

# Community Advisory Committee Meeting Monday, April 17, 2023 6:00 pm

#### In Person:

The Lake Merritt Room
Cal State East Bay - the Oakland Center
In the Transpacific Centre
1000 Broadway, Suite 109
Oakland, CA 94607

# Or from the following locations:

- 4563 Meyer Park Circle, Fremont, CA 94536
  - 3602 Thornton Ave, Fremont, CA 94536
- Starbucks 20663 Rustic Dr. Castro Valley, CA 94546

### Via Zoom:

https://us02web.zoom.us/j/84794506189

### Or join by phone:

Dial(for higher quality, dial a number based on your current location): US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 929 205 6099 or +1 301 715 8592 or +1 312 626 6799 or 877 853 5257 (Toll Free) Webinar ID: 847 9450 6189

Meetings are accessible to people with disabilities. Individuals who need 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 materials, should contact the Clerk of the Board at least 2 working days before the meeting at (510) 906-0491 or <a href="mailto:cob@ebce.org">cob@ebce.org</a>.

If you have anything that you wish to be distributed to the Committee, please email it to the clerk by 5:00 pm the day prior to the meeting.

- C1. Welcome & Roll Call
- C2. Public Comment

This item is reserved for persons wishing to address the Committee on any EBCE-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. As with all public comment, members of the public who wish to address the Committee are customarily limited to three minutes per speaker and must complete an electronic <u>speaker slip</u>. The Committee Chair may increase or decrease the time allotted to each speaker.

- C3. Approval of Minutes from March 13, 2023
- C4. CAC Chair Report
- C5. Emissions Overview (CAC Informational Item)
  Informational Overview on Emissions
- C6. Resolution to Authorize CEO to Negotiate and Execute Loan to Forum Mobility for Heavy Duty Vehicle Electrification (CAC Action Item)
  Requesting the board to delegate authority to the EBCE CEO to complete negotiations and sign the contract.
- C7. EBCE Brand Evolution and Name Exploration (CAC Informational Item)
  Brief overview of background and name ideation process
- C8. CAC Member and Staff Announcements including requests to place items on future CAC agendas
- C9. Adjournment to Monday, May 15, 2023 at 6:00 pm



Community Advisory Committee Meeting Monday, March 13, 2023 6:00 pm

#### In Person:

The Lake Merritt Room
Cal State East Bay - the Oakland Center
In the Transpacific Centre
1000 Broadway, Suite 109
Oakland, CA 94607

### Or from the following locations:

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If you have anything that you wish to be distributed to the Committee, please email it to the clerk by 5:00 pm the day prior to the meeting.

### C1. Welcome & Roll Call

Present: Members: Landry, Hu, Swaminathan, Lakshman, Pacheco, Lutz, Vice-Chair Hernandez and Chair Eldred

Excused: Members: Liu, Talreja and Souza

#### Presenters and Staff:

Marie Fontenot - EBCE staff Chris Eshleman - EBCE staff Jim Dorrance - EBCE staff Raissa Ngoma (Assistant Clerk) Adrian Bankhead (Clerk)

#### C2. Public Comment

This item is reserved for persons wishing to address the Committee on any EBCE-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. As with all public comment, members of the public who wish to address the Committee are customarily limited to three minutes per speaker and must complete an electronic <u>speaker slip</u>. The Committee Chair may increase or decrease the time allotted to each speaker.

Jessica Tovar discussed the recent reduction in Net Energy Metering incentives by the CPUC and suggested that East Bay Community Energy (EBCE) should offer better incentives than the investor-owned utilities. Jessica Tovar advocated for incentives that exceed Net Energy Metering 2.0, citing inquiries at the Local Clean Energy Alliance and public concerns raised at the January 18, 2023 EBCE Board meeting. She also encouraged the creation of incentives to promote the growth of local solar, wind and storage within EBCE's service territory.

Tom Kelly raised concerns about the lack of response to public inquiries and requests for information. He cited a recent example, where both he and Jessica Tovar asked for an update on the \$50 million program for replacing gasfired appliances but received no update. He also expressed discomfort with the thought that unidentified staff members might be present on Zoom calls. Despite asking for a list of participants in the meeting minutes, he has not seen it implemented yet. Kelly emphasized the importance of openness and transparency.

Additionally, Tom Kelly reminded the Chair of a previous request made by Member Landry to address his concerns regarding greenhouse gas emissions and the comparison between Bright Choice and PG&E.

**Audrey Ichinose** expressed appreciation for the remote meeting setup, which allows for public participation via Zoom. Audrey Ichinose reiterated her public comment from the Power Procurement Board retreat, requesting a follow-up retreat focused on local clean energy development. Audrey Ichinose suggested

that the second retreat should cover EBCE's programs, progress, and the costs of these programs in terms of their percentage of budget surplus allocations.

# C3. Approval of Minutes from February 13, 2023

Tom Kelly objected to the use of the word "allege" in the minutes regarding his comments on EBCE's greenhouse gas emissions compared to PG&E's. He requested the word be replaced with "stated." Chair Eldred suggested not accepting Tom's feedback since the accuracy of his statements had not been determined, and that further examination of the methodology was needed, which would be discussed during the meeting.

Jim Lutz raised a concern about an incorrect phrase in the minutes, "Long-Term Critical Care Facilities," stating that the correct term should be "Resilient Critical Facilities." Chair Eldred recommended approving the minutes with the understanding that clarification of the correct term would be provided.

Member Lutz motioned to approve the minutes with the understanding that the clarification of the use of the phrase "long term critical care facilities" would be provided. Member Hernandez seconded the motion, which passed 7/0. Abstain: Member Pacheco.

