Regular Meeting of the Citizens Advisory Committee of the Peninsula Clean Energy Authority (PCEA)
Thursday, July 13, 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; Board 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@smc.gov.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/kTIH1Ocod). Peninsula Clean Energy uses best efforts to ensure audio and visual clarity and connectivity. However, it cannot guarantee the connection quality.

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.

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.
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.

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.

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 / APPROVE TELECONFERENCE PARTICIPATION UNDER AB 2449

This item is reserved to approve teleconference participation request for this meeting by Citizens Advisory Committee Member pursuant to Brown Act revisions of AB 2449 due to an emergency circumstance to be briefly described.

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 June 8, 2023 Regular Meeting

REGULAR AGENDA

2. Swearing in of New Members (Action, est. 5 minutes)

3. Chair Report (Discussion, est. 5 minutes)

4. Member Introductions (Discussion, est. 30 minutes)
5. Programs Overview (Discussion, est. 30 minutes)
6. Surplus Funds Ad Hoc Committee CAC Alternate Selection (Action, est. 5 minutes)
7. Brown Act Training (Discussion, est. 30 minutes)
8. Marketing and Community Liaison Update (Discussion, est. 5 minutes)
9. Upcoming Topics for Discussion (Discussion, est. 10 minutes)
10. Committee Members' Reports (Discussion, est. 5 minutes)

ADJOURNMENT
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=aktkbTFOeSs3R2VYb0VyOWM4QVpKZz09](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 audioconference options. Click on the Phone Call option at the top of the pop-up screen.

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

   - **Country/Region:** United States
   - **Dial:** +1 646 558 8656  
     +1 312 626 6799  
     +1 301 715 8592
   - **Meeting ID:** 849 7539 0654
   - **Participant ID:** 449701
   - **Passcode:** 2075

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, June 8, 2023
MINUTES

In-Person, Video Conference, and Teleconference 6:30 p.m.

CALL TO ORDER

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

ROLL CALL

Present:

*PCEA Lobby, 2075 Woodside Road, Redwood City, CA 94061*

- Diane Bailey, Belmont
- Steven Booker, Half Moon Bay
- Brandon Chan, South San Francisco
- Michael Closson, Menlo Park
- Kathleen Goforth, San Carlos arrived at 6:37 p.m.
- Margaret Li, South San Francisco
- Jason Mendelson, Redwood City, Vice Chair
- Cheryl Schaff, Menlo Park, Chair
- Desiree Thayer, Burlingame

*UC Merced, Sustainability Research and Engineering (SRE) 458, 5200 North Lake Rd., Merced, CA 95340*

- Daniel Baerwaldt, Los Banos

Absent:

An in-person quorum was established.

PUBLIC COMMENT

Christine Boles, *Peninsula Clean Energy Board Member*, reported on a recent electrification workshop in Pacifica. Christine Boles announced that she is inviting tours of her all-electric home on June 17 at 1:30 and 3:30 p.m.

ACTION TO SET THE AGENDA AND APPROVE CONSENT AGENDA

1. Approval of the Minutes for the May 11, 2023, Regular Meeting

Motion Made / Seconded: Closson / Chan
Motion passed 10-0 (Absent: None)

REGULAR AGENDA

2. Chair Report (Discussion)

Cheryl Schaff, Chair, clarified that the Peninsula Clean Energy Board of Directors will select the new members of the Citizens Advisory Committee (CAC).

3. Member Introductions (Discussion)

Cheryl Schaff invited each member of the Committee to introduce themselves and answer the following questions: What is your favorite resource for sustainability content or information?

4. Budget Report and Update (Action)

Shawn Marshall, Chief Operations Officer, provided an overview of Peninsula Clean Energy’s draft budget for fiscal year 2023-24, including key assumptions and notable increases in the budget. Shawn also described the budget review and approval process, which involves the creation of an ad-hoc subcommittee to develop a policy on the use of excess funds.

Committee members discussed key external influences on the budget and change in net position, such as the Power Charge Indifference Adjustment (PCIA), PG&E’s generation rates, and high volatile and unpredictable energy markets over the past year. Jason Mendelson, Vice Chair, expressed hesitation towards formally recommending the draft budget at this time due to limited context, granularity, and understanding of each item entailed in the budget. Jason suggested that the CAC endorse the idea of including a CAC member in the ad-hoc subcommittee focused on excess funds. Michael Closson, Committee Member, and Diane Bailey, Committee Member, expressed agreement and requested more information on the proposed budget for energy programs.

