Regular Meeting of the Citizens Advisory Committee of the Peninsula Clean Energy Authority (PCEA)

Thursday, March 9, 2023
6:30pm

PLEASE NOTE: This meeting will be held in a hybrid format with both in-person and Zoom participation options for members of the public; Citizens Advisory Committee members shall appear in person.

In-Person Meeting Locations:
PCEA Lobby, 2075 Woodside Road, Redwood City, CA 94061
UC Merced, Sustainability Research and Engineering (SRE) 458, 5200 North Lake Rd., Merced, CA 95340

Zoom, Virtual Meeting Link: https://pencleanenergy.zoom.us/j/86953524805
Meeting ID: 869-5352-4805 Passcode: 2075 Phone: +1 (669-444-9171)

This meeting of the Peninsula Clean Energy Citizens Advisory Committee will be held at the Peninsula Clean Energy Lobby: 2075 Woodside Road, Redwood City, CA 94061 and UC Merced, Sustainability Research and Engineering (SRE) 458, 5200 North Lake Road, Merced, CA 95340 and by teleconference pursuant to California Assembly Bill 2449 and the Ralph M. Brown Act, CA Gov’t Code. Section 54950, et seq. Members of the Committee are expected to attend the meeting in person and should reach out to Assistant General Counsel for Peninsula Clean Energy, Jennifer Stalzer, with questions or accommodation information (jstalzer@smcgit.org). For information regarding how to participate in the meeting remotely, please refer to the instructions at the end of the agenda.

Public Participation

The PCEA Citizens Advisory Committee meeting may be accessed through Zoom online at https://pencleanenergy.zoom.us/j/86953524805 The meeting ID is: 869-5352-4805 and the passcode is 2075. The meeting may also be accessed via telephone by dialing +1(669) 444-9171. Enter the webinar ID: 869-5352-4805, then press #. (Find your local number: https://pencleanenergy.zoom.us/u/kTlH1Ocod).

Members of the public can also attend this meeting physically at the Peninsula Clean Energy Lobby at 2075 Woodside Road, Redwood City, CA 94061 or UC Merced, Sustainability Research and Engineering (SRE) 458, 5200 North Lake Road, Merced, CA 95340.

Written public comments may be emailed to Vanessa Shin (vshin@pencleanenergy.com) and such written comments should indicate the specific agenda item on which the member of the public is commenting.

Public records that relate to any item on the open session agenda are available for public inspection. The records are available at the Peninsula Clean Energy offices or on PCEA’s Website at: https://www.peninsulacleanenergy.com.
Spoken public comments will be accepted during the meeting in the Board Room(s) or remotely through Zoom at the option of the speaker. Please use the “Raise Your Hand” function in the Zoom platform, or press *6 if you phoned into the meeting, to indicate that you would like to provide comment. Public comments via Zoom will be taken first followed by speakers in person.

**ADA Requests**

Individuals who require special assistance or a disability related modification or accommodation to participate in this meeting, or who have a disability and wish to request an alternative format for the meeting, should contact Vanessa Shin by 10:00 a.m. on the day before the meeting at (vshin@peninsulacleanenergy.com). Notification in advance of the meeting will enable PCEA to make reasonable arrangements to ensure accessibility to this meeting, the materials related to it, and your ability to comment. Closed Captioning is available for all PCEA Citizens Advisory Committee meetings. While watching the video broadcast in Zoom, please enable captioning.

**CALL TO ORDER / ROLL CALL**

**PUBLIC COMMENT**

*This item is reserved for persons wishing to address the Committee on any PCEA-related matters that are not otherwise on this meeting agenda. Public comments on matters listed on the agenda shall be heard at the time the matter is called. Members of the public who wish to address the Committee are customarily limited to two minutes per speaker. The Committee Chair may increase or decrease the time allotted to each speaker.*

**ACTION TO SET AGENDA AND TO APPROVE CONSENT AGENDA ITEMS**

1. Approval of the Minutes for the February 9, 2023 Regular Meeting

**REGULAR AGENDA**

2. Chair Report (Discussion, est. 5 minutes)
3. Member Introductions (Discussion, est. 20 minutes)
4. Recommendation on Building Electrification Strategy (Action, est. 30 minutes)
5. Outreach Training (Discussion, est. 30 minutes)
6. Working Group Overview and Reports (Discussion, est. 10 minutes)
7. Marketing and Community Liaison Update (Discussion, est. 10 minutes)
8. Upcoming Topics for Discussion (Discussion, est. 5 minutes)
9. Committee Members’ Reports (Discussion, est. 5 minutes)

