rebates and Tax Credits⁴³

The United States Government passed the Inflation Reduction Act in 2022 to curb inflation and as one of the strategies, the legislation promotes clean energy through rebates for energy efficiency retrofits as well as solar and EV charger installation. However, the Federal government recently changed its priorities and intends to cancel many or all of the rebates and tax credits listed in the table below for both single-family and multi-family homeowners.

Measure	Rebate	Tax Credit	
HP HVAC	up to \$8,000	30% of cost up to \$2,000	
HPWH	up to \$1,750	30% of cost up to \$2,000	
HP Clothes Dryer	up to \$840	N/A	
Electric Stove	up to \$840	N/A	
Building Weatherization	up to \$1,600	30% of cost up to \$1,200	
Electrical Panel Upgrade	up to \$4,000	30% of cost up to \$600	
Electrical Wiring	up to \$2,500	N/A	
Home Energy Audit	N/A	30% of cost up to \$150	
Battery Storage (2022-2023)	N/A	30% of total cost	
Solar Energy Systems (2022-2023)	N/A	30% of total cost	

6.3 Financing Options

For many property owners, particularly those located in Impacted Communities, it will be a substantial financial burden to make any energy efficiency or all-electric building retrofits. A transition to all-electric in all existing buildings will need to leverage existing financing options as well as come up with other, more creative financing options. Beyond the traditional lending options (i.e., home equity loan or personal loan), below

⁴³ www.rewiringamerica.org/app/ira-calculator

are additional financing options available for property owners and businesses to transition their gas appliances to all-electric.

Tariff On-Bill Financing (TOBF)⁴⁴: TOBF, or Inclusive financing, allows utilities to finance clean energy upgrades for low- and middle-income households without dealing with credit or income level issues. TOBF is similar to traditional on-bill financing except it does not require the loan recipient to be approved by the utility or a third-party financier for the loan. This enables utilities to provide capital for all-electric upgrades and then recover their cost through a tariff added to the customer's utility bill. The tariff charge is tied to the service address as well as the upgrade made.

On-Bill Financing (Traditional)⁴⁵: On-bill financing of retrofits enables non-residential customers to obtain loans from their utility provider to fund the upfront costs of all-electric and weatherization projects. The customer pays the loan back using cost savings that result from the project. Once the loan is repaid, subsequent savings go directly to the customer. PG&E offers on-bill financing with loans ranging between \$5,000 and \$4,000,000 through its interest free loan program. PG&E also offers loans smaller than \$5,000 through the GoGreen Business Financing Program.

GoGreen Home Energy Financing (GoGreen Home)⁴⁷: The GoGreen Home program, formerly known as the Residential Energy Efficiency Loan (REEL) program, is a statewide loan program that provides incentives for homeowners to make home energy efficiency improvements by offering a credit enhancement to mitigate the risk of default. These credit enhancements essentially improve the credit risk of a borrower which in turn improves the terms for repaying the debt. This allows participating lenders to offer lower rates, higher loan amounts, longer payback periods, and a broader base of borrowers. The program is available to single-family homes, condos, townhomes, manufactured homes and duplexes, triplexes, and fourplexes. In early 2022, the Go Green Home program partnered with the TECH initiative to expand the equipment and associated costs that are eligible for credit enhancements through GoGreen Homes based on fuel source. This partnership results in a streamlined pathway to all-electric homes for California residents.

GoGreen Multifamily Energy Financing (GoGreen Multifamily)⁴⁸: The GoGreen Multifamily program provides financing options to eligible multifamily property owners for energy efficiency upgrades. Financing types include leasing, equipment financing

⁴⁴ www.aceee.org/toolkit/2017/02/bill-energy-efficiency

⁴⁵ www.pge.com/pge_global/common/pdfs/save-energy-money/financing/energy-efficiency-financing/handbook_obf.pdf

⁴⁶ www.gogreenfinancing.com/smallbusiness

⁴⁷ www.gogreenfinancing.com/residential

⁴⁸ www.gogreenfinancing.com/multifamily

agreements, and energy service agreements for existing properties. Eligibility is contingent on the property having five or more units with at least 50 percent of the units categorized as income restricted, the property must have a minimum of five years remaining on the affordability covenant when qualified, and the property must receive a gas or electricity bill from PG&E, or another participating utility.

Property Assessed Clean Energy (PACE)⁴⁹: PACE programs are financing mechanisms designed for residential and commercial properties to fund energy efficiency, electrification, and renewable energy improvements. This includes, but is not limited to, replacement and/or installation of HVAC system, solar panels, EV charging, battery storage, as well as projects that improve seismic and wildfire resiliency. PACE is unique from other financing mechanisms in that a PACE loan is tied to the property rather than the individual. This means that when a home is purchased with an active PACE loan tied to it, the new property owner is responsible for the loan payments. Contra Costa County has approved four PACE financing providers to work with property owners in unincorporated areas of the County.

Refundable Transfer Tax: A refundable transfer tax for converting to all-electric is a financing mechanism that levies a refundable tax (typically run through a local government incentive program) on the sale of a home for which the home buyer can then be reimbursed upon the completion of a partial or full transition to all-electric. Should the buyer decide not to make any upgrades that bring it closer to or fully transition the home to all-electric, the home buyer will forfeit the tax refund.

<u>Restructuring Permit Fees:</u> The County collects permit fees for new construction, additions, alterations, remodels, for any conversion or replacement of an electrical or gas system, and more. An option would be to reduce the permit fees associated with retrofits that improve energy efficiency and/or result in the replacement of a gas appliance with an electric equivalent.

6.4 Existing Funding Models to Explore

Richmond Community Foundation (RCF) Model⁵⁰: In partnership with the City of Richmond, the Richmond Community Foundation has developed a solution for addressing blighted properties and barriers to home ownership through social impact bonds from private capital to fund the rehabilitation of abandoned properties. These properties are then advertised and sold to first time home buyers. Though this model doesn't directly address all-electric building retrofits, it does provide a potential

⁴⁹ www.energy.gov/scep/slsc/property-assessed-clean-energy-programs

⁵⁰ www.rcfconnects.org/community-initiatives/restoring-neighborhoods/richmond-housing-renovation-program/

framework for other jurisdictions to adopt and modify so that the homes that are rehabilitated are outfitted to be all-electric. Identifying the potential impact of a program of this nature will require an analysis to determine the frequency of property types this program reaches in unincorporated Contra Costa County. This includes properties that are abandoned or extremely dilapidated, properties that have unaddressed code violations or significant tax delinquencies, and properties that have defaulted on the mortgage.

RCF has partnered with MCE to enroll these homes in MCE's Virtual Power Plant program, enabling these newly renovated and all-electric homes to bolster grid resilience as demand continues to rise.

Exploring the feasibility of implementing this financing model or others that are similar will be important in supporting the County's all-electric building(s) goals.

7.0 Centering Equity

Impacted communities exist throughout the County, however, the majority of the impacted communities are concentrated along the Northern Waterfront and in East and West County. In many cases, these communities consist of minority groups that have been historically marginalized including Black, Latino/a/x, Asian, and Indigenous and Communities of Color (BIPOC). Additionally, and oftentimes concurrently, the residents living in these communities have limited income, live with a disability, are non-English speaking, elderly, or part of the LGBTQ community.

To make our existing buildings be all-electric in unincorporated Contra Costa County we will need to consider equity. Transitioning buildings to all-electric in these communities presents an invaluable opportunity to improve on the inequities around housing that persist in the County today. To address equity in this Roadmap we we will use the Greenlining Institute's definition of equity, which states that equity is "increasing access to power, redistributing and providing additional resources, and eliminating barriers to opportunitity, in order to empower low-income communities of color to thrive and reach full potential". This means that those living in impacted communities should have an equal opportunity to experience the benefits of transitioning to all-electric such as health, comfort, improved resilience, and economic benefits.