Jason Mendelson made a motion to provide the following recommendation to the Peninsula Clean Energy Board of Directors:

The CAC appreciates the significant work that went into developing the budget and the budget details that were shared with us. We support the creation of an ad-hoc subcommittee, including a CAC member, to make a recommendation on what to do with excess FY24 funds. We would like to receive programmatic budget information in order to continue to advise on the potential uses of the excess funds, specifically focused on programmatic funding moving forward. The CAC would like to recommend Steven Booker to serve on that subcommittee.

Motion Made / Seconded: Mendelson / Bailey

Motion passed 10-0 (Absent: None)
5. **Net Energy Metering 3.0 Update (Discussion)**

Leslie Brown, *Director of Account Services*, introduced the history of Net Energy Metering and new framework of Net Billing Tariff. Leslie also explained how these changes affect current and future solar customers of Peninsula Clean Energy.

Committee Members discussed the impact of Net Billing Tariff compensation on residential building electrification and how to communicate these changes to customers. Diane Bailey noted the current incentives for battery backup available, especially for environmental justice communities and customers vulnerable to Public Safety Power Shutoff events.

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

Kirsten Andrews-Schwind, *Senior Manager of Community Relations*, announced the launch of the E-Bikes for Everyone program. Additionally, the Board of Directors approved the Peninsula Clean Energy Diversity, Equity, Accessibility, and Inclusion Action Plan. Kirsten announced that Peninsula Clean Energy received two Community Impact Awards from CalCCA: First Place in the Equity Category for the Community Outreach Grant Program and Runner-Up in the Decarbonization Category for the Reach Codes Program.

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

Kirsten Andrews-Schwind previewed topics for the upcoming meetings of the Peninsula Clean Energy Board of Directors, including a discussion on the goal to provide 100% renewable energy on a 24/7 basis by 2025, an update on the Solar and Storage for Public Buildings Program, and an overview on grid regionalization. Kirsten noted that the July CAC meeting will include onboarding for new members.

Steven Booker, *Committee Member*, recommended a discussion on reach codes and the electric vehicle infrastructure training program. Michael Closson suggested an overview on Peninsula Clean Energy’s local programs. Jason Mendelson requested an update on the ad-hoc subcommittee focused on excess funds in the budget as well as a regulatory update on grid regionalization.

Cheryl Schaff suggested the idea of pairing existing CAC members with new CAC members. Jason Mendelson, Diane Bailey, and Desiree Thayer expressed interest in supporting new members.

8. **Committee Members’ Reports (Discussion)**

No Committee Member Reports.

**ADJOURNMENT**

Meeting was adjourned at 9:04 p.m.
TO: Honorable Peninsula Clean Energy Authority Board of Directors

FROM: Jan Pepper, Chief Executive Officer, Peninsula Clean Energy
Rafael Reyes, Director of Energy Programs

SUBJECT: Community Programs Report

SUMMARY

The following programs are in progress, and detailed information is provided below:

1. Highlights from Prior Month
2. Building and EV Reach Codes
3. Buildings Programs
   3.1. Appliance Rebates and On-Bill Financing
   3.2. Low-Income Home Upgrades & Electrification
   3.3. Building Pilots
   3.4. Refrigerator Recycling
4. Distributed Energy Programs
   4.1. Solar and Storage for Public Buildings
   4.2. Residential Solar + Battery Backup
   4.3. FLEXmarket
   4.4. Community Solar, DAC-GT
5. Transportation Programs
   5.1. “EV Ready” Charging Incentive
   5.2. Used EV Rebate
   5.3. EV Ride & Drives/EV Rental Rebate
   5.4. E-Bikes for Everyone Rebate
   5.5. Municipal Fleets
   5.6. Transportation Pilots

DETAIL

1. Highlights from Prior Month
• 32 new smart outlets were installed in a Belmont apartment building, as part of the EV Ready program, the largest multi-family residential install in the program to date.
• The buildings program has crossed over 1,000 electric heat pump water heaters and heat pump space conditioning systems since inception in 2021.
• PCE’s Residential FLEXmarket opened and is available to aggregators of energy efficiency and building electrification projects to shape customer load to reduce grid costs and GHG emissions.
• The Lyft electrification pilot has delivered over 250 thousand rides and 3.5 million miles.

2 Building and EV Reach Codes

Background: In 2018 the Board approved a building “reach code” initiative to support local governments in adopting enhancements to the building code for low-carbon and EV ready buildings. The initiative is a joint project with Silicon Valley Clean Energy (SVCE) and East Bay Community Energy (EBCE). The program includes no-cost technical assistance, model codes and other tools. The tools and model code language are available on the project website (www.BayAreaReachCodes.org).