**ADJOURNMENT**

Public records that relate to any item on the open session agenda are available for public inspection. The records are available at the Peninsula Clean Energy offices or on PCEA’s Website at: [https://www.peninsulacleanenergy.com](https://www.peninsulacleanenergy.com).
Instructions for Joining a Zoom Meeting via Computer

or Phone Best Practices:
• Please mute your microphone when you are not speaking to minimize audio feedback
• If possible, utilize headphones or ear buds to minimize audio feedback
• If participating via videoconference, audio quality is often better if you use the dial-in option (Option 2 below) rather than your computer audio

Options for Joining
A. Videoconference with Computer Audio – see Option 1 below
B. Videoconference with Phone Call Audio – see Option 2 below
C. Calling in via Telephone/Landline – see Option 3 below

Videoconference Options:

Prior to the meeting, we recommend that you install the Zoom Meetings application on your computer by clicking here https://zoom.us/download.

If you want full capabilities for videoconferencing (audio, video, screensharing) you must download the Zoom application.

Option 1 Videoconference with Computer Audio:

1. From your computer, click on the following link that is also included in the Meeting Calendar Invitation: https://pencleanenergy.zoom.us/j/86953524805 pwd=aktkbTFOeSs3R2VYb0VyOWM4QVpKZz09
2. The Zoom application will open on its own or you will be instructed to open Zoom.
3. After the application opens, the pop-up screen below will appear asking you to choose ONE of the audio conference options. Click on the Computer Audio option at the top of the pop-up screen.
4. Click the blue, “Join with Computer Audio” button
5. In order to enable video, click on “Start Video” in the bottom left-hand corner of the screen. This menu bar is also where you can mute/unmute your audio.

**Option 2 Videoconference with Phone Call Audio:**

1. From your computer, click on the following link that is also included in the Meeting Calendar Invitation: [https://pencleanenergy.zoom.us/j/86953524805 pwd=aktkbTFOeSs3R2VYb0VvOOM4QVpKZz09](https://pencleanenergy.zoom.us/j/86953524805 pwd=aktkbTFOeSs3R2VYb0VvOOM4QVpKZz09)
2. The Zoom Application will open on its own or you will be instructed to Open Zoom.
3. After the application opens, the pop-up screen below will appear asking you to choose ONE of the audioconference options. Click on the Phone Call option at the top of the pop-up screen.

![Choose ONE of the audio conference options](image)

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1. Please dial +1 (669)-444-9171
2. You will be instructed to enter the meeting ID: **869-5352-4805 followed by #**
3. You will be instructed to enter in your participant ID. Your participant ID is unique to you and is what connects your phone number to your Zoom account.
4. After a few seconds, your phone audio should be connected to the Zoom application on your computer.
5. In order to enable video, click on “Start Video” in the bottom left hand corner of the screen. This menu bar is also where you can mute/unmute your audio.

**Audio Only Options:**

Please note that if you call in/use the audio only option, you will not be able to see the speakers or any presentation materials in real time.
**Option 3: Calling in via Telephone/Landline:**

Dial +1 (669)-444-9171

You will be instructed to enter the meeting ID: **869-5352-4805**

followed by # You will be instructed to enter the meeting passcode

2075 followed by #
REGULAR MEETING of the Citizens Advisory Committee of the Peninsula Clean Energy Authority (PCEA) Thursday, February 9, 2023

MINUTES

Video conference and teleconference 6:30 p.m.

CALL TO ORDER

Meeting was called to order at 6:33 p.m.

ROLL CALL

Present:

- Daniel Baerwaldt, Los Banos
- Diane Bailey, Belmont
- Steven Booker, Half Moon Bay arrived at 6:40 p.m.
- Brandon Chan, South San Francisco
- Michael Closson, Menlo Park
- Michael Garvey, San Carlos arrived at 6:49 p.m.
- Kathleen Goforth, San Carlos
- Katie Green, San Mateo
- Margaret Li, South San Francisco
- Jason Mendelson, Redwood City, Vice Chair
- Cheryl Schaff, Menlo Park, Chair
- Desiree Thayer, Burlingame

Absent:

- Edward Love, Half Moon Bay
- Bryan Tran, South San Francisco

A quorum was established.