Communities in the County have varying needs and backgrounds and it will be important to develop strategies and policies that are targeted for these varying needs. We must determine how to integrate policies that prevent resident displacement, particularly when

home improvments are made. This approach will consider the concept of Targeted Universalism in the strategy and policy planning around this transition. Targeted Universalism, as outlined in the Haas Institute *Primer on Targeted Universalism*⁵¹, seeks to establish a general policy goal while also identifying strategies to specifically address impacted communities. This serves to ensure that both impacted communities and the greater population stand to benefit from the established policy.

The Greenlining Institute's Equitable Building Electrification Framework⁵² outlined below, serves as a framework to be used to engage the community on the County's all-electric buildings approach. The Greenlining framework consists of five steps that are outlined to serve as a guide for jurisdictions, such as the County, to ensure that community engagement is equitable and supports the overall goal.

The Greenlining Framework

1. Step 1: Assess the Communities' Needs.

This should include understanding the barriers preventing community members from transitioning their homes to all-electric as well as the residents' knowledge around building electrification.

2. Step 2: Establish Community-Led Decision-Making.

Input and engagement from the community serves to strengthen the overall program design quality by ensuring local buy-in and investment, and deliver tangible local benefits rooted in the lived experiences of everyday people. Partner with community-based organizations to develop a decision-making process that ensures that decisions are based on community needs and priorities.

3. Step 3: Develop Metrics and a Plan for Tracking.

Metrics should include both clean energy benefits like greenhouse gas reductions and community benefits such as local hires and residents' ability to pay their energy bills without sacrificing other essential expenses.

4. Step 4: Ensure Funding and Program Leveraging.

Current low-income energy programs often fail to deliver maximum benefits to all qualifying households due to short and unpredictable funding cycles, poor program design that inadequately reaches qualifying customers, or lack of coordination and integration with complementary programs.

⁵¹ www.belonging.berkeley.edu/targeted-universalism

⁵² www.greenlining.org/publications/equitable-building-electrification-a-framework-for-powering-resilient-communities/

5. Step 5: Improve Outcomes.

Using the tracking and metrics plan described above, ensure that there is a continuous feedback loop to improve current and future programs' reach and impact in Environmental and Social Justice Communities. Consider adjustments to ensure the program reaches the people it seeks to reach and delivers the intended benefits.

7.1 Community Engagement Approach

Using the Greenlining Framework as a guide, the County should develop a strategy for working with communities that build trust with all stakeholders who may be involved in an all-electric transition. Community engagement efforts should be transparent and place emphasis on co-creation throughout the process.

Preparing for Community Engagement

<u>Understanding Community Level Data:</u> Prior to working with the community, staff will review information and lessons learned from recent development of the 2045 Contra Costa General Plan to better understand the composition and geographic distribution of all communities. This will include data on socio-economic demographics as well as burdens faced by communities such as air quality, climate resilience, and energy costs.

<u>Determine Key Issues:</u> Through activities such as literature review and policy analysis, a building inventory assessment, meeting with technical experts and community members, and consultation of the specific community profiles developed in the County's Envision 2040 General Plan, the County can build its understanding of the most pressing issues communities face as they work to make the existing building stock all-electric.

<u>Establish Relationships with Community-Based Organizations (CBOs)</u>: The role of CBOs in engaging the community cannot be understated. CBOs will provide an invaluable perspective about the communities with which they work. CBOs can help convey the financial and economic needs, the social and human assets, and the values of the community, providing an understanding of the power dynamics within the community.

<u>Consider Establishing a Steering Committee:</u> A steering committee or working group composed of members who understand the function and capabilities of the community engagement process can help ensure the process continuously leads to positive outcomes.

<u>Work With Community Stakeholders Prior to Engagement Process:</u> It is important that the all-electric building strategy is developed in collaboration with the community to

develop strategy. This requires working with stakeholders to establish a mutual understanding and metrics for assessing goals and potential strategies and establishing recommendations. Community engagement should prioritize working with community leaders to define as many relevant community partners and stakeholders as possible to ensure that all community groups, especially impacted groups, have a voice in planning the strategy.

Proposed Community Engagement Process

Engage the Community through Community-Based Organizations (CBOs): The initial stages of community engagement will focus on educating the public on the County plans around all-electric buildings for existing buildings. This would include an overview of the benefits of having buildings be all-electric. CBOs would serve as a bridge between local government and community groups and members who are best positioned to provide input, feedback, or assist with the initial outreach efforts in coordination with the County. CBOs can set up meetings with community leaders and other groups, especially those representing impacted communities, to build trust. Because the County will be requesting feedback from community members, providing compensation for their time through use of stipends is critical to the success of the effort. County staff should work to identify funding mechanisms to cover this cost, either through grant or County funding.

These meetings can also serve as a place for feedback on the County's goal to reduce greenhouse gas emissions from existing buildings as well as provide direction on how to reach the broader community at-large. Department of Conservation and Development staff will work to explore partnerships with all other County departments in developing the outreach strategy, such as the Office of Racial Equity and Social Justice, the County Health Department, and the Employment and Human Services Department.

As the CBOs work with the County on initial outreach to communities, the County will connect with other stakeholders. These should include, and are not limited to, unions such as the Electrical Workers Union (IBEW Local 302) and the Plumbers and Steamfitters Union (Local 159), environmental organizations like 350 Contra Costa, the East Contra Costa Community Alliance, Rising Juntos, and Rising Sun, community colleges, faith organizations, and other similar groups.

<u>Acknowledge and Understand Community Feedback:</u> As communities become informed about the benefits of all-electric buildings and trust is established between the communities and the County, feedback will be gathered from the community on the opinions and concerns related to this transition. In addition to receiving community

feedback, the County will explore other options for this type of transition, including alternative pathways for making buildings all-electric.

To help bolster widespread community comprehension and increase community participation, the County will look at ways to host educational workshops and use focus groups to help inform community members on all-electric technology, available incentives, and the health and safety benefits of having buildings be all-electric.

<u>County and Community Co-Create Draft Strategy:</u> A co-created draft strategy should be developed for strategically engaging with specific community groups on the barriers and other considerations that need to be contemplated in working to transition buildings in their community to be all-electric.

7.2 Workforce Development

Transitioning our buildings to be all-electric in the County is an opportunity to increase the number of high-quality jobs that pay a living wage. Making buildings all-electric will require one or more specialized tasks such as building weatherization, replacement of appliances, electrical panel and wiring upgrades, energy efficiency upgrades, and/or battery backup and solar photovoltaic (PV) power. This transition can lead to the creation of more high-quality job opportunities which will in turn necessitate a trained workforce. It will also require a focus on maintaining the existing contractor pool by continuing to provide resources and training through programs like BayREN.

To address the eventual need for more trained contractors, coordination will be needed with the Workforce Development Board of Contra Costa County (WDBCCC) and the Contra Costa County Department of Conservation and Development's Economic Development team on outreach to local trade schools, leveraging existing relationships with community colleges that provide information on pathways to becoming trained to work on transitioning buildings to be all-electric. Coordinating this effort should also be integrated into the Economic Development team's work around the County's Just Transition to an economy that is less reliant on fossil fuels.

8.0 Facilitating an Equitable Transition

Moving to all-electric buildings includes a number of issues that must be resolved if the transition is going to be equitable for all County residents. Those issues are described below.