In addition, in January 2020 the Board approved an extension of the reach code technical assistance plus additional elements – Education and training for developers and contractors, and consumer education program on the benefits of all-electric buildings. This technical assistance is publicly available at www.AllElectricDesign.org. In December 2020, the Board approved to extend the contract with TRC Engineers include technical assistance for developing policy for existing buildings. In February 2022 the Board extended the initiative for another two years.

Model Code Summary
• New construction building electrification codes require all-electric and include a menu of exceptions for cities to choose from.
• New construction EV codes are the same as last cycle for most building types, requiring more access than the state code. Multi-family buildings are required to provide at least one level 2 charging access point for every dwelling unit. 15% must be Level 2 charging stations. 85% can be low-power Level 2 EV ready.
• Existing building model codes provide a full menu of options for cities to choose from, including end of flow requirements, time-of-sale replacement mandates, time of sale disclosure requirements, and a requirement to upgrade existing EV-capable circuits to EV-ready by a time-certain deadline.

Status:
• City Progress: Most cities with reach codes from the prior cycle have re-adopted or adopted for the first time, including:
  o New construction
- **Adopted**: Atherton, Belmont, Brisbane, Burlingame, County of San Mateo, Daly City, Half Moon Bay, Hillsborough, Menlo Park, Millbrae, Pacifica, Portola Valley, Redwood City, San Bruno, San Carlos, San Mateo, East Palo Alto
- **Continuing reach codes from 2019**: Hillsborough
- **In Progress**: South San Francisco, Colma
  - **Existing buildings**
    - **Adopted**: Portola Valley, City of San Mateo
    - **Exploring**: San Carlos, Menlo Park, County of San Mateo
- **Berkeley 9th circuit ruling** – The Ninth Circuit Court of Appeals has ruled against Berkeley in a case brought by the California Restaurant Association and funded by Sempra (SoCalGas.) The City of Berkeley has been granted an En Banc hearing by the Ninth Circuit. The next step after that, for either party, would be an appeal to the Supreme Court.
  - The Ninth Circuit ruling is specific to the Berkeley code, the city’s police powers, and federal energy regulations. Most cities adopted a different code based on the California State Energy Code.
  - Our legal staff is available to connect with the City attorneys throughout the state and have already done so. Ultimately, it is up to each jurisdiction how they move forward with amendments to their reach codes.
  - Our team is developing alternative code approaches to provide options for cities to continue to support building decarbonization.

**Strategic Plan:**

**Goal 3 – Community Energy Programs**

Objective A: Decarbonization Programs: Develop market momentum for electric transportation, and initiate the transition to clean energy buildings
- Key Tactic 3: Ensure nearly all new construction is all-electric and EV ready
- Key Tactic 4: Establish preference for all-electric building design and appliance replacement among consumers and building stakeholders

**3 Buildings Programs**

**3.1 Appliance Rebates and Zero Percent Loans**

**Background**: In May 2020, the Board approved a 4-year, $6.1 million for electrifying existing buildings. This included $2.8 million for implementing an appliance rebate program. Peninsula Clean Energy successfully launched the heat pump water heater (HPWH) rebates on January 01, 2021. Peninsula Clean Energy rebates were exclusively offered in partnership with BayREN’s Home+ program, which offers additional rebates for HPWHs that are combined with Peninsula Clean Energy’s. Additionally, in August 2021, the Board approved an On-Bill Financing program (now referred to as the Zero Percent Loan program) with $1.0 million in loan capital (treated as a balance sheet asset and not part of the annual budget). The program offers qualified residential customers a 0%
interest loan up to $10,000 to fund the cost of eligible electrification and complementary electrical and energy efficiency upgrades.

On October 17, 2022, Peninsula Clean Energy launched its Zero Percent Loan program and rolled out modifications and enhancements to the Appliance Rebates Program including increasing its HPWH rebate, launching a new heat pump heating ventilation and air conditioning (HVAC) rebate, adjusting the eligibility criteria for its electrical panel upgrade bonus rebate, and creating a rebate application process for customers not working with BayREN contractors, while still maintaining the integrated application process with the BayREN Home+. These modifications were made to A) bring fuel switching/electrification to at least cost parity with gas replacements, B) backstop the loss of state incentives, and C) support the adoption of existing building reach codes.