PUBLIC COMMENT

No public comment

ACTION TO SET THE AGENDA AND APPROVE CONSENT AGENDA

1. Approval of the Minutes for the January 12, 2023, Regular Meeting

   Cheryl Schaff, Chair, suggested corrections to mistakes in the draft minutes: remove the words "participation" in Item 4 and "December and" in Item 11.
2. Adopt Findings Pursuant to AB 361 to Continue Fully Teleconferenced Committee Meetings Due to Health Risks Posed by In-Person Meetings

Motion Made / Seconded: Schaff / Mendelson

Motion passed 10-0 (Absent: Booker, Garvey, Love, Tran)

REGULAR AGENDA

3. Chair Report (Discussion)

Cheryl Schaff shared positive comments about the Citizens Advisory Committee (CAC) from the Peninsula Clean Energy Board of Directors during the January 26, 2023 meeting. She invited the Board of Directors CAC liaisons Christine Boles, Coleen Mackin, and Harvey Rarback to introduce themselves. Cheryl also announced the resignation of Bryan Tran from the Citizens Advisory Committee.

4. Member Introductions (Discussion)

Cheryl Schaff and Jason Mendelson, Vice Chair, introduced the Member Introductions, an activity intended to help Committee members learn more about each other’s background and interests. Cheryl and Jason invited Committee members Steven Booker, Katie Green, and Margaret Li to answer icebreaker questions as part of the activity.

5. Building Electrification Strategy (Discussion)

Alejandra Posada, Associate Programs Manager, provided an overview of Peninsula Clean Energy’s existing building electrification programs, current customer challenges, and framework for expanding support for residential electrification. Alejandra also discussed the current results from the Home Upgrade Program and vision for the next iteration of the program.

Michael Closson, Committee member, asked how financing support is included in the strategy’s top priorities. Alejandra clarified that the customer call support will provide information about financing options, including the Peninsula Clean Energy’s Zero Percent Loan.

Brandon Chan, Committee member, inquired about the portion of home electrification upgrade costs that have been covered by rebates and the Zero Percent Loan, suggesting that more financing support makes the process simpler for residents. Brandon also highlighted PG&E’s Marketplace model and encouraged the recruitment of a diverse contractor network with services in multiple languages.

Diane Bailey, Committee member, recommended implementing guidelines in the contract extension to address customer challenges from the first round of homes, such as timing the removal of old appliances to occur when the new appliance is
installed. Diane also supported prioritizing the replacement of gas stoves and including education around the health harms of gas cooking.

Michael Closson expressed concern about the target number of electrified homes, speaking in favor of scaling the program to include more homes. He also asked if PG&E is pursuing similar programs for residential electrification, and Cheryl Schaff asked if Peninsula Clean Energy has identified other partners to expand the program more quickly.

Jason Mendelson requested that Committee have an opportunity to make a formal recommendation on the Building Electrification Strategy during the next CAC meeting.

6. **Feedback on Functioning of Citizens Advisory Committee (Discussion)**

Jason Mendelson identified common themes that emerged from the recent CAC Feedback Survey, including opportunities to update and better align Committee activities with the stated mission of the CAC. Kathleen Goforth, *Committee member*, asked whether outreach around ECO100 should remain a goal of the CAC. Michael Closson requested that slide decks and other information to be provided for review prior to the CAC meetings.

7. **Working Group Reports (Discussion)**

Diane Bailey announced that the Home Upgrade Working Group completed their objectives. Jason Mendelson reminded Committee members that the working group deliverables are due in April 2023.

8. **Review of Peninsula Clean Energy Outreach Talking Points (Discussion)**

Kirsten Andrews-Schwind, *Senior Manager of Community Relations*, provided examples of outreach that CAC members can engage in. She led an overview of Peninsula Clean Energy key messages for communicating with the public. Kathleen Goforth requested talking points on electrification.

9. **Marketing and Community Liaison Update (Discussion)**

Kirsten Andrews-Schwind reminded Committee members that CAC meetings will resume in person starting in March. She also invited Committee members to join Peninsula Clean Energy staff and support outreach at Earth Day events in April. Vanessa Shin, *Community Outreach Specialist*, demonstrated how to use Peninsula Clean Energy’s media toolkits on Nextdoor. Brandon Chan recommended reposting content from Peninsula Clean Energy’s account.

10. **Upcoming Topics for Discussion (Discussion)**

Kirsten Andrews-Schwind previewed upcoming topics for the February meeting of the Peninsula Clean Energy Board of Directors. Cheryl Schaff expressed interest in a presentation about Peninsula Clean Energy’s Community Outreach Grants as well as a discussion on how the agency prioritizes funding across various programs and
initiatives. Jason Mendelson requested an update on the impact of the proposed rate changes on Peninsula Clean Energy’s budget when available.