Electrical Panel Capacity and Wiring: Electrical panel capacity can be a significant barrier to costeffective all-electric buildings. Existing residences in unincorporated areas vary widely by vintage and oftentimes lack sufficient capacity to accommodate newer all-electric appliances. Homes of average size built in the 1980s are typically equipped with 200amp service, the minimum service level currently required for new home construction. Whereas homes built prior to the 1980s may be outfitted with any number of panel sizes, such as 100-amp or 60amp service, depending on the year the home was built or if the home has had any significant upgrades. As shown in this report, the housing stock in the unincorporated county, which consists of 93 percent single-family homes, most of which were built prior to 1978. This indicates that over half of the existing single-family homes could require panel upgrades.



Wiring is also a factor that presents a challenge for transitioning buildings to be all-electric. When designing electrical systems for homes, 240-V outlets are often only located where they'll be needed; historically limited to clothes dryers and in some cases for electric stoves. This has resulted in the majority of homes being insufficiently equipped to successfully transition homes to be all-electric. For this transition, many homes will need to have rewiring work completed to accommodate the newer appliances that require 240-V outlets. This will increase the cost burden. As the County explores pathways for a cost-effective all-electric building(s) transition, high priority must be given to mitigate the challenges around electrical panel and wiring upgrades.

The cost of an electric panel upgrade and associated rewiring may be the most significant barrier to making homes all-electric in the County. Determining how best to upgrade an electric panel that minimizes the impact on the overall electric grid capacity needs to be considered in evaluating the best approach to transitioning buildings to be all-electric. Strategies for load shifting also need to be considered, such as on-site solar and battery

storage, so energy be stored and used during peak energy demands to help reduce the impact on the overall grid and mitigate the need for panel upgrades.

On-site Solar Photovoltaic (PV) and Battery Storage: Barriers for installing solar PV and



battery storage impact low income and impacted communities more than the broader community. The largest barrier is cost, as solar PV requires high upfront cost if paying out of pocket or a relatively high credit score to access financing options. Furthermore, there is a lack of incentives available for low-income and impacted communities for on-site solar PV and battery storage. Another common barrier is that low-income and impacted communities often face issues

around site suitability, which also impacts cost. Roofs oftentimes require repair or replacement before solar PV can be installed and the electrical wiring and panel of a home may need to be upgraded, as described above. In the case of renter-occupied properties, renters lack the decision-making authority to initiate investments in solar PV and battery storage.

To overcome these barriers the County will need to explore creative solutions. One approach and promising example of a creative solution is the EnergyScore risk indicator ⁵³ developed by Stanford University, the Massachusetts Institute of Technology (MIT), and a community solar company, Solstice, designed to provide an alternative metric to predict a customer's future payment behavior more accurately than the FICO credit score, which is the current standard. Rather than focusing on a customer's overall credit history, EnergyScore utilizes the customer's utility bill payment history to gauge future payment history, thereby ensuring that potential customers with lower FICO scores are not automatically disqualified from financing. In addition to removing the barriers to those without exemplary credit scores, this model also could enable utility companies to consolidate the utility bill with community solar repayment so that the customer would only receive one bill and would be less likely to default on the financing payments for solar PV.

⁵³ www.globalenergyinstitute.org/international-energy-security-risk-index

Another option is facilitating community-scale solar projects with battery storage, rather than projects on individual rooftops. Community solar projects are defined by the U.S. Department of Energy as:

...any solar project or purchasing program, within a geographic area, in which the benefits flow to multiple customers such as individuals, businesses, nonprofits, and other groups. In most cases, customers benefit from energy generated by solar panels at an off-site array.

Community solar customers typically subscribe to—or in some cases own—a portion of the energy generated by a solar array and receive an electric bill credit for electricity generated by their share of the community solar system. Community solar can be a great option for people who are unable to install solar panels on their roofs because they are renters, can't afford solar, or because their roofs or electrical systems aren't suited to solar. ⁵⁴

Community solar projects, paired with battery storage for backup, may be a more efficient and cost-effective option for providing solar energy in unincorporated areas of the County.

Displacement and Tenant/Landlord Constraints: As the County creates a strategy to transition existing buildings to all-electric, it is important to ensure that retrofits don't displace renters or homeowners. Any strategy or policy addressing all-electric conversion of existing buildings should develop strategies to support housing preservation and tenant protections. Property owners of single family and multifamily buildings encounter numerous obstacles when transitioning buildings to be all-electric. These obstacles are highlighted in the American Council for an Energy-Efficient Economy's (ACEEE), Energy Equity for Renters Toolkit⁵⁵, and include,

- Lack of awareness or knowledge
- Lack of resources
- Deferred Maintenance
- Split Incentives

Addressing these barriers is paramount in the overall effort to transition our existing building stock to all-electric. Staff should explore strategies for addressing the tenant/landlord dilemma that are being deployed in other jurisdictions to determine their feasibility as a strategy in Contra Costa County.

⁵⁴ https://www.energy.gov/eere/solar/community-solar-basics

⁵⁵ www.aceee.org/toolkit/2022/11/energy-equity-renters-toolkit

Ensuring Energy Reliability: With the increase of electric appliances in homes and businesses, it is anticipated that communities in Contra Costa County will become more dependent on the electrical grid. The California electrical grid, operated by the CALISO, delivers over 239 million megawatt hours (MWh) per year to approximately 30 million consumers. The grid operates under a delicate balance. Because electricity is difficult to store, the grid must maintain a balance that ensures that electricity consumption matches electricity production as closely as possible. Increasing the number of all-electric homes will strain the grid while utility companies and energy providers work to build capacity. For this reason, communities throughout the County and beyond will need to take steps to make homes more energy efficient to help to reduce power disruptions.

As Contra Costa County pushes forward to transition its existing building stock to allelectric to meet its CAAP target goal of carbon neutrality by 2045, the County must take actions to better insulate itself from the potential of an unreliable grid. These actions will need to focus on multiple areas including minimizing demand on the grid from our building stock to the greatest extent feasible, enhancing the energy resilience of the building stock, developing policies and programs that support grid stability and increase renewable generation, as well as partnering with regulatory agencies, utility companies, and other government agencies at the local, regional, and state level.

Minimizing demand on the grid from our building stock is necessary for maintaining grid stability and energy reliability to residents in the County. As more buildings transition to all-electric, energy efficiency, building envelope improvements, and load management will become increasingly important strategies. Homes transitioning to all-electric should be outfitted with high-efficiency appliances and building envelope improvements such as wall and attic insulation, multi-pane windows, and air sealing to minimize energy loss. Residents will also need to shift energy use habits to avoid drawing from the electrical grid during peak demand periods which generally run from 4:00 p.m. to 9:00 p.m. and shift the use of operating high energy use appliances such as clothes dryers and electric vehicle charging during off-peak times.