**Status**: The table below summarizes the number of rebates issued as of June 9, 2023.

<table>
<thead>
<tr>
<th>Upgrade Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPWH rebates</td>
<td>607</td>
</tr>
<tr>
<td>Heat pump HVAC rebates</td>
<td>322</td>
</tr>
<tr>
<td>Electrical panel rebates</td>
<td>127</td>
</tr>
<tr>
<td>Zero percent loans completed</td>
<td>110 for $987,302</td>
</tr>
<tr>
<td>Additional zero percent loans reserved</td>
<td>82 for $797,440</td>
</tr>
</tbody>
</table>

The chart below summarizes the number of applications received by month by upgrade type.

**Strategic Plan:**

**Goal 3 – Community Energy Programs**

Objective A: Decarbonization Programs: Develop market momentum for electric transportation, and initiate the transition to clean energy buildings
• Key Tactic 4: Establish preference for all-electric building design and appliance replacement among consumers and building stakeholders

3.2 (Low-Income) Home Upgrade Program

Background: In May 2020, the Board approved $2 million for implementing a turnkey low-income home upgrade program to offer minor home repair, energy efficiency, and electrification measures to income-qualified homeowners at no cost to them. The measures implemented in each home will vary depending on the home’s needs but will include at least one electrification measure such as installing a HPWH or replacing a gas stove with an electric induction stove. The Board approved a contract extension for $1.5 million in February 2023 which included more homes for the current service plus 4-6 whole home electrification upgrades.

Status: The program was announced on September 28, 2021. The below table summarizes the program’s status as of the end of May.

<table>
<thead>
<tr>
<th>Stage/category</th>
<th>#s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leads</td>
<td>4259</td>
</tr>
<tr>
<td>Reached</td>
<td>1349</td>
</tr>
<tr>
<td>Pre-assessments</td>
<td>624</td>
</tr>
<tr>
<td>Enrolled and eligible</td>
<td>233</td>
</tr>
<tr>
<td>Installations in progress</td>
<td>19</td>
</tr>
<tr>
<td>Fully complete</td>
<td>178</td>
</tr>
</tbody>
</table>

The following table summarizes the number of electrification measures implemented on the fully complete homes.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat pump water heater</td>
<td>71</td>
</tr>
<tr>
<td>Induction cooktop/range</td>
<td>44</td>
</tr>
<tr>
<td>Electric dryer</td>
<td>42</td>
</tr>
<tr>
<td>Central or mini split heat pump (HVAC)</td>
<td>3</td>
</tr>
<tr>
<td>Window or wall mounted heat pump (HVAC)</td>
<td>10</td>
</tr>
<tr>
<td>Portable heat pump (HVAC)</td>
<td>45</td>
</tr>
</tbody>
</table>

Strategic Plan:
Goal 3 – Community Energy Programs

Objective B: Community Benefits: Deliver tangible benefits throughout our diverse communities
• Key Tactic 1: Invest in programs that benefit underserved communities
• Key Tactic 3: Support workforce development programs in the County
3.3 Building Pilots

**Background:** In May 2020, The Board approved $300,000 for piloting a new innovative technology from Harvest Thermal Inc., a Bay Area-based startup, that combines residential space and water heating into a unified heat pump electric system with a single water storage tank. Through this project, this technology will be installed in 3-5 homes within the San Mateo County to assess its performance and demonstrate its effectiveness for emission reductions.

**Status (no updates from last month):** The home recruitment process began in late April 2021 and the project received 290 applications. Homes were selected based on technical criteria (home characteristics, energy usage patterns, and technical feasible of the upgrade within budget). The four pilot homes are located in Daly City, South San Francisco, Redwood City, and Menlo Park. As of September 7, 2022, all four homes have had their system installed. The consulting firm TRC has been contracted to provide independent measurement and verification services for the project and have begun collecting data on the homes installed. The 12-month data collection period ended on 4/23, with draft results expected in the summer, final results in the fall, and project closure by the end of the year.

**Strategic Plan:**
- **Goal 3 – Community Energy Programs**
  - Objective C: Innovation and Scale: Leverage leadership, innovation, and regulatory action for scaled impact
    - Key Tactic 1: Identify, pilot, and develop innovative solutions for decarbonization

3.4 Refrigerator Recycling

**Background:** In April 2019, Peninsula Clean Energy launched a small turnkey refrigerator recycling program with a budget of $75,000 as part of the Community Pilots program. The program administrator, ARCA Recycling, manages orders intake, pick up scheduling, and rebate processing. The objective of the program is to capture high impact greenhouse gas gases from old appliances by facilitating proper recycling of the appliance’s refrigerants and foaming agents for insulation.

Peninsula Clean Energy executed an amendment effective March 1, 2023 to add $95,000 to the residential program and remove bulk pickups.