11. Committee Members’ Reports (Discussion)

No Committee Member Reports

ADJOURNMENT

Meeting was adjourned at 9:10 p.m.
Agenda

- 2035 Decarbonization Analysis
- Building Electrification v2
- Home Upgrade Program Status
- Home Upgrade v2
- RHA Contract Amendment
2035 Decarbonization Analysis
Results Refresher
2035: PCE Scope

• Primary Scope
  o Transportation
    o private passenger, local gov & small commercial fleets,
    o ride-hailing, alternative mobility
  o Buildings
    o residential (single family & small multifamily),
    o Office (incl. local gov.), small commercial

• Not in scope, or limited* (others lead)
  o Transportation: heavy-duty vehicles, off-road
  o Buildings: industrial, large commercial*, large multifamily*
  o Non-energy: land-use, compost, stationary sources, landfills
  o Out of territory: SF airport
  o Embedded carbon, Climate Adaptation, Sequestration/restoration

San Mateo Countywide Greenhouse Gas Emissions,
2035: Buildings Electrification

1. **Flexible Incentives**
   - All measures, incl. prewiring and panels
   - Broader building segments
   - Integrated load shaping & solar+storage options

2. **High touch support**
   - Advanced “right-sizing” design
   - One-stop shop, hotline assist, turnkey option
   - Procurement aggregation to lower costs
   - Greater contractor support

3. **Links to Finance**
   - Specific linkages by customer segment
Building Electrification v2

Goals and Architecture
What we have

All-electric homes
Learn about the benefits and next steps to power your home with clean electricity

Zero interest loans
Get a loan of up to $10,000, with no interest, no credit check, and no fees

Heat pump water heater rebates
Find out about heat pump water heaters and the available rebates

Heat pump heating, ventilation and air-conditioning (HVAC)
Find out about heat pump HVAC and the available rebates

Home Upgrade Program
This program provides income-qualified homeowners with home repairs and energy efficiency upgrades at no cost
Needs for Building Electrification 2.0 ("BE v2")

- Current program provides incentives but minimal guidance/support
- Updated program needs to address barriers customers face
  - Especially important to ensure city councils are comfortable adopting existing buildings reach codes
- Customer challenges include:
  - Lack of clear information
  - Difficulty selecting contractors and equipment
  - Technically complicated installations
  - Emergency replacements
  - Limited time and money
Types of Residential Customers - Profiles

• "I want to choose"/DIY
  o We need to take action on climate
  o I’m interested in technology
  o I like sorting it out myself

• “Just get it done”
  o I’m busy (single parent)
  o My water heater went out and I need one immediately

• "I cannot afford this"
  o I’ve been without heating the last two years. My home has lots of problems.
  o I don’t have the time or funds
First Priorities: Turnkey, Hotline, One-Stop-Shop Website

• **Turnkey install**
  a) Direct install electrician and contractor
  b) Gas WH loaner unit
     o Supports emergency replacements
     o Essential for deeper existing building reach codes
  c) Point of sale finance option (OBF &/or 3rd pty)

• **Hotline**
  a) Customer call support for
     o basic program participation
     o navigating PCE & other support
     o basic project process
     o technical support
  b) Whole home electrification planning

• **One-stop-shop website v1**
  a) Info & education: why, how, rebates
Leveraging Home Upgrade

Dedicated workforce can support turnkey projects for non-low-income customers

Equipment discounts available to all customers

Advanced designs inform program improvements

Home Upgrade Program Components

Dedicated workforce
- Specifically trained
- Whole home experience
- Dedicated contractors

Bulk buy discounts

Embedded innovation
- Pilot new tech
- Virtual Power Plant (VPP)
- Advanced designs

Equipment discounts available to all customers

Advanced designs inform program improvements
Home Upgrade

Program Status
Home Upgrade Overview & Objectives

Current Program Overview

• Goal to serve up to 200 homes with home repairs & electrification over 2 years
• $2M total budget, contract through November 2023
• Plays a large role in DEAI focus, including PCE’s goal of 20% program expenditure on low-income communities

Objectives

• Provide tangible benefits to low-income customers while driving GHG reductions and net energy savings
• Leverage local/state incentives to maximize impact
• Develop guidelines, strategies, and learnings on home electrification
## Results & Metrics

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<tr>
<th>Metrics</th>
<th>Count</th>
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<tbody>
<tr>
<td>Homes complete</td>
<td>115</td>
</tr>
<tr>
<td>Homes in progress (installations underway or soon to be scheduled)</td>
<td>62</td>
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### Electrification Upgrade