Local utility companies, community choice energy providers, and others play an important role in shifting consumer behavior by offering demand response programs like the Power Saver Rewards Program offered by PG&E, which provides consumers with credit to their bills for minimizing energy consumption during peak demand periods or the SmartAC device that remotely shifts air conditioning use to off-peak times to reduce strain on the grid.⁵⁷

⁵⁶ www.caiso.com/Documents/CaliforniaISO-GeneralCompanyBrochure.pdf

⁵⁷ www.pge.com/en_US/residential/save-energy-money/savings-solutions-and-rebates/demand-response/demand-response.page

Building resilience through DER is another strategy for maintaining overall grid stability and improving energy reliability for residents. DER consists of small, modular, energy generation and storage technologies that provide electric capacity such as solar panels, battery storage, and electric vehicles. ⁵⁸ Installing solar panels on homes reduces the demand on the grid during peak times and when paired with battery storage provides the added benefit of allowing homes to maintain power, even during power loss events due to extreme heat or weather. DER can also help to build out the infrastructure for Virtual Power Plants (VPP) which consists of a collection of small-scale energy resources that, when aggregated together and coordinated with grid operations, can provide added grid reliability. ⁵⁹

Developing programs to support energy efficiency and DER will be necessary to realize the full benefit of these strategies. Contra Costa County offers several programs that help support grid reliability and energy resilience. The state and federal funded weatherization program offers free energy efficiency improvements to low-income renters and property owners. The County also partners with BayREN to promote energy efficiency through rebates and no-cost technical assistance for single-family and multifamily properties. MCE, the County's community choice energy provider, offers similar incentive programs for properties in its service area which includes much of Contra Costa County along with parts of Marin, Napa, and Solano Counties. These programs will help residents in the County to improve efficiency in their homes, however, this alone will not ensure grid reliability as the building stock increasingly becomes more electric. The state will need to continue to support local governments by establishing policies and programs that promote continued energy efficiency and DER retrofits in our building stock. In 2022, California established the Community Energy Resilience Investment (CERRI) Program to fund projects that bolster grid reliability. One of the CERRI program goals will be to reduce the frequency and duration of power outages as well as strengthen communities' ability to function during these outages. 60 Grant funding is currently available for electric grid operators, electricity storage operators, electricity generators, transmission owners or operators, distribution providers, and fuel suppliers.

As Contra Costa County and other jurisdictions across the State continue to promote transitioning to all-electric in their communities, ensuring that the grid has the capacity to handle the added demand is paramount. At the local level, this will require local governments to develop and implement policies and programs that further support energy efficiency and DER upgrades in our communities. However, ensuring a reliable grid goes beyond local governments. The state must act as a leader in this effort by continuing to

⁵⁸ www.nrel.gov/docs/fy02osti/31570.pdf

⁵⁹ www.rmi.org/clean-energy-101-virtual-power-plants/

⁶⁰ www.energy.ca.gov/programs-and-topics/programs/community-energy-resilience-investment-ceri-program

establish higher emission reduction targets while also developing policies and programs that help to mitigate the challenges involved, notably maintaining grid reliability.

9.0 Policy Options and Other Strategies

There are many local policies and approaches that other jurisdictions have implemented to make or encourage buildings to transition to all-electric. Most policy actions taken include the adoption of a local ordinance to establish mandates for all-electric retrofits based on a specific action being taken by a property owner. This includes:

- Time of Major Renovation Requires homeowners to replace gas appliances with the electric equivalent when performing major home renovations.
- Time of Burnout Requires homeowners to replace end-of-life gas appliances with the electric equivalent.
- Point of Sale Requires home sellers and/or buyers to retrofit the home to be allelectric at the time of sale.

Ordinances with these types of actions have been implemented in other jurisdictions within the San Francisco Bay Area. The most widely utilized policy adopted is an ordinance that requires gas appliances/equipment to be replaced with all-electric equipment at the time of major renovation, which has been successfully adopted in numerous counties and cities in the region. This includes the City and County of San Francisco, the County of Marin, the City of Alameda, and the City of Palo Alto.

While these policy actions have been successful with other jurisdictions, it is not recommended that they are considered due to a decision from the U.S. Court of Appeals 9th Circuit in January 2024, that precludes cities and counties from adopting ordinances that prohibit the installation of gas plumbing in buildings. Some jurisdictions have responded with implementing more stringent energy efficient building code requirements instead of mandating that gas appliances be replaced with all-electric appliances. However, similar to what the County has done, this approach is more widely used only for new construction projects.

Neighborhood-wide gas infrastructure decommissioning is a strategy being looked at by local governments with their local utility. The process involves identifying sections of the gas distribution system that are more cost-effective to remove from use. These buildings would be converted to all-electric. The primary advantage of this approach is that it is the most efficient method for transitioning homes to all-electric and in certain circumstances can be very cost-effective for the utility to implement. Rather than continuing to maintain

the gas pipeline system, the utility can instead invest those funds in other ways to make the grid more reliable.

The State in 2024 directed the investor-owned utilities to conduct up to 30 pilots statewide that remove gas lines, rather than replace them, and instead convert those neighborhoods to all-electric (SB 1221). The California Public Utilities Commission is in the process of determining which neighborhoods will be eligible for potential participation in this program, and how the program will operate (Rulemaking 24-09-012). The County is a party to this proceeding, with a focus on monitoring opportunities for neighborhoods in Contra Costa County to potentially participate in the SB 1221 program, coordinating with the eligible County Supervisorial district(s), and advocating for including appropriate neighborhoods in Contra Costa County in a manner that will benefit residents.

Coordination with the County's local utility, PG&E, and CCA, MCE, will be necessary to leverage all available resources to develop an approach within the County to implement neighborhood-wide gas infrastructure decommissioning. Incentivizing Incremental improvements to reduce reliance on gas, such as changing out specific appliances when they wear out, is also likely to be a more realistic option for removing gas infrastructure from existing buildings. Additional research and coordination will be needed to determine the best feasible approaches for the County.

10.0 Next Steps

Transitioning the existing building stock to be all-electric is a complex issue. Most of the approaches used only address a portion of the issue. To meet our CAAP goals, the County will need to implement additional initiatives that both align and compliment state and regional efforts. To help support this work, below are recommended actions for staff to either explore or implement to support the use of low-carbon or carbon-free appliances for existing buildings.

10.1 Action Items and Recommendations

Outreach and Engagement

- Develop a thoughtful community outreach and engagement strategy that centers
 equity in the process. Outreach and engagement should educate residents about
 the benefits of all-electric buildings. Leverage regional programs like BayREN for
 outreach and education, as appropriate. The preliminary work done in this
 Roadmap should serve as a framework for engaging with impacted communities
 throughout the County.
- Work with the County's Economic Development team on outreach to local trade schools, leveraging existing relationships with community colleges that provides information on pathways to becoming trained to work on transitioning buildings to be all-electric.

Additional Analysis

Expand on the preliminary building inventory. This should include a more comprehensive inventory that accurately reflects the distribution of homes by type and vintage so that these can be mapped on a more specific community scale. County staff should also work to gain a better understanding of the appliances that currently exist in homes by analyzing the permits issued for appliance replacement. For appliances that do not require a permit for replacement, such as stoves or washers and dryers, staff should seek other ways to identify whether these are gas fueled in homes or have already been swapped for the all-electric equivalent. These actions will help enable County staff to better prioritize and more accurately target specific areas based on home configuration and financial need. Explore the

feasibility of this work being completed in-house or determine if a consultant is needed to assist with this work.

Expand on the preliminary cost analysis. This Roadmap presents a high-level overview of the costs associated with transitioning existing buildings to all-electric. Further research is needed on the direct and indirect costs for this all-electric transition which includes an analysis and cost breakdown of the various options for each appliance type and the operational costs around operating all-electric appliances. From this analysis, County staff could provide a policy or County specific program for consideration to encourage more buildings to operate solely using electricity.