**Status:** This program is on pause. ARCA is going through an ownership change, and they stopped doing pickups during this transition. Customers can still place orders, but they will not be scheduled until ARCA has resumed appliance pick-ups. They have not provided an estimated timeframe.
Since inception in April 2019, the recycling program has recycled 842 refrigerators and freezers resulting in over 1,600 MTCO2e in greenhouse gas reduction.

**Strategic Plan:**

Goal 3 – Community Energy Programs

Objective A: Decarbonization Programs: Develop market momentum for electric transportation, and initiate the transition to clean energy buildings

- Key Tactic 4: Establish preference for all-electric building design and appliance replacement among consumers and building stakeholders

4 Distributed Energy Programs

Peninsula Clean Energy has Board-approved strategies for the promotion of 20 MW of new distributed energy resources in San Mateo County and is advancing distributed energy resources to provide resilience, lower decarbonization costs, provide load shaping to support our strategic goal for 24/7 renewables. The projects described below are efforts towards meeting both of these goals.

4.1 Solar and Storage for Public Buildings

**Background:** The Solar and Storage for Public Buildings is aimed at aggregating local government facilities into a group procurement of solar and optionally storage systems. Peninsula Clean Energy provides no-cost site assessments and preliminary designs as well as manages the procurement process. Participating sites have systems installed as part of power purchase agreements directly with Peninsula Clean Energy. As part of the pilot phase, in October 2020, the Board approved a Solar Site Evaluation Services contract with McCalmont Engineering for Solar site evaluation and designs for County and municipal facilities identified as candidates for solar-only or solar + storage resilience projects. In March 2022, the board approved up to $8 million in capital for system installations to be repaid over 20 years and $600,000 for technical assistance on the second round of the aggregated solar program. Intermountain Electric Company was selected in the competitive solicitation on the basis of its pricing, experience, labor practices, and other metrics. Intermountain is a local union firm with an excellent reputation. At the January 2023 Board Meeting, the Board of Directors granted authority to the CEO to execute the installation contract and power purchase agreements with participating agencies in the first round.

In December 2022, the CPUC finalized a decision to change rules to net metering, which will reduce the value of solar exported to the grid during the day. Customers can get grandfathered into current net metering rules (“NEM 2.0”) before the rules go into effect.
(“NEM 3.0”). Interconnection applications were submitted for the first portfolio of systems in October 2022 to secure a grandfathered position under NEM 2.0.

Staff is running the second round of the program. Staff expects to increase the size of the portfolio from round one and help our customers lock-in NEM 2.0 for their projects.

**Status**
For the first round of the Program, 12 PPAs for 1.27 MWdc have been executed with 10 jurisdictions. Intermountain Electric Company is finalizing technical designs and related documentation for all sites. Construction is expected to begin by the end of this calendar year, with all sites being complete by end of Q1, 2024.

A total of 23 agencies expressed interest in the second round of the program, providing staff with 120 facilities to evaluate for their solar potential. Site walks have been executed at all viable facilities with engineering firms NV5 and SepiSolar. 38 interconnection applications for >16 MWdc were submitted by the April 14th deadline to grandfather them into the more favorable NEM 2.0 rules. Other sites considered were disqualified for technical reasons.

Staff is currently developing the energy contract, construction contract, financial proposal, and procurement documents as part of the second round.

### 4.2 Residential Solar + Battery Backup

**Background**: The Residential Solar + Battery Backup offers energy resiliency program in partnership with Sunrun. This program provides energy storage systems paired with solar power to single family customers. Customers who sign up for this program receive an incentive up to $500. At Peninsula Clean Energy’s direction, Sunrun will dispatch the stored energy during evening hours when renewable generation on the California grid is low and electricity prices are high. This will also help Peninsula Clean Energy to reduce its peak load and thereby reduce our resource adequacy requirements.

**Status (no updates from last month)**: The program has commenced dispatching customer batteries in the evening to help reduce Peninsula Clean Energy's net peak. Sunrun continues to enroll new customers throughout 2023 and, as they enroll more customers, available capacity from their distributed battery storage fleet continues to increase as well. Sunrun and staff included distributed battery storage in their 2024 load forecast submission, which will result in a lower net peak and smaller RA allocation for calendar year 2024.