# C4. CAC Chair Report

Chair Eldred expressed gratitude to the staff for their efforts in coordinating meetings and enabling remote participation for the public. She offered assistance to CAC members to find remote locations if needed.

Chair Eldred reported that the last board meeting had a closed session with nothing to report, and that there will be a substantial closed session at the next meeting. Chair Eldred also reported that the travel reimbursement policy passed as originally presented, but staff are reviewing feedback and seeking examples from other bodies. The mid-year budget was discussed, and feedback from the CAC and the board was incorporated.

A special board meeting on power procurement took place, with no solutions reached, but the board requested the information be brought back to them. Marie Fontenot agreed to present the key discussion point at the current meeting, addressing Tom Kelly's concerns. Chair Eldred encouraged CAC members and the public to watch the procurement meeting.

### C5. MRP Malaga (CAC Action Item)

MRP Malaga long-term energy hedge and RA agreement

# The Community Advisory Committee discussed:

- Member Swaminathan asked for details about the structure of the financial hedge that is included in the Malaga contract.
- Member Lutz asked for the percentage of EBCE's power contracts that are dedicated to resource adequacy versus generation and storage.
- Member Landry asked if EBCE would ever use the natural gas that is produced at the peaker plant, in particular when natural gas is less expensive than wind or solar. Member Landry also asked if the energy source for the battery storage at the peaker plant is renewable.
- Member Pacheco asked if additional detail can be provided about the structure of the Malaga contract, and if that contract structure has been used elsewhere. Member Pacheco also asked for staff to explain how this contract would reduce the number of hours that the peaker plant would be in operation, and why staff is confident that the battery power will be deployed equitably.
- Chair Eldred expressed concern about contracting with a gas plant, when a battery could be added to a curtailed solar or wind plant. .

Tom Kelly expressed confusion about EBCE, an organization founded to combat climate change, signing a contract with a fossil fuel company to maintain a peaker plant. Tom Kelly cited the Vistra peaker plant in Oakland as an example of a harmful facility that needed to be shut down. Kelly suggested that solar energy, abundant in California and often curtailed, should be used to power batteries instead of relying on peaker plants.

Member Swaminathan motioned to support the staff recommendation. The motion was seconded by Member Lakshman. The motion was not approved: 4/0 (the ayes did not meet the quorum necessary for passage).

### MRP Malaga vote tally:

Aye: Swaminathan, Lakshman, Lutz and Chair Eldred

Abstain: Landry, Hu, Pacheco and Hernandez

Excused: Liu, Talreja, Souza and Kaur

# C6. Emissions Reporting (CAC Informational Item)

Receive update on Power Procurement activities

### The Community Advisory Committee discussed:

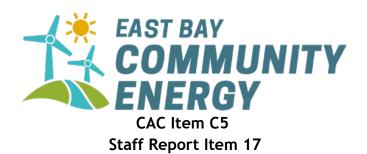
- Chair Eldred asked if a significant portion of the unspecified power on the Bright choice Power Content Label is, in fact, provided by an assetcontrolling supplier (ACS).
- Chair Eldred addressed concerns about energy reporting mechanisms and questioned the accuracy and usefulness of the Power Content Label as a representation of energy procurement.

- Member Swaminathan suggested that a time series graphic of the power content label pounds per megawatts over time and for different scenarios would be helpful for this conversation.
- Chair Eldred suggested that staff should focus on "greening" Bright Choice to avoid attributing carbon emissions to those who cannot afford to purchase Renewable 100.
- Member Lutz asked why the Power Content Labels for the other Northern California CCAs look so much cleaner than EBCE. Marie Fontenot responded that EBCE provides a discount to PG&E and that it has not accepted a nuclear allocation.

Tom Kelly expressed confusion over the presentation's intent, stating that PG&E and other Northern California CCAs outperformed EBCE in greenhouse gas emissions. Tom Kelly also highlighted EBCE's reliance on system power and questioned why EBCE's emissions increased significantly in 2020. Kelly urged the board to follow the example of other CCAs or provide a clear explanation for why EBCE has not matched their performance in reducing greenhouse gas emissions.

# C7. CAC Member and Staff Announcements including requests to place items on future CAC agendas

- Chair Eldred stated that Councilmember Wright would be sworn in as the new Board member for the City of Stockton at the March 15, 2023 Board of Directors meeting.
- Chair Eldred asked for contacts at community groups and member cities that might be interested in supporting an eagle scout project to provide public education about peak power usage reduction.
- C8. Adjournment to Monday, April 17, 2023 at 6:00 pm



**TO:** East Bay Community Energy Board of Directors

FROM: Izzy Carson, Power Resources Manager

SUBJECT: Emissions Overview (Information Item)

**DATE:** April 19, 2023

## Recommendation

Receive a presentation showing the history of the Bright Choice plan's emission factor and future emission reduction targets.

### **Background and Discussion**

Staff is presenting an overview of the Bright Choice plan's emission factor to the Board. This presentation is in response to requests for additional information on Bright Choice emissions and the history and methodology of how this is calculated.

### **Bright Choice History**

In October 2018, the Board adopted a 2018 calendar year emission factor of 142 pounds of carbon-dioxide equivalent per mega-watt hour (lb-CO<sup>2</sup><sub>e</sub>/MWh) for the Bright Choice energy product, a product approved in 2018 that was established to provide a choice for customers for electricity at a lower price than PG&E as a comparable renewable product.

### 2020 Changes Impacting Procurement and Emissions Reporting

#### Carbon Free Allocation

In 2019 Pacific Gas and Electric (PG&E) initiated a formal large hydro and nuclear electricity allocation process determined by load share, with deliveries starting in 2020. The acceptance of this allocation did not have incremental cost to Community Choice Aggregators (CCAs) due to the Power Charge Indifference Adjustment (PCIA), a non-by passible charge set annually, under which all customers pay.