Regional and State Collaboration

- Work with the County's Legislation Committee and BOSto develop a policy framework to more routinely engage with State regulatory agencies, such as the CEC, CPUC, and CARB, to provide input on activities and actions that help support all-electric building initiatives, or other low-carbon or carbon-free appliances for existing buildings.
- Work with energy providers, such as PG&E, MCE, or other regulatory agencies, such as the CEC and CPUC, to obtain information on the gas infrastructure throughout the County to determine cost-effective opportunities where gas infrastructure could be decommissioned. Analyze which community areas may have the best opportunity for cost-effective gas infrastructure decommissioning and explore a County-wide strategy for decommissioning gas infrastructure in certain parts of the County, if feasible.
- Continue to track opportunities that assist property owners and renters in paying
 for retrofits associated with transitioning buildings to all-electric. These
 opportunities could include incentive programs that offer rebates or no-cost
 retrofits as well as financing options that are accessible to those of all income levels.
 In addition, County staff should track statewide and regional plans that address
 building decarbonization so that future planning efforts are aligned with these
 plans.

Other Actions

- Further explore the policy options outlined in this document to support making buildings all-electric. This should include time of sale, time of replacement due to burnout OR due to renovation, building performance standards, and neighborhoodwide gas decommissioning.
- To support the transition of buildings to all-electric, work to develop a strategy to address the tenant/landlord rental property constraints that commonly prevent property owners from making building improvements.
- Seek solutions that make installing solar panels and battery storage accessible to all homeowners and property owners to improve the overall resiliency of households in unincorporated County, including community solar with battery storage. Work with the County's Legislation Committee and BOS to advocate through the CPUC for additional funding support to utility companies and collaborate with PG&E to facilitate more timely and efficient solar panel upgrades and backup battery installations.
- Allow staff to seek and obtain funding that supports the implementation of this Roadmap.
- Identify opportunities for pilot projects that will test the variety of strategies for converting existing homes and other buildings to be all-electric.

11.0 Roadmap Implementation Action Plan

This section discusses how a Roadmap Implementation Action Plan will be created, updated and maintained to ensure the County follows through on implementing the recommended next steps and action items specified in the Roadmap.

11.1 Implementing Action Items and Recommendations

There are key action items and recommendations specified in the Roadmap that need to be completed to determine the appropriate path forward to further develop additional actions on an on-going basis that can provide more detail on how the County can further support CAAP Strategy BE-2.

These include:

- Completing a building inventory and cost analysis to expand the work presented in the Roadmap,
- Adopting a Policy Framework for staff to engage in State Regulatory proceedings that support the goal of transitioning existing buildings to all-electric, and
- Developing recommendation(s) to consider how to implement the equitable outreach and engagement strategy outlined in the Roadmap

Below is an expected timeline to complete the key action items and next steps outline in Section 10 of this Roadmap.

Timeline to Complete Key Next Steps		
January 2026	Complete Building Inventory and Cost Analysis	
March-June 2026	Adopt Framework to engage in State Regulatory Proceedings	
January 2027	Develop Recommendation(s) for Equity Focused Outreach and Engagement Strategy	

The Roadmap Implementation Action Plan discussed below will include updates on the completion of these key action items.

11.2 Roadmap Implementation Action Plan

Meeting the County's clean energy goals for existing buildings will require the development of an Implementation Action Plan that is adaptive to changes and allows for flexibility when needed so the County can meet its CAAP goals. This section outlines the content that will be included in the implementation action plan as well as information to include for the development of a clean energy webpage. Both the implementation plan and clean energy Roadmap webpage are to be completed within 12 months of when this Roadmap is adopted by the County.

Implementation Action Plan Framework

Below is a framework that outlines what is required to be in the Roadmap Implementation Action Plan for the County's Clean Energy Roadmap for Existing

Buildings. The framework is intended to specify all the required content necessary to include in the Implementation Action Plan.

The Implementation Action Plan shall include, but not be limited to, the following elements:

- List of all existing next steps and recommendations outlined in the Roadmap with progress on each item to date,
- Metrics for each action item included in the Roadmap with specific goals (i.e., number of homes retrofitted to all-electric, partnership groups formed, and/or information on funding for specific initiatives),
- Funding source(s) or funding options for implementing each action item,
- Specify how in Implementation Action Plan supports current State and Regional initiatives to convert existing building to all-electric (i.e., Bay Area Air District Rules 9-4 and 9-6 on Building Appliances),
- Include new next steps and actions items, as appropriate,
- Define the County role in implementation actions and expected roles with other entities, where appropriate, and
- Incorporate feedback from Sustainability Committee and Sustainability Commission on implementation plan, as appropriate.

The Implementation Action Plan will be used to implement the next steps; actions items and recommendations specified in the Roadmap and allow for new next steps or action items to be included in the future. The plan will be examined on an annual basis to allow for any adjustments, as needed. Adoption of the plan and any modifications to the plan are to be approved by the County Board of Supervisors.

Clean Energy Roadmap Webpage

The Clean Energy Roadmap provides information that is likely to change over time. As part of the Roadmap Implementation Action Plan, a website will be created and maintained that includes regularly updated information on the topic of converting buildings to be all-electric. The website is expected to include the following content:

- Overview of the Clean Energy Roadmap
- Benefits of All-Electric Buildings
- Existing All-Electric Policies and Programs
- Funding and Financing Opportunities, and
- Updates on the Roadmap Implementation Action Plan

The intent of the webpage is to provide more routine updates to the relevant sections in the Clean Energy Roadmap that are expected to change over time.



CONTRA COSTA COUNTY

1025 ESCOBAR STREET MARTINEZ, CA 94553

Staff Report

File #: 25-3505 Agenda Date: 9/8/2025 Agenda #: 7.

SUSTAINABILITY COMMITTEE

Meeting Date: September 8, 2025

Subject: RECEIVE Report on Contra Costa Asthma Initiative Grant Project and PROVIDE DIRECTION, if

needed

Submitted For: SUSTAINABILITY COMMITTEE

Department: DEPARTMENT OF CONSERVATION & DEVELOPMENT

Presenter: Demian Hardman-Saldana || Principal Planner | DCD

Contact: Demian Hardman-Saldana | (925) 655-2816

Referral History:

In November 2019, a Business Plan was completed through a technical assistance grant provided to the County Contra Costa Health Services (CCHS) in coordination with the County Department of Conservation and Development (DCD), Marin Clean Energy (MCE), and Association for Energy Affordability, Inc. (AEA), a nonprofit corporation, to implement a comprehensive home-based asthma program (also referred to as the "Contra Costa Asthma Initiative".

In coordination with the technical assistance team, CCHS submitted a funding proposal to the Bay Area Air Quality Management District (now the Bay Area Air District, or BAAD) to support the implementation of the Business Plan and was awarded \$100,000 in March 2020 to implement the program.

In July 2020, CCHS was also awarded a \$527,558 grant with the State of California Department of Health Care Services and Sierra Health Foundation to implement and administer a Asthma Mitigation Project (or "Contra Costa Asthma Initiative"). Both the BAAD and Sierra Health Foundation funding grant agreements with the County allocated funding to AEA to implement the Contra Costa Asthma Initiative project, which provided, among other things, project management for homes selected in coordination with CCHS for enrollment in home improvement upgrades related to energy efficiency, all-electric building retrofits, weatherization, and other such improvements known to improve indoor air quality and reduce asthma.

Referral Update:

The Contra Costa Asthma Initiative project was implemented for approximately three (3) years from 2021 through 2023.

Staff will provide a report on the Asthma Initiative project and discuss lessons learned.

Recommendation(s)/Next Step(s):

RECEIVE Report on Contra Costa Asthma Initiative Grant Project and PROVIDE DIRECTION, if needed.

Fiscal Impact (if any):

None.