### 4.3 FLEXmarket

**Background**: In November 2021 the Board approved a program plan for the establishment of an innovative “virtual power plant” using what is known as FLEXmarket. FLEXmarket is a market-based program structure that provides incentives to program
“aggregators” to implement programs for energy efficiency and load shaping. The novel elements of the structure include a “pay-for-performance” approach which only provides incentives on confirmed performance using meter data. This novel structure was innovated by MCE and is also being implemented by East Bay Community Energy and Sonoma Clean Power. In addition, the program plan was developed for submission to the CPUC to allow Peninsula Clean Energy to run the program with fully reimbursed funding through the CPUC. Peninsula Clean Energy’s billing data services provider Calpine has entered into a strategic partnership with the firm Recurve to provide FLEXmarket services through a streamlined structure.

**Status:** The residential FLEXmarket is officially open. Providers of energy efficiency and building electrification equipment can apply for incentives through this program. In addition, Peninsula Clean Energy anticipates submitting its own projects to receive CPUC funds under the program. Staff is developing the commercial version of the program to be launched later in 2023.

### 4.4 Community Solar, DAC-GT & CSGT

**Background:** The Disadvantaged Communities Green Tariff program (“DAC-GT”) and associated Community Solar Green Tariff (“CSGT”) are community solar programs developed by the California Public Utilities Commission (CPUC) to enable DAC residents to participate in renewable energy projects, and to promote development of renewable projects in DACs. Participating customers will receive a 20% discount on their full electric bill (PG&E and Peninsula Clean Energy charges). Peninsula Clean Energy administers these programs on behalf of its customers.

Peninsula Clean Energy began enrolling DAC-GT customers in San Mateo County in January 2022 and customers in Los Banos in April 2022. Those customers are currently served by an interim resource procured from Marin Clean Energy pending Peninsula Clean Energy’s procurement of a new renewable resource for the program.

Per the CPUC DAC program guidelines, Peninsula Clean Energy is authorized to procure up to 3MW of solar capacity. Until a new solar resource is procured, Peninsula Clean Energy will serve customers from MCE’s interim resource. Peninsula Clean Energy executed a PPA with Marin Clean Energy for its existing Goose Lake Solar project, which meets DAC program guidelines, to provide for its DAC customers until a permanent resource is procured.

**Status:** The program is currently serving approximately 1,000 customers. Peninsula Clean Energy signed a PPA with Renewable America, LLC for a 3MW solar resource located in Dos Palos, CA, approximately 15 miles southeast of the City of Los Banos. The Dos Palos Clean Power solar project has a Commercial Operation Date of August 1, 2023. In June, staff expanded their contract with MCE’s interim resource Goose Lake Solar to 3.74MWdc. This will allow more customers to subscribe to the program and receive on-bill benefits.
Staff launched a Request for Proposals for 402kW of solar as part of their Community Solar Green Tariff (“CSGT”). Proposals were due by February 28, 2023 and are now being evaluated.

**Strategic Plan**

- Distributed Energy Resources: Support strategic decarbonization and local power
  - Key Tactic 1: Create minimum of 20 MW of new local renewable power sources in PCE service territory by 2025
  - Key Tactic 2: Support distributed energy resources to lower costs, support reliability, and advance distributed and grid decarbonization
  - Key Tactic 3: Foster Resilience

5 Transportation Programs

5.1 Used EV Rebate Program

**Background:** Launched in March 2019, the Used EV Rebate Program (formerly referred to as “DriveForward Electric”) provided an incentive up to $4,000 for the purchase of used plug-in hybrid electric vehicles (PHEVs) and full battery electric vehicles (BEVs) to income-qualified San Mateo County residents (those making 400% of the Federal Poverty Level or less).

In October 2020, the Board approved expanding the program to offer used EV incentives to all San Mateo County and Los Banos residents, while maintaining the increased incentives for income-qualified residents. In February 2021, Peninsula Clean Energy executed a competitively bid contract with GRID Alternatives (“GRID”) to administer the expanded program. This rebate is available point-of-sale at qualifying dealerships or post-purchase. The incentives may be combined with other state-funded income-qualified EV incentive programs.

**Status:** Since the re-launch of the program in August 2021, 229 rebates have been provided under the new program (see monthly chart below).