<table>
<thead>
<tr>
<th>Upgrades</th>
<th>Count</th>
</tr>
</thead>
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<tr>
<td>Heat pump water heater</td>
<td>43</td>
</tr>
<tr>
<td>Electric dryer</td>
<td>27</td>
</tr>
<tr>
<td>Induction stove/range</td>
<td>28</td>
</tr>
<tr>
<td>Central ducted heat pump</td>
<td>1</td>
</tr>
<tr>
<td>Ductless mini split heat pump</td>
<td>2</td>
</tr>
<tr>
<td>Window mounted heat pump</td>
<td>11</td>
</tr>
<tr>
<td>Portable heat pump</td>
<td>26</td>
</tr>
<tr>
<td>Electrical panel upgrade</td>
<td>8</td>
</tr>
<tr>
<td>Electrical subpanel</td>
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Testimonials

“This is a phenomenal program. It helped my family at the perfect time. Our water heater broke, and the program stepped in and helped… The program’s crew and workers were professional, friendly, and quick.” – Mrs. Marquez

“Regarding the new water heater pump that was installed over the weekend... Thank you so much. It's working great. Everyone was very friendly and super-fast...now we are able to have hot water! Thank you so much.” - Maribel
RHA Contract Status

• Contract to expire November 2023

• All installations expected to be completed by May/June but program is currently oversubscribed – no more outreach & enrollments

• RHA performance: good
Home Upgrade v2
Vision for Home Upgrade v2

- Scale to Whole Home
- Increase Homes Impacted per Year
- Capture Federal & State Incentives
- Integrate with Turnkey Offering
- Develop VPP
Whole homes & more of them

Scale to Whole Home

Increase Homes Impacted per Year

<table>
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<tr>
<th>Electrification Cost</th>
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<tbody>
<tr>
<td>Water Heating (includes 240V circuit)</td>
<td>$6,100</td>
</tr>
<tr>
<td>Space Heating</td>
<td>$20,700</td>
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<tr>
<td>Cooking</td>
<td>$1,098</td>
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<tr>
<td>Clothes Drying</td>
<td>$925</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$28,823</strong></td>
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<tr>
<td>Panel, if required</td>
<td>$3,700</td>
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<tr>
<td><strong>Total non-optimized cost</strong></td>
<td><strong>$32,523</strong></td>
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<tr>
<td>Minor home repair</td>
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<tr>
<td><strong>Estimated Average for Home Upgrade</strong></td>
<td><strong>$31,500</strong></td>
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Minimum to enable dedicated workforce

Aligns with 2035 analysis

250 homes per year
Planning ahead to Capture Fed/State Incentives

Planning to integrate with CPUC FLEXmarket
  - $2,500 per home

CEC building decarb funding being planned currently
  - $600m fund

Inflation Reduction Act funds should come online in late 2023/early 2024
  - $10,000 per home
*Most of the cost would be for the expanded Home Upgrade program to fully electrify 650 low-income homes. Non-low-income turnkey and hotline services is estimated at $900,000-$1,300,000 but will depend on services and volume. More detailed budget estimates will be developed based on proposals received in a competitive procurement process.
Approximate Timeline and Plan

2023

First RHA Contract (Fully subscribed)

February

RFP Process

March

2024

RHA Contract Amendment

June

Turnkey install and hotline program (including Home Upgrade v2)

January

Building Electrification 2.0

January

2025

2026

Inflation Reduction Act Incentives

State incentives
RHA Contract Amendment
Contract Amendment as Bridge

Existing Home Upgrade Contract
Currently fully subscribed

RHA Contract Amendment

Home Upgrade v2
Starts Jan 2024
Proposed Contract Amendment Details

Overview
• $1.5M budget for 1 year
• Serve ~100 homes total

Scope of work
• Continue Home Upgrade program in its current form
  a) Continue minor home repair & 1 electrification upgrade per home
  b) Serve current waitlist first, then continue limited and targeted outreach
• Pilot 120v heat pump water heaters
  a) Pilot this new "plug and play" equipment in 5-10 homes
  b) Lower installation costs than traditional 240v HPWH
• Pilot whole home electrification upgrades
  a) Fully electrify 4-6 homes
  b) Learn and inform next phase of program
Summary of Request to the Board

**Program:** Building Electrification Strategy and Home Upgrade Program

**Request**

1. Approval of building electrification strategy, including implementation of a multi-year turnkey residential install program and customer support hotline
2. Delegate authority to CEO to execute a contract amendment with Richard Heath and Associates (RHA) to continue implementing the Home Upgrade program for one year as a bridge to the turnkey residential install program