Lessons Learned: Contra Costa Asthma Initiative

Sustainability Committee July 14, 2025

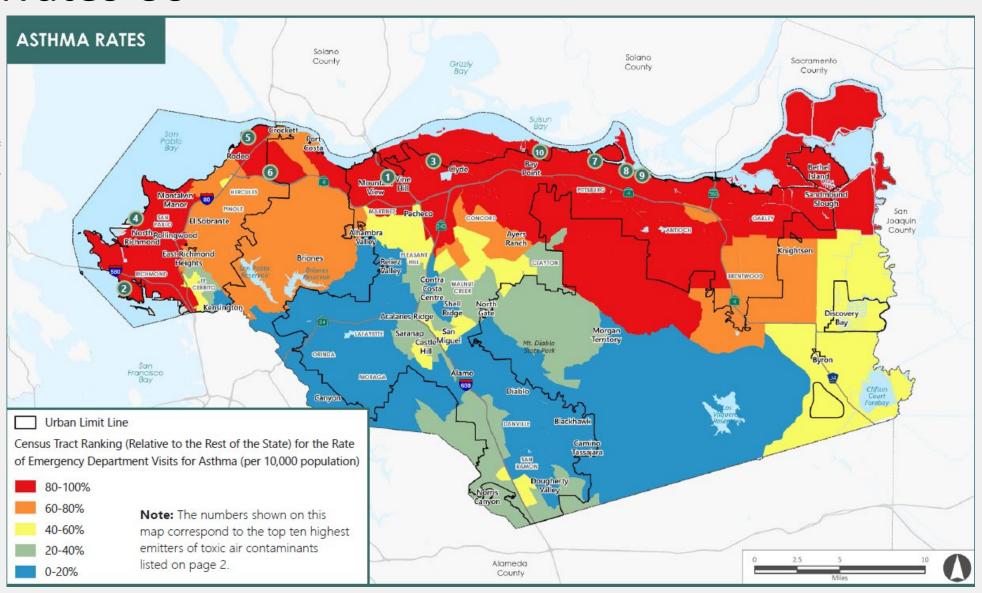


Demian Hardman-Saldana
Department of Conservation and Development
County of Contra Costa

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What Motivates Us

- 1. Martinez Refinery
- 2. Chevron Products Company
- 3. Marathon Refinery*
- 4. West Contra County Landfill
- 5. Phillips 66 San Francisco Refinery*
- 6. Phillips 66 Carbon Plant
- 7. Los Medanos Energy Center
- 8. Delta Energy Center
- 9. Air Liquide Large Industries US
- 10. Criterion Catalysts
 Company LP
- * Approved to process renewable fuel 5/2022.



Funding for the Contra Costa County Asthma Initiative (Asthma Mitigation Program)



2018/2019: Awarded Phase I Technical Assistance Grant from the Green and Healthy Homes Initiative to Develop Business Plan to Expand Services to improve Health Outcomes



2019/2020: Awarded Phase II Technical Assistance Grant from Green and Health Homes Initiative

Research feasibility of integrating Project into the State health care billing system



2020: Awarded grants from State and Regional Air District to implement Business Plan



2021-2023: Implemented Contra Costa Asthma Initiative

Connecting County Health Plan clients to reduce Asthma related ER visits with in-home asthma education and energy efficiency services



Program Component

Staffing Organization

Home Visits

3 Home Visits for Asthma Education

Coordinate with PCP on Asthma Action Plan; medication usage tra environmental triggers training; follow up with PCP and care manage





Home **Assessment**

Environmental assessment

Identify hombased asthma triggers and write remediation scope County

e.g. green cleaning suppliesally mattress and pillow

covers, integrated pest management, food storage containers

SingleFamily: Weatherization

MultiFamily: Association for **Energy Affordability**

Trigger Remediation

Remove asthma triggers from home

Moisture issues (mold removal, ventilation, plumbing leaks) Allergens (carpet removal/cleaning), and Irritants (HVAC, combustion gases, VOCs)





EE/Weatherization

Lower energy bills and improve comfort of home Leveraged funds

Lighting, heat pumps, energy-efficient appliances, HVAC







Asthma client Home Visits

- 150 First Home Visits
- 185 Supply drop-offs for 134 members (some had more than one supply drop-off for air purifier deliveries)
- 64 Third Home Visits
- 37 Forth Home Visits

Your Asthma Control Test Score

Average Asthma Control Test Scores before and after went from 15.4 to 18.9



15 20 25

Home Asthma Mitigation Measures Implemented

12 Home Upgrades Provided with Asthma Related Energy Efficiency Measures at no cost to client or property owner

• \$10,797 – Average Cost per Home Upgrade (contractor installation equipment cost only)

3 Homes were served exclusively by the State's Low-Income Home Energy Assistance Program Measures Implemented

- Bathroom Fan replaced 11
- Kitchen Exhaust component 8
- Electric Panel upgrades 8
- Gas Stove replacements 6
- Duct repair and sealing 6
- Window replacements 4
- Minor envelope repairs 4
- Cleaning Services 7 homes (2 of 7 received some of the energy efficiency measures above)

Rental Property Participation Rates

	<u> </u>
	Count of Landlord
Landlord Status	Status
Didn't Make Contact - Landlord Unresponsive	6
Client was the Homeowner (no landlord permission needed)	12
Landlord Agreed to Services	14
Landlord Declined Services	11
Made initial Contact - Landlord ultimately Unresponsive	6
N/A*	36
Never Reached Out to landlord - Member Declined Services	35
Never Reached Out to the landlord - Member Unresponsive	
to contact by AEA	50
Grand Total	170
*The N/A includes members who were removed from the list for a variety of reasons. Some of and/or assessments from AEA and some received no services from AEA. Some were not counte the program.	
Landlord Information Obtained by AEA	n= 37
% Agreed	37.8%
% Declined	29.7%
% Unresponsive	32.4%

Lessons Learned



Success of future programs depends on having tight timeline of implementation – lags between steps in the pilot hurt uptake, participation and follow-up.



Future success will depend on increasing Rental Properties willingness to participate in similar programs. Recognize that not all landlords are going to be willing to participate and that goals need to be set accordingly.



Ability to pull resources from different energy efficiency and other home improvement programs. Only 6 homes received measures implemented by an additional program. Were not able to provide additional mitigation measures to homes served by the LIHEAP program. Layering funding from multiple sources of funding is necessary to address mitigation measures not covered by energy efficiency programs.



Pairing asthma trigger mitigation services through the MediCal CalAIM program with EE programs is challenging because of the different models of CalAIM implementation regionally. In CCC, MediCal CalAIM is implemented through a service provider contracted with by the Contra Costa Health Plan (CCHP). TBD if future collaborations between this service provider, CCHP and an EE provider will be possible.

Thank You!



Contact:

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CONTRA COSTA COUNTY

1025 ESCOBAR STREET MARTINEZ, CA 94553

Staff Report

File #: 25-3506 **Agenda Date: 9/8/2025** Agenda #: 8.

SUSTAINABILITY COMMITTEE

Meeting Date: September 8, 2025

Subject: RECEIVE Report from the Sustainability Commission Chair, or Designee

Submitted For: SUSTAINABILITY COMMITTEE

Department: DEPARTMENT OF CONSERVATION & DEVELOPMENT **Presenter:** Shoshana Wechsler || Chair | SUSTAINABILITY COMMISSION

Contact: Demian Hardman-Saldana | (925) 655-2816

Referral History:

This is a standing item of the Committee.

Referral Update:

The Sustainability Commission Chair provides an update at each meeting of the Sustainability Committee on the work of the Commission.

Recommendation(s)/Next Step(s):

RECEIVE report from the Sustainability Commission Chair, or Designee.

Fiscal Impact (if any):

None.