**Used EV rebates paid by month**
Strategic Plan
Goal 3 – Community Energy Programs

Objective A: Decarbonization Programs: Develop market momentum for electric transportation, and initiate the transition to clean energy buildings
- Key Tactic 1: Drive personal electrified transportation to majority adoption

Objective B: Community Benefits: Deliver tangible benefits throughout our diverse communities
- Key Tactic 1: Invest in programs that benefit underserved communities

5.2 “EV Ready” Charging Incentive Program

Background: In December 2018 the Board approved $16 million over four years for EV charging infrastructure incentives ($12 million), technical assistance ($2 million), workforce development ($1 million), and administrative costs ($1 million). Subsequent to authorization of funding, Peninsula Clean Energy successfully applied to the California Energy Commission (CEC) for the CEC to invest an additional $12 million in San Mateo County for EV charging infrastructure. Of Peninsula Clean Energy’s $12 million in incentives, $8 million was previously administered through the CEC’s California Electric Vehicle Incentive Project (CALeVIP) and $4 million under a dedicated, complementary Peninsula Clean Energy incentive fund. The dedicated Peninsula Clean Energy incentives address Level 1 charging, assigned parking in multi-family dwellings, affordable housing new construction, and public agency new construction. In August, Peninsula Clean Energy elected to directly administer the not yet approved pool of funds that were previously administered through CALeVIP, worth approximately $4 million, further described below.
Status: Peninsula Clean Energy implemented changes in August 2022 to expedite installations, including providing customers with greater flexibility in selecting contractors, adjusted incentive levels to account for rising costs, and direct management of all Level 2 projects not already approved by the Center for Sustainable Energy in the CALeVIP program (worth approximately $4 million in funding). Since the changes were implemented in mid-August, there has been significant uptake in the program. Over ten new contractors have been added to the Technical Assistance component of the program, including 4 minority or woman-owned businesses. Customers receiving Technical Assistance may choose from these contractors or another of their choosing.

Summary of program metrics is outlined in the table below:

<table>
<thead>
<tr>
<th>Sites/ Applications</th>
<th>Ports</th>
<th>Incentive Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td># of sites in PCE Technical Assistance</td>
<td>194</td>
<td>2,000+</td>
</tr>
<tr>
<td># of Technical Assistance site evaluations approved by PCE</td>
<td>158</td>
<td>1,800</td>
</tr>
<tr>
<td>Total # of funding applications approved in Peninsula Clean Energy incentive program</td>
<td>104</td>
<td>1,700</td>
</tr>
<tr>
<td># of approved funding applications in progress in Peninsula Clean Energy incentive program</td>
<td>87</td>
<td>1,400</td>
</tr>
<tr>
<td># of current CALeVIP applications*</td>
<td>40</td>
<td>630</td>
</tr>
<tr>
<td>Total # of ports installed</td>
<td>30</td>
<td>432</td>
</tr>
</tbody>
</table>

*Includes DCFC and L2 ports: 272 DCFC, 358 L2 ports

Strategic Plan:
Goal 3 – Community Energy Programs

Objective A: Decarbonization Programs: Develop market momentum for electric transportation, and initiate the transition to clean energy buildings
- Key Tactic 1: Drive personal electrified transportation to majority adoption
- Key Tactic 5: Support local government initiatives to advance decarbonization

Objective B: Community Benefits: Deliver tangible benefits throughout our diverse communities
- Key Tactic 3: Support workforce development programs in the County

5.3 E-Bikes for Everyone Rebate Program

Background: The Board initially approved the income-qualified E-Bikes Rebate program in July 2020 with a budget of $300,000, approved an increase of an additional $300,000 in December 2022, and approved a further increase of $150,000 in August 2022, bringing the total program budget to $750,000.
The program runs in annual cycles and is available to residents with low to moderate incomes. The program has provided 510 rebates since 2021. Customers can use the rebate either at a qualifying bike shop for a point-of-sale discount, or at any other shop for a post-purchase rebate. Enrolled bike shops include Summit Bicycles, Mike’s Bikes, Sports Basement, Chain Reaction, and Epicenter Cycling. Rebates will be distributed on a first-come, first-served basis.

**Status:** This program reopened on June 12 for income-qualifying customers. There is enough available funding for 238 bikes. Staff will enroll 500 applicants since we expect a 50% attrition rate. Everyone after that will be placed on a waiting list.

Staff is marketing this program to CARE/FERA customers and through Peninsula Clean Energy’s Outreach Grant partners.

**Strategic Plan:**

Goal 3 – Community Energy Programs

Objective A: Decarbonization Programs: Develop market momentum for electric transportation, and initiate the transition to clean energy buildings
- Key Tactic 1: Drive personal electrified transportation to majority adoption

Objective B: Community Benefits: Deliver tangible benefits throughout our diverse communities
- Key Tactic 1: Invest in programs that benefit underserved communities

5.4 Public EV Fleet Program

**Background:** The Board approved the Public EV Fleet Program in November 2020. This program will run for three years with a total budget of $900,000 and is comprised of three components to help local agencies begin their fleet electrification efforts: hands-on technical assistance, gap funding, and a vehicle to building resiliency demonstration that will assess the costs and benefits of utilizing fleet EVs as backup power resources for agencies in grid failures and other emergencies. In August 2022, the Board of Directors approved a contract with Optony to assist in administration of this program. A workshop was held on November 16 to promote the program and recruit local agency fleet managers.

**Status:** The program has now started. Menlo Park, Burlingame, San Mateo, South San Francisco, and Daly City are now receiving technical assistance. Menlo Park will be installing several charging stations for fleet vehicles at the City Hall, Police Department, and Corporation Yard. Pre-construction site designs have been developed as part of the program. Other agencies are encouraged to apply, when ready, at [https://www.peninsulacleanenergy.com/public-ev-fleets-program/](https://www.peninsulacleanenergy.com/public-ev-fleets-program/).
Strategic Plan:

Goal 3 – Community Energy Programs

Objective A: Decarbonization Programs: Develop market momentum for electric transportation and initiate the transition to clean energy buildings
- Key Tactic 2: Bolster electrification of fleets and shared transportation
- Key Tactic 5: Support local government initiatives to advance decarbonization

Objective C: Innovation and Scale: Leverage leadership, innovation, and regulatory action for scaled impact
- Key Tactic 1: Identify, pilot, and develop innovative solutions for decarbonization

5.5 Transportation Pilots

Ride-Hail Electrification Pilot

Background: This pilot, approved by the Board in March 2020, is Peninsula Clean Energy’s first program for the electrification of new mobility options. The project partners with Lyft and FlexDrive, its rental-car partner, to test strategies that encourage the adoption of all-electric vehicles in ride-hailing applications with up to 100 EVs. Because ride-hail vehicles drive much higher than average miles per year, each vehicle in this electrification pilot is expected to save over 2,000 gallons of gas and 20 tons of greenhouse gas emissions per year.

Status: The 100 EV fleet has been put into service by Lyft and Peninsula Clean Energy is monitoring progress. Over 250 thousand rides have been provided. 350+ unique drivers have already rented them, with each rental averaging over three months. Over 3.5 million all electric miles have been driven so far with an average of 120 miles/day per vehicle, comparable to gas counterparts. Vehicles include a customer-facing PCE branded placard that informs riders about the pilot and directs them to the PCE website for more information.

Strategic Plan

Goal 3 – Community Energy Programs

Objective A: Decarbonization Programs: Develop market momentum for electric transportation and initiate the transition to clean energy buildings
- Key Tactic 2: Bolster electrification of fleets and shared transportation

Objective C: Innovation and Scale: Leverage leadership, innovation, and regulatory action for scaled impact
- Key Tactic 1: Identify, pilot, and develop innovative solutions for decarbonization

EV Managed Charging Pilot
**Background:** Peninsula Clean Energy aims to facilitate EV charging that avoids expensive and polluting evening hours through “managed charging” systems. This work is in the second phase of a pilot. In 2020, Peninsula Clean Energy ran a proof-of-concept pilot for EV managed charging with startup FlexCharging to test timing of EV charging through vehicle-based telematics. This was a limited pilot with approximately 10 vehicles. The system utilizes existing Connected Car Apps and allows Peninsula Clean Energy to manage EV charging via algorithms as a non-hardware-based approach to shift more charging to occur during off-peak hours. The pilot is moving to Phase 2 intended for a larger set of 1,000+ vehicles. In October of 2021, the Board approved a contract up to $220,000 with the University of California, Davis’ Energy Economics Program (DEEP) to develop and advise on an incentive structure experiment that will be used to inform the Peninsula Clean Energy managed charging program design. This collaboration has been ongoing. In November 2022, the Board approved a contract up to $220,000 with ev.energy as the platform provider for EV managed charging services.

**Status:** The project began development in December, including platform and data warehouse systems preparation. Large-scale recruitment recently launched, targeting a random sample of EV drivers, with the goal of recruiting at least 1,000 customers for the pilot. 200+ participants have already joined after the initial recruitment round, several additional recruitment campaigns are upcoming. A Technical Advisory Committee, consisting of staff from CEC, CPUC, CCAs, and NGOs, is also informing the pilot with an upcoming meeting in late July.

**Strategic Plan**

**Goal 3 – Community Energy Programs**

**Community Benefits:** Deliver tangible benefits throughout our diverse communities
- Key Tactic 1: Invest in programs that benefit underserved communities

**Innovation and Scale:** Leverage leadership, innovation and regulatory action for scaled impact
- Key Tactic 1. Identify, pilot, and develop innovative solutions for decarbonization
  - Pilot and scale EV load shaping programs to ensure that 50% of energy for EV charging takes places in non-peak hours