The fundamental question of whether to accept nuclear electricity form the allocation came down to a trade-off between having nuclear electricity as part of East Bay Community Energy's (EBCE) portfolio and lower greenhouse gas (GHG) emissions, or not having nuclear and accepting higher GHG emissions. Ultimately the Board elected to accept the large hydro allocation and reject the nuclear allocation.

With the introduction of the Carbon-Free Allocation, EBCE's large hydro portfolio was expected to be more in line with PG&E, and therefore renewable energy was a more appropriate focus.

#### Bright Choice Procurement Floor

In 2020 the Bright Choice renewable target was amended to establish a clean energy procurement floor that was intended to be higher than PG&E. The procurement floor was derived based on PG&E's prior year renewable energy power content forecast, plus an additional 5% renewables.

While the 5% buffer was included as to mitigate uncertainty in PG&E's provided forecast, it was noted at the April 2020 Board meeting that there was a possibility that in a given year EBCE's renewable percentage may be less than PG&E's. This approach did have increasing forecasting challenges due to a lack of visibility into PG&E's annual renewable target Furthermore, the reporting lag on power content means that actual values are not fully validated until their Power Content Label is produced, which occurs in the Fall of the year after the power is procured.

# Assembly Bill (AB) 1110

In 2016, AB 1110 was passed which modified the Power Source Disclosure Report (PSDR) methodology and impacted the information shared with customers on the Power Content Label (PCL). The new methodology required electricity suppliers, EBCE included, to disclose the GHG emissions intensity associated with its electricity sources. The California Energy Commission (CEC) updated the PSDR regulations implementing AB 1110 effective May 2020.

AB 1110 required replacing that emission factors can only be marketed using the newly adopted PSDR regulations methodology and that other methods for calculating emissions factors like The Climate Registry (TCR), a national emissions accounting methodology that was widely used by load serving entities, including CA utilities, CCAs and cities could not be used for calculating and disclosing emission factors to customers. The global emissions perspective of TCR was replaced with a California specific methodology, with the most significant change being in the application of the associated GHG emissions from firm and shaped Renewable Energy Credit (REC) purchases, also known as Portfolio Content Category (PCC) 2 RECs. PCC2 RECs are a California Renewable Portfolio Standard (RPS) renewable product that are by in large solar, wind and hydro resources, generated outside of California. Under the new CA specific methodology, these PCC2 RECs, regardless of source, are given an equivalent emissions factor equal to unspecified power, resulting in a material increase in reported emissions.

Path to Zero Emissions 2030

In December of 2020, the Board adopted a clean energy goal for all electricity within EBCE's portfolio to have zero net emissions by 2030. In April of 2022, a path to reach that zero emissions goal was approved by the Board, which included annual targets for renewables and large hydro (as a percentage of sales) to reach that goal. Two months later in June of 2022, the renewable targets were increased by an additional 5%.

The path to zero emissions also removed the use of Pacific Gas and Electric's (PG&E) prior year renewable content forecast as the basis for the annual procurement floor for Bright Choice. This step de-coupled the renewable content of Bright Choice from PG&E renewable content forecasts and established the annual steps that would lead to zero emission electricity in 2030.

Bright Choice Annual Renewable and Carbon Free Electricity Targets

The table below shows renewable and carbon free content targets through 2030 for Bright Choice, including estimates for unspecified power based on those targets, as well as estimates for emission factors in future years, and the CA RPS percentages for comparison.

Table 1: Bright Choice: Renewable, Carbon Free Percentages by Year, Unspecified Power estimates and PCL Emissions Factor for Bright Choice

| Vace |             | CA-RPS %      |               |                             |             |
|------|-------------|---------------|---------------|-----------------------------|-------------|
| Year | Renewable % | Carbon Free % | Unspecified % | <b>PSDR Emission Factor</b> | Renewable % |
| 2018 | 41%         | 62%           | 38%           | n/a                         | 29%         |
| 2019 | 60%         | 87%           | 13%           | n/a                         | 31%         |
| 2020 | 40%         | 55%           | 45%           | 591                         | 33%         |
| 2021 | 42%         | 60%           | 40%           | 564                         | 36%         |
| 2022 | 50%         | 68%           | 32%           | 545                         | 39%         |
| 2023 | 54%         | 71%           | 29%           | 540                         | 41%         |
| 2024 | 58%         | 75%           | 25%           | 455                         | 44%         |
| 2025 | 61%         | 79%           | 21%           | 390                         | 47%         |
| 2026 | 65%         | 84%           | 17%           | 317                         | 49%         |
| 2027 | 69%         | 88%           | 13%           | 243                         | 52%         |
| 2028 | 73%         | 92%           | 8%            | 164                         | 55%         |
| 2029 | 76%         | 98%           | 2%            | 66                          | 57%         |
| 2030 | 80%         | 100%          | 0%            | -                           | 60%         |

There are two primary factors influencing Bright Choice emissions. The largest source of emissions in EBCE's portfolio is power content from emitting generation sources and for Bright Choice this is unspecified power which is the balance of carbon free electricity purchases (which includes renewable) and total sales. Unspecified electricity is not purchased for Bright Choice for content purposes but is reflective of the total sales net of carbon free content. The second factor influencing the Bright Choice emissions is renewable content from PCC2 RECs since the PSDR emissions reporting regulations require EBCE to report emissions for these renewable purchases when the source of the energy is not specified. Annual increases in the renewable and carbon free content result in annual reductions in the emission factor and unspecified power for Bright Choice.

Not shown in the above table but reflected in the estimates for emission factors is an annual reduction in the purchase of PCC2 RECs for the Bright Choice plan whereby 2030 all of the renewable electricity for Bright Choice would come from PCC1 RECs.

# Fiscal Impact

There are no fiscal impacts as this item provides information only on Bright Choice product emissions.

# **Attachments**

A. Presentation

**APRIL 19, 2023** 

# Bright Choice Emissions Overview





# Overview

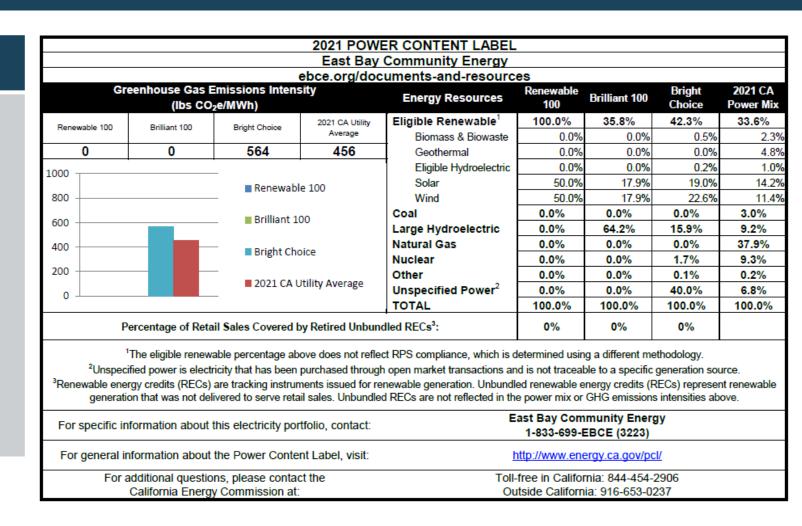
- What is Power Content
- EBCE Product Overview
- Renewable Energy Credits and Portfolio Content Category Classifications
- EBCE Bright Choice Target History
- PG&E Carbon Free Allocation
- Bright Choice Amendment to Power Content
- Emissions Accounting Methodology
- Where we are now
- CCA Comparison
- 2022 Snapshot



# What is the Power Content Label (PCL)? Attachment Staff Report Item 17A

# **PCL**

- Published annually, based on prior calendar year generation from owned or contracted-for resources
- Detailed breakdown on sources of energy used to provide electricity
- Resembles a nutrition label for electricity
- The PCL submission requires a formal 3rd party audit and is reviewed and approved by the CEC





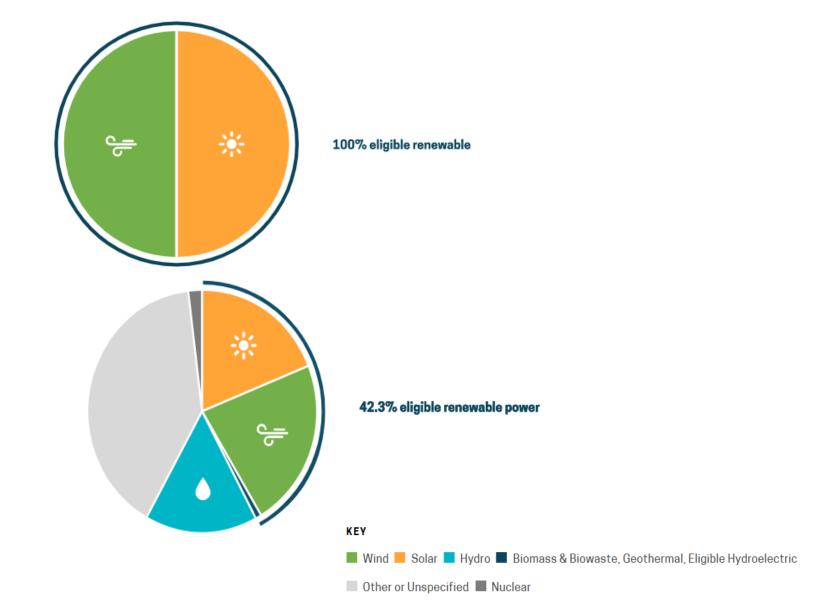
# **EBCE's Customer Products**

# Renewable 100

100% renewable energy from California solar & wind power at a slightly higher price than PG&E

# **Bright Choice**

Our basic plan, which costs less than PG&E





# Renewable Energy Credits and Portfolio Content tem 17A Category Classifications

# Renewable Energy Credits (RECs):

- Represent clean energy attributes of renewable electricity
- Each REC is equivalent to one MWh of renewable electricity generated
- Limitations to the amount that each group can count towards RPS requirements
- Classified into three distinct categories Portfolio Content Categories (PCC)

| PCC 1 | Energy and REC are from same source and delivered into a California Balancing Authority (CBA) without any substitution |
|-------|--|
| PCC 2 | Substitute Energy not from the same source as REC  |
| PCC 3 | Electricity Products Not Qualified as PCC 1 or PCC 2, Including Unbundled RECs   |



# **Bright Choice History**

Bright Choice plan was created to provide electricity to customers at a lower price than PG&E as a comparable product.

**2018** – Bright Choice was a Board approved product, with an approved power content set at 85% carbon free

- October 2018 Board approved use of The Climate Registry (TCR) carbon accounting methodology and 2018 calendar year emissions factor target of 142 lb-CO2e/MWh (Actual 2018 emissions was 101 lb-CCO2e/MWh)
- TCR is a national emissions accounting methodology that was widely used by load serving entities, including CA IOUs and CCAs, and cities



# 2019 PG&E Carbon Free Allocation

- PG&E initiated a formal large hydro and nuclear allocation process determined by load share, with deliveries starting in 2020. The acceptance of this allocation had zero incremental cost to CCAs due to PCIA
- EBCE initiated discussions in the November 2019 ExComm meeting followed by extensive discussions on risks, benefits, and costs with the Board and CAC at the December 2019 and January 2020 Board meetings
  - Fundamental question for accepting nuclear or not came down to a trade-off between having nuclear and lower greenhouse gas emissions, or not having nuclear and accepting higher greenhouse gas emissions
  - EBCE board elected to accept the large hydro allocation





# 2020 Amendment to Bright Choice Power Content Guidelines

- With the introduction of the carbon free allocation, EBCE's large hydro portfolio content was expected to be generally in line with PG&E, and therefore Renewable Energy was a much more appropriate focus
- Renewables target was amended to reflect a clean energy procurement floor based on PG&E's prior year renewable energy power content forecast + 5% buffer for uncertainty

2020 Bright Choice Renewable % = [2019 PG&E Renewable Forecast] + 5% = 39.5%

• Challenges existed under this approach due to lack of visibility into PG&E's annual renewable target and a changing RPS banking strategy. Furthermore, the reporting lag means that actual values are not fully validated until the fall of the year after the power is procured



# **Assembly Bill (AB) 1110**

- Regulations modifying power content reporting methodology and emissions accounting methodology were initially implemented in 2020.
- AB 1110 fundamentally required replacing the previously accepted TCR emissions methodology, which took a global emissions perspective, with a California-centric emissions methodology
- Requires retail sellers to:
  - Include emissions from PCC 2 RECs resulting in a material increase in reported emissions
  - Resources, regardless of source (solar, wind, hydro) are given an equivalent emissions factor based on imported energy into CAISO, typically unspecified system power.



# Where are we now?

- In December 2020, the Board adopted a clean energy goal for all electricity within EBCE's portfolio to have zero net emissions by 2030
- In April 2022, a path to reach that zero emissions goal in 2030 was approved, which included annual targets for renewable and large hydro (as a percentage of sales)
- Targets were increased by an additional 5% in June 2022

Note: 2019 renewables procurement increased significantly to address scarcity in large hydro generation due to drought conditions

| Year | Bright Choice |               |               |                      |                             |             |  |  |
|------|---------------|---------------|---------------|----------------------|-----------------------------|-------------|--|--|
| rear | Renewable %   | Carbon Free % | Unspecified % | TCR*-Emission Factor | <b>PSDR Emission Factor</b> | Renewable % |  |  |
| 2018 | 41%           | 62%           | 38%           | 101                  | n/a                         | 29%         |  |  |
| 2019 | 60%           | 87%           | 13%           | 135                  | n/a                         | 31%         |  |  |
| 2020 | 40%           | 55%           | 45%           | n/a                  | 591                         | 33%         |  |  |
| 2021 | 42%           | 60%           | 40%           | n/a                  | 564                         | 36%         |  |  |
| 2022 | 50%           | 68%           | 32%           | n/a                  | 545                         | 39%         |  |  |
| 2023 | 54%           | 71%           | 29%           | n/a                  | 540                         | 41%         |  |  |
| 2024 | 58%           | 75%           | 25%           | n/a                  | 455                         | 44%         |  |  |
| 2025 | 61%           | 79%           | 21%           | n/a                  | 390                         | 47%         |  |  |
| 2026 | 65%           | 84%           | 17%           | n/a                  | 317                         | 49%         |  |  |
| 2027 | 69%           | 88%           | 13%           | n/a                  | 243                         | 52%         |  |  |
| 2028 | 73%           | 92%           | 8%            | n/a                  | 164                         | 55%         |  |  |
| 2029 | 76%           | 98%           | 2%            | n/a                  | 66                          | 57%         |  |  |
| 2030 | 80%           | 100%          | 0%            | n/a                  | -                           | 60%         |  |  |



# Total Emissions Inclusive of Renewable 100 Product

| Voor |             | CA-RPS %      |                      |                             |             |
|------|-------------|---------------|----------------------|-----------------------------|-------------|
| Year | Renewable % | Carbon Free % | TCR*-Emission Factor | <b>PSDR-Emission Factor</b> | Renewable % |
| 2018 | 42%         | 88%           | 82                   | n/a                         | 29%         |
| 2019 | 65%         | 88%           | 113                  | n/a                         | 31%         |
| 2020 | 39%         | 61%           | n/a                  | 488                         | 33%         |
| 2021 | 42%         | 65%           | n/a                  | 464                         | 36%         |
| 2022 | 61%         | 75%           | n/a                  | 406                         | 39%         |
| 2023 | 68%         | 78%           | n/a                  | 391                         | 41%         |
| 2024 | 69%         | 81%           | n/a                  | 338                         | 44%         |
| 2025 | 72%         | 84%           | n/a                  | 288                         | 47%         |
| 2026 | 75%         | 88%           | n/a                  | 234                         | 49%         |
| 2027 | 77%         | 91%           | n/a                  | 179                         | 52%         |
| 2028 | 80%         | 94%           | n/a                  | 121                         | 55%         |
| 2029 | 83%         | 97%           | n/a                  | 62                          | 57%         |
| 2030 | 86%         | 100%          | n/a                  | -                           | 60%         |



# **CCA Comparison**

|                | RPS    | Hydro  | % Nuclear | Non-nuke<br>Carbon Free | Unspecified | Rate     | 2021 Cost<br>Differential w/<br>PG&E | Lbs<br>CO2e/MWh |
|----------------|--------|--------|-----------|-------------------------|-------------|----------|--------------------------------------|-----------------|
| Peninsula      | 49.20% | 50.80% | 0.00%     | 100.00%                 | 0.00%       | \$0.1439 | 1.29%                                | 5               |
| Silicon Valley | 44.10% | 35.90% | 20.00%    | 80.00%                  | 0.00%       | \$0.1459 | 2.65%                                | 18              |
| MCE            | 60.50% | 36.80% | 0.90%     | 97.30%                  | 1.70%       | \$0.1490 | 4.68%                                | 75              |
| CleanPowerSF   | 55.40% | 37.60% | 0.10%     | 93.00%                  | 6.90%       | \$0.1196 | -18.72%                              | 82              |
| PG&E           | 47.70% | 4.00%  | 39.30%    | 51.70%                  | 0.00%       | \$0.1420 | 0.00%                                | 98              |
| Sonoma         | 49.70% | 40.60% | 0.50%     | 90.30%                  | 9.20%       | \$0.1353 | -4.98%                               | 130             |
| San Jose       | 36.00% | 31.30% | 31.30%    | 67.30%                  | 1.30%       | \$0.1487 | 4.48%                                | 162             |
| 3CE            | 38.40% | 11.80% | 0.00%     | 50.20%                  | 49.80%      | \$0.0910 | -56.07%                              | 494             |
| Pioneer        | 30.80% | 0.40%  | 20.40%    | 31.20%                  | 48.40%      | \$0.1287 | -10.33%                              | 542             |
| EBCE           | 42.30% | 15.90% | 1.70%     | 58.20%                  | 40.00%      | \$0.1373 | -3.41%                               | 564             |
| King City      | 40.00% | 0.00%  | 0.00%     | 40.00%                  | 60.00%      | \$0.1524 | 6.81%                                | 567             |
| Redwood Coast  | 33.10% | 10.50% | 0.00%     | 43.60%                  | 56.40%      | \$0.1509 | 5.89%                                | 615             |
| Valley         | 12.60% | 10.90% | 0.00%     | 23.50%                  | 76.50%      | \$0.1521 | 6.65%                                | 722             |

Contributing factors to higher/lower emissions

- Acceptance or rejection of nuclear allocation
- Rates compared to PG&E
- Renewable and Hydro content
- Unspecified Power



# 2022 Snapshot

Note that these are draft power content forecast positions for 2022 and subject to change following formal reconciliation and audit. Formal PCL and emissions data to be released on October 1<sup>st</sup>.

|                      | PG&E*  | EBCE   |
|----------------------|--------|--------|
| Eligible Renewable   | 40.00% | 47.77% |
| Large Hydro          | 7.00%  | 22.75% |
| Nuclear              | 49.00% | 0.00%  |
| Unspecified          | 0.00%  | 29.48% |
| Total Carbon Free    | 96.00% | 70.52% |
| Carbon Free non-Nuke | 47.00% | 70.52% |



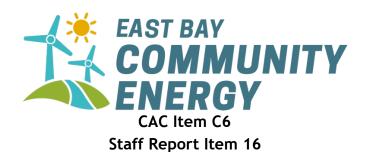
<sup>\*</sup> https://www.pgecurrents.com/articles/3689-pg-e-customers-electricity-96-greenhouse-gas-free-2022

# **Questions?**

Thank You

Izzy Carson
Power Resources Manager





**TO:** East Bay Community Energy Board of Directors

**FROM:** JP Ross, Vice President of Local Development, Electrification and

Innovation

SUBJECT: Forum Mobility Loan Agreement

**DATE:** April 19, 2023

### Recommendation

Approve a Resolution authorizing CEO to negotiate and execute a ten-year loan of \$4.5M at an interest rate of 5% with Forum Mobility ("Forum") for the Greenville Community Charging Depot (Greenville CCD) in Livermore.

### **Background and Discussion**

By several measures, EBCE's service area is one of the most important gateways for international, domestic, and interregional trade in the U.S. At the center of this important logistics hub is Alameda County which is home to the 5th busiest container port in the U.S., the Port of Oakland. It is also home to Oakland International Airport which moves 1.5 million tons of air freight annually. While each hub makes use of multimodal infrastructure, trucking will continue to be the predominant mode for goods movement, with trucking accounting for 80% of tonnage and 60% of value moved between 2020 - 2045.

These vehicles and the fossil fuels that power them today are the largest contributors in California to the formation of ozone, greenhouse gas ("GHG") emissions, fine particulate matter ("PM2.5") and toxic diesel particulate matter ("PM"). In the State, and EBCE's service area, the transportation sector alone accounts for 41 percent of total GHG emissions (50 percent when upstream emissions from fuel is included) and is a major contributor to oxides of nitrogen ("Nox") and PM emissions. Medium duty & heavy duty ("MHD") goods movement vehicles contribute a quarter of the transportation sector's GHG emissions. And a third of the transportation sector's NOx emission, a disproportionately high share considering these vehicles represent only about 1.8 million trucks and vans among the 30 million registered vehicles in the state.

Increasing access to fast charging infrastructure to refuel MHD battery electric vehicles ("BEV") is critical to serving vehicle operators who; 1) are unable to charge overnight where their trucks are domiciled, 2) will need opportunity charging to get from point A to B (and back), and 3) share the same BEV with multiple shift drivers.

Public, private, and utility investments have and will continue to play essential roles in deploying this critical refueling infrastructure. Growth in public and private funding will provide a pathway to success in BEV charging infrastructure deployment. EBCE's loan to Forum exemplifies the opportunity for public-private sector collaboration.

# The Project:

The purpose of this loan is to support the financing of the Greenville CCD for medium and heavy-duty vehicles on Greenville Road in Livermore. a. The loan will be funded and drawn upon after the Greenville CCD achieves commercial operations. The forecasted capital cost of the Greenville CCD is approximately \$14.3M and the project is scheduled to come online by the end of 2024. Once online, the Greenville CCD will be capable of charging approximately one hundred (100) MHD BEVs daily at the 4-acre brownfield site.

The initial construction of the Greenville CCD will include high capacity, direct-current fast chargers ("DCFC") capable of delivering an 80% state of charge to most Class-8 BEVs in approximately 2.5 hours. The Greenville CCD will utilize advanced energy and charge management software to avoid charging during peak demand. Initial operations will be focused on providing safe, reliable and efficient charging services to early adopters of MHD BEVs.

Once operational, Forum is committed to incorporating distributed energy resources like solar canopies, stationary energy storage and mobile energy storage into the operations of the Greenville CCD, where feasible. Additionally, as the technology becomes commercially viable and economically in both the chargers as well as the MHD BEVs, Forum will incorporate bi-directional charging capabilities. Together, these resources will allow the Greenville CCD to provide peak energy shaving, demand response, grid resiliency and additional ancillary services to the California electric system.

The Greenville CCD will utilize a variety of state incentives and federal tax credits to provide competitive charging and trucking offerings to customers. Efforts to secure incentives and credits are underway and Forum will keep EBCE informed of the progress.

Forum has committed to paying prevailing wage on this project as required by the terms of the loan agreement.

# Charging on Site:

The Greenville CCD will offer two types of BEV charging services. The Greenville CCD will serve as the home-base for "dwell charging" for up to 100 MHD BEVs. Dwell charging usually occurs while the vehicle is not in service and the charging can occur over night. Additionally, the Greenville CCD will also provide "opportunity charging" during workhours while the vehicle is in service and in-between freight trips. Opportunity charging usually lasts for approximately thirty minutes to one-hour at a higher power level to get the vehicle back on the road as quickly as possible. Forum intends to utilize the EBCE RE100 product for retail service at the Greenville CCD.

#### Maintenance:

The Greenville CCD will be staffed by Forum personnel to ensure uptime and reliability. The Charging Infrastructure Installers and Maintenance entities will comply with all industry standards and regulations.

All charging infrastructure and equipment will be installed and maintained by a contractor with the appropriate license and at least one electrician on each crew, at any given time, will hold an Electric Vehicle Infrastructure Training Program certification (EVITP).

### Project Loan:

Loan Summary

Forecasted Interest Income: Loan to Value Ratio:

With total project costs of approximately \$14.3M and a \$4.5M loan, EBCE will be over collateralized in this financing with a Loan-To-Value ("LTV") of 31%. The Loan to Value is the ratio of the loan to the value of the project, in this case \$4.5M / \$14.3M = 31%. Typical project finance LTVs fall in the range of 50%-75%, depending on a variety of factors. This over-collateralization provides EBCE a strong buffer in the event of default. Additionally, EBCE will receive guarantees from the project parent company, FM Infra AssetCo, LLC, to fund any major equipment replacements or debt service payments, in the event that the project company is short on cash.

The original loan offering by EBCE for this project was for \$3M. However, while negotiating with Forum on the terms of the loan, EBCE has increased the security of the loan with both a parent guarantee and security in the charging assets on-site. These changes justify EBCE offering a larger \$4.5M loan for this project.

| Financing Type:       | Secured Project Level Loan |
|-----------------------|----------------------------|
| Borrower Name:        | FM Greenville, LLC         |
| Borrower Parent Name: | FM Infra AssetCo, LLC      |
| Amount:               | \$4,500,000                |
| Interest Rate:        | 5%                         |
| Term:                 | 10 years                   |
| Payment Frequency:    | Quarterly                  |
| Payment Amount:       | \$143,646                  |

\$1,245,855

31%

# **Ongoing Reporting:**

Forum will provide annual reporting on multiple items, including but not limited to charging infrastructure deployed, energy delivered, vehicles operating and emissions offsets.

# Fiscal Impact

EBCE has allocated funding from approved Local Development Transportation Electrification budgets for this loan. EBCE expects to earn \$1,245,855 in interest over the term of the loan.

# **Committee Recommendation**

Staff presented an Informational Item to the Executive Committee on April 5th, 2023.

# <u>Attachments</u>

- A. Resolution
- B. Power Point Presentation

# RESOLUTION NO. R-2023-XX A RESOLUTION OF THE BOARD OF DIRECTORS

# OF THE EAST BAY COMMUNITY ENERGY AUTHORITY TO AUTHORIZE THE CEO TO NEGOTIATE AND EXECUTE THE FORUM MOBILITY LOAN AGREEMENT

WHEREAS The East Bay Community Energy Authority ("EBCE") was formed as a community choice aggregation agency ("CCA") on December 1, 2016, Under the Joint Exercise of Power Act, California Government Code sections 6500 et seq., among the County of Alameda, and the Cities of Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Piedmont, Oakland, San Leandro, and Union City to study, promote, develop, conduct, operate, and manage energy-related climate change programs in all of the member jurisdictions. The cities of Newark and Pleasanton, located in Alameda County, along with the City of Tracy, located in San Joaquin County, were added as members of EBCE and parties to the JPA in March of 2020.

WHEREAS EBCE seeks to support the adoption of Medium and Heavy Duty Vehicle Electrification across its service territory to reduce greenhouse gas and particulate emissions that disproportionately impact lower income and disadvantaged communities,

WHEREAS EBCE issued a Request for Offers for Zero-Emission Medium and Heavy-Duty Goods Movement project loans in October of 2022 and received a conforming bid from Forum Mobility,

WHEREAS The project proposed by Forum Mobility will deliver charging infrastructure and electric drayage trucks to operate in EBCE service territory, and

WHEREAS EBCE has substantially negotiated a loan agreement with Forum Mobility and hereby requests Board authorization for loan funding.

# NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE EAST BAY COMMUNITY ENERGY AUTHORITY DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. THE CEO is hereby authorized to negotiate and execute a 10-year loan at 5% interest for \$4.5 million with Forum Mobility for the development of the Greenville Charging Depot located in Livermore pursuant to the terms described in the staff report attached to this agenda item and subject to the approval of the General Counsel.

ADOPTED AND APPROVED this 19th day of April, 2023.

|                                  | Elisa Márquez, Chair |
|----------------------------------|----------------------|
|                                  | Lusa marquez, Chan   |
| ATTEST:                          |                      |
|                                  |                      |
|                                  |                      |
|                                  |                      |
|                                  | <del>-</del>         |
| Adrian Bankhead, Clerk of the Bo | oard                 |

**APRIL 2023** 

# Forum Mobility -Greenville Charging Infrastructure Loan





# MD/HD Charging Program Loan Overview Attachment Staff Report Item 168

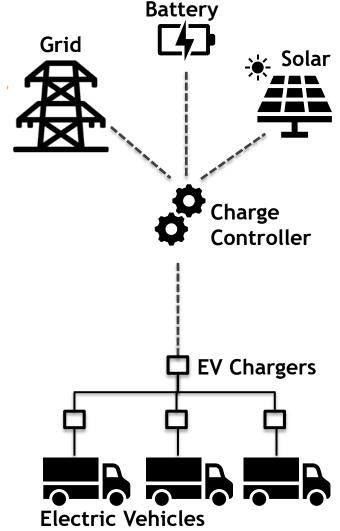
To support the development of medium and heavy-duty electric vehicle charging infrastructure, EBCE offered a low interest loan for projects that can be online in 2024.

- EBCE Budget approved in June, 2022
- RFO issued in September, 2022
- Applications submitted October, 2022
- EBCE began due diligence December, 2022
- Anticipated loan closing April, 2023
- Project commercial operations July, 2024
- EBCE funding September, 2024



# What Does The Greenville Project Look Like?

- Offering to Customers:
  - <u>Full Service</u> truck, charging, vehicle servicing, & software optimization multi-year contract with known pricing
  - <u>Charging as a Service</u> Charging only through multi-year contract w/ known pricing
- Site is a 4.4-acre brownfield, less than a half mile from I-580
- Total build cost of \$14.3M
- Capable of charging 100 MD/HD electric vehicles / day
- Prevailing wages are required
- Committed to EBCE's RE 100 product
- Commitment to add solar, battery storage and Bi-directional direct current fast charging electric vehicle charging infrastructure after initial project deployment
- Forecasted emissions avoided over 10-year project life PM: 178 tons, PM10: 178 tons, PM2.5: 178 tons, SOx: 166 tons, NOx: 2,535 tons, CO2: 93,752 tons, CH4: 3.802 tons, N2O: 0.7605





# More on the Loan

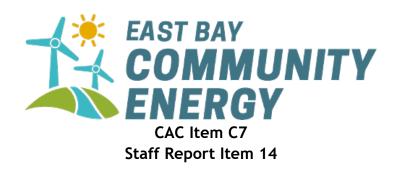
- \$4.5 million to support facility construction
- Funded once project has reached commercial operations
- 10-tear term @5% interest rate
- 12 months of capitalizing interest & 9 years of level amortization
- Loan secured by a deed of trust
- Principle & interest expense guaranteed by holding co, FM Asset Co.
- No closing fees & EBCE pays its own legal fees
- \$1.25M in forecasted revenue from \$4.5M loan
- EBCE funding leveraged with 3.2x in additional capital



# Forum Mobility

- As an organization, Forum Mobility is targeting the 28,700 drayage trucks serving ports and railyards in CA, which if transitioned to zero-emissions, would avoid 2.4M metric tons of carbon dioxide emissions
- Team Experience:
  - End-to-end experience with sustainable energy infrastructure project delivery
  - Combined experience overseeing \$10B+ in sustainable infrastructure
- Planning 2 additional charging hubs in EBCE service territory





**TO:** East Bay Community Energy Board of Directors

FROM: Theresa McDermit, Head of Brand

SUBJECT: EBCE Brand Evolution and Name Exploration (Informational Item)

**DATE:** April 19, 2023

#### Recommendation

Receive a memo from staff and prepare for upcoming requests to adopt brand identity recommendations.

#### **Background and Discussion**

#### **Brand Identity Evolution**

EBCE has grown and evolved since our founding in 2016. We've expanded both our service territory (Pleasanton, Newark and Tracy 2022; Stockton 2024), and our offerings / programs. This dual expansion is the driver of our brand evolution and is detailed below.

Strategic Imperative - EBCE is uniquely positioned to drive adoption of electric consumer products, like EVs and induction cooktops. We have many "carrots" at hand including rebates, incentives, and trial programs. Unfortunately, we also have an uphill battle gaining consumers' attention on topics outside of their energy bill. This makes sense given both the role we've played to date in their lives, and our current brand identity (e.g. logo, name, way of "speaking").

<u>Our current role in customers' lives</u> - We know that most of our customers were passively opted-in to our service; we haven't historically asked them to make pro-active decisions. The role we have played until

recently is that of a utility: something in the background that doesn't spark a lot of engagement.

<u>Our current brand identity</u> - Our current brand identity is literal and clean; it was carefully crafted to support the education and trust-building needed as the agency was introduced and rolled out. It is reminiscent of other utilities, which helped consumers understand what type of service we are as they were introduced to the concept of a CCA.

We are now entering a phase in our maturation where we're launching more programs and seeking deeper engagement with our customers on topics that are normally the territory of "consumer" brands. We seek to evolve our brand identity to better influence these discretionary choices, like the purchase of an EV or induction cooktop. This includes a name that avoids the "alphabet soup" of acronyms that consumers find confusing, as well as an engaging visual design and communication style.

Geographic Imperative - Once fully integrated into our service area, Stockton will be the second largest community in our JPA. In a recent statistically significant survey