CONTRA COSTA COUNTY

1025 ESCOBAR STREET MARTINEZ, CA 94553

Staff Report

File #: 25-3507 **Agenda Date: 9/8/2025 Agenda #:** 9.

SUSTAINABILITY COMMITTEE

Meeting Date: September 8, 2025

Subject: RECEIVE Report on Staff Activities that Support Goals

Submitted For: SUSTAINABILITY COMMITTEE

Department: DEPARTMENT OF CONSERVATION & DEVELOPMENT

Presenter: Jody London || Sustainability Coordinator | DCD

Contact: Jody London | (925) 655-2815

Referral History:

This is a standing item of the Committee.

Referral Update:

PLEASE SEE ATTACHMENT.

Recommendation(s)/Next Step(s):

RECEIVE report on staff activities that support sustainability goals.

Fiscal Impact (if any):

None.

SUSTAINABILTY STAFF REPORT FOR SUSTAINABILITY COMMITTEE September 8, 2025

Activities that have occurred since the report prepared for the Sustainability Committee's meeting on July 14, 2025, are listed below. Activities are keyed to goals in the 2024 Climate Action and Adaptation Plan.

ACTIVITY	2024 CAAP GOAL	
Department of Conservation and Development		
Staff released two Requests for Proposals for technical and community engagement subconsultants to support the development of the Contra Costa Resilient Shoreline Plan. 8 proposals were received. Staff anticipate contracting and onboarding both the technical and community engagement subconsultants in the fall.	Goal 5 – Resilient Communities and Natural Infrastructure	
Staff are coordinating with the San Francisco Bay Conservation and Development Commission on the Contra Costa County Shoreline Leadership Academy, which will complement the County's work funded through its Ocean Protection Council Senate Bill (SB) 1 Grant.		
Staff successfully submitted the first Ocean Protection Council SB 1 Grant quarterly report.		
Staff continues to work and plan the activities funded by the U.S. Department of Energy's (DOE) Energy Efficiency and Conservation Block Grant (EECBG). Staff continues to work with a technical consultant, San Timoteo, to develop an inventory of existing buildings and cost analysis for transitioning the unincorporated County's existing building stock to all-electric to support the County's Draft Clean Energy Roadmap. San Timoteo has already begun work on this task. It is expected that the final Existing Buildings Inventory and Cost Analysis will be completed by the end of 2025.	Goal 1 – Clean and Efficient Built Environment Goal 6 – Climate Equity	
Staff will be releasing a solicitation to select an entity to implement energy efficiency upgrades for licensed childcare facilities in August/September. It was planned to be released in July, but additional time was needed to refine the scope of work and ensure it complies with the Federal Government priorities. Once the solicitation is released, we will also execute the contract with CoCoKids to work with County staff to partner and identify licensed home-based childcare facilities that are eligible for energy efficiency and all-electric transition retrofits.		
Staff have entered into contracts with partners for the Urban Forest Management Plan (The Watershed Project, Sustainable Contra Costa, Civicorps, Workforce Development Board of Contra Costa County). Rincon Consultants is being retained after a competitive bid process to provide the technical support for developing the Plan. The project will be kicking off in early September.	Goal 5 – Resilient Communities and Natural Infrastructure	

A CTIVITY	C115 C011
ACTIVITY The Dueft Class Francis Declared for Friedrica Declared for the Control of the Control	2024 CAAP GOAL
The <u>Draft Clean Energy Roadmap for Existing Buildings</u> being discussed at today's meeting, and is expected to be recommended to the Board of	Goal 1 — Clean and Efficient Built
Supervisors to consider for adoption later this year.	Environment
On May 1, 2025, the County received a Notice of Termination Award from the	Goal 1 – Clean and
U.S. Environmental Protection Agency (EPA), cancelling the \$19 million	Efficient Built
Community Change Grant for the North Richmond Community Resilience	Environment
Initiative. The County contested the termination.	Goal 5 – Resilient
initiative. The county contested the termination.	Communities and
On August 29, 2025, the EPA Decision Dispute Official sent the County a letter	Natural Infrastructure
dismissing the County's disagreement that EPA had the authority to cancel the	Goal 6 – Climate Equity
contract. The letter cited the One Big Beautiful Bill Act, signed on July 4, 2025, as	
the reason to terminate the contract, and directs the County to close out the	
contract. The County is considering next steps.	
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The County submitted a declaration that was included in a <u>Class Action</u>	
<u>Lawsuit filed on June 25</u> suing the Trump administration for unlawful termination	
of the EPA's Section 138 Environmental and Climate Justice Grant Program. On	
August 29, 2025, the judge granted the government's motion to dismiss the case,	
and denied the class certification and preliminary injunction motions that were	
part of the lawsuit. The judge did not rule on the merits of the case, and based his	
ruling on an assessment that the district court did not have jurisdiction. The	
groups that brought the case are considering legal options.	
The County continues to implement the Bay Point/Pittsburg Energy	Goal 1 – Clean and
Enhancement Pilot Program, funded through a grant from the Keller Canyon	Efficient Built
Mitigation Fund. The Pilot Program offers rebates to cover up to 50% of the project cost (maximum of \$8,000) for the installation of qualified electric heat	Environment Goal 6 – Climate Equity
pump heating, ventilation, and air conditioning (HVAC) systems in eligible single-	Goal 6 - Climate Equity
family homes. The first phase of the Pilot Program ended on June 30, 2025.	
Taring notices. The first phase of the Filot Frogram chaca on some 30, 2025.	
Due to remaining available funding, the Pilot Program has been extended with	
expanded eligibility from July 1, 2025, through March 31, 2026, or when funding	
runs out, whichever comes first.	
Climate Emergency Resolution:	Goal 1 – Clean and
Just Transition. No change from prior report provided in June.	Efficient Built
	Environment
Interdepartmental Climate Action Task Force. The G ₃ Champion meeting on	Goal 7 - Leadership
August 13 included presentations on: interdepartmental County projects that	·
are helping meet CAAP goals; the ongoing employee commute survey; and	
how one G ₃ Champion incorporates the G ₃ Champion mission into her	
department's work.	
On August 25, 2025, the Departments of Conservation and Development and	
Public Works met with the Interdepartmental Climate Action Task Force (aka	
County department heads) to provide updates on CAAP implementation	
projects and projects being performed through the Sustainability Fund. Staff	

ACTIVITY	2024 CAAP GOAL
will provide a progress update to the Board of Supervisors later in September or October.	
• All-Electric Building Ordinance. The new ordinance that amends the County building code to increase energy efficiency standards for newly constructed residential buildings, offices, hotels, and retail buildings to meet the County's Climate Action Plan goals went into effect on May 1, 2025. Staff are currently analyzing how the County's more stringent energy efficiency ordinance will be affected by the new 2025 Building Code that will become effective on January 1, 2026. Staff are also looking at other building types to consider for higher energy efficiency standards in the future under the new 2025 Building Code. A report on the County's local building code amendments being considered as part of the State's 2025 Building Code is being provided at today's meeting.	
Staff facilitated the third quarter All-Electric Working Group meeting on August 19, 2025. The meeting featured presentations from GRID Alternatives and RCF on the all-electric programs they operate, and discussion among participants about how to support and leverage this work in Contra Costa County. Meeting participants included staff from cities, community groups, unions, contractors, MCE, and individuals, as well as the County.	Goal 1 – Clean and Efficient Built Environment
Staff are participating in a proceeding at the California Public Utilities Commission (CPUC) to implement Senate Bill 1221 (2024). SB 1221 requires the CPUC to identify up to 30 neighborhoods that will be pilot projects where gas lines will be removed rather than replaced. The County is participating in Rulemaking 24-09-012 in order to monitor the potential for neighborhoods in Contra Costa County to participate in this program, if that is of interest to residents.	Goal 1 – Clean and Efficient Built Environment
Staff are participating in the Rising Sun Center for Opportunity's Climate Careers Externship Program. Staff are working with an extern from August through November to update the energy efficiency kits offered as part of the Contra Costa Library network's Library of Things.	Goal 1 – Clean and Efficiency Built Environment
Staff, in partnership with the Ambrose Recreation and Park District, were awarded a \$25,000 PG&E Resilience Hubs Feasibility Study Grant. The grant will be used to fund an analysis of the Ambrose Community Center in Bay Point to determine what is needed for the Ambrose Community Center to act as a resilience hub for the community. The project will help inform the County's CAAP strategy to establish and maintain resilience hubs.	Goal 5 – Resilient Communities and Natural Infrastructure
 DCD Transportation Planning staff report the following: In February 2025, DCD was awarded \$425,000 from the Metropolitan Transportation Commission's Regional Measure 3 – Safe Routes to Transit and Bay Trail Program to conduct the San Pablo Avenue Enhanced Bicycle and Pedestrian Gap Closure Study. The study will evaluate enhanced bicycle and pedestrian facilities along San Pablo Avenue between Richmond Parkway and the Pinole/Hercules border, which is a proposed segment of the San Francisco Bay Trail. The City of Pinole will be a partner in the study. 	Goal 5 – Clean Transportation Network

ACTIVITY	2024 CAAP GOAL
 In March 2025, DCD was awarded \$400,000 from the Metropolitan Transportation Commission's Transit Oriented Communities (TOC) Planning Grant – Station Access and Circulation to conduct the Pleasant Hill BART Station Access Gap and Mobility Hub Planning effort. This effort will help achieve TOC compliance for station access and circulation for the Pleasant Hill BART Station. 	
 In July 2025, DCD was awarded \$442,650 from the Caltrans Sustainable Transportation Planning Grant Program to conduct the Bay Point Enhanced Bicycle and Pedestrian Improvements Study. The study will evaluate enhanced bicycle and pedestrian facilities along the Willow Pass Road and Port Chicago Highway corridors in Bay Point. 	
• DCD was a partner in a proposal to the Strategic Growth Council's Affordable Housing and Sustainable Communities (AHSC) Grant Program in May 2025. The proposal would construct a portion of Orbisonia Village, a mixed-use development with 100% affordable residential units adjacent to the Pittsburg-Bay Point BART Station, along with bicycle, pedestrian, and transit improvements to support mobility for Orbisonia Village residents and patrons. The proposal also requests funding to enhance Tri Delta Transit bus operations to the development site. The proposal requests \$50 million in AHSC funding.	
In the community: • Emily Groth attended the Bay Point Community Resource Fair, organized by the District 5 Supervisor's Office, on August 16 to share information about energy efficiency programs and the County's sea level rise planning work, as well as ask residents about the features they would like to see in a resilience hub at the Ambrose Community Center. • Nicole Shimizu participated in the County Block Party in Antioch on August 26, 2025, and shared similar information as was provided at the Bay Point Community Resource Fair.	Goal 1 – Clean and Efficient Built Environment Goal 6 – Climate Equity Goal 7 - Leadership
Sustainability staff continue to monitor state and federal grant opportunities and prepare to apply for projects that will support key climate goals around allelectric buildings, active transportation, sea level rise, climate resilience, and Just Transition.	All
Public Works	
On July 30, 2025, Public Works was awarded \$4,360,000 from the Active Transportation Program for the Verde K-8 Safe Routes to School project, which will improve pedestrian infrastructure along Market Avenue and the intersection of Giaramita Street at Verde Avenue. The project also includes a non-	Goal 5 – Clean Transportation Network

ACTIVITY	2024 CAAP GOAL
infrastructure component to support active transportation education for students	2024 CAAF GOAL
of the Verde K-8 School.	
In early August 2025, Public Works had to cease design on the North Bailey Road	Goal 5 – Clean
Active Transportation Corridor project due to reprioritization of projects to repair	Transportation Network
damaged and failed roads resulting from the 2022-2023 severe storm events.	
Due to this reprioritization, meeting the grant funding deadlines was no longer	
attainable. The project was awarded Active Transportation Program and Safe	
Routes to BART grant funds, which will be returned to their respective sources.	
Public Works will continue to pursue the project at a later date after identifying	
future funding opportunities and securing the necessary resources to complete	
the project. Health	
Building Healthy Communities Program	Goal 4 – Clean
banang nearing communices riogram	Transportation Network
California Office of Traffic Safety, Pedestrian and Bicycle Safety Grant, FFY25:	Goal 6 – Climate Equity
 California Office of Hame Salety, Fedestrial and Bicycle Salety Grant, 11125. Coordinated with back-to-school, the BHC Program relaunched its 	
traffic safety campaign "Slow Roads Save Lives / Calles Lentas Salvan	
Vidas." The advertisements will appear on 18 billboards across the	
county from August through September. One version of the	
advertisement features a child wearing a backpack preparing to enter	
a crosswalk. The other version of the advertisement features a child	
riding a bike, wearing a backpack and a helmet. The ads are co-	
branded with the Contra Costa Transportation Authority.	
 Additionally, the BHC program will distribute 3' x 6' vinyl banners of 	
the campaign to ten public schools across the county with the highest	
rates of bicycle and pedestrian serious injuries and deaths within a	
half mile radius of the school campus.	
Funding for this program was provided by a grant from the California Office of Troffic Sefety, through the National Highway Troffic Sefety,	
Office of Traffic Safety, through the National Highway Traffic Safety Administration.	
Administration.	
Transportation Development Act Article 3 (TDA3): Throughout the summer,	
the BHC Program provided bike and pedestrian safety resources and	
encouragement activities to several communities, including the following:	
 On June 25, the BHC program partnered with 511 Contra Costa during 	
a Contra Costa County Library Summer Exploration Station event at	
the Hercules Library. BHC and 511 staff facilitated a bike blender	
demonstration where families and children had the opportunity to try	
the BHC bike blender—using pedal power to blend healthy smoothies.	
Over 50 residents participated in this activity.	
On July 24, the BHC Program hosted a bicycle and pedestrian safety booth at the PASOS y Thrive Thursday's community wellness event.	
booth at the PASOS x Thrive Thursdays community wellness event	
held at Nicholl Park in Richmond. Staff provided bike/ped incentives, shared safety tips for active travel, and fitted seven participants with	
new helmets, along with helmet safety fliers.	
new heimers, along with heimer safety filers.	

ACTIVITY	2024 CAAP GOAL
 On August 14, the BHC program facilitated a bike rodeo safety course activity at the final session of the PASOS x Thrive Thursdays community wellness series. Staff provided personalized bicycle safety instruction to eight children and fitted five children with new helmets. New Funding: The BHC Program will serve as a subrecipient of the County Public Works Department's \$4,360,000 award in grant funding from the Caltrans Active Transportation Program Cycle 7 for the Verde K-8 Safe Routes to School Project in North Richmond. The BHC Program will receive \$500,0000 to support non-infrastructure safe routes to school programing at Verde K-8 School. The Program will provide encouragement, engagement, and education programming through community outreach such as participation in community events, walking field trips, bike rodeos, walking school buses, classroom presentations, and parent/guardian events. 	
Ongoing	
Staff participated in professional learning opportunities regarding environmental justice, carbon sequestration, climate resilience, communication and facilitation strategies, race and equity, and related.	All
Staff participated in regional activities.	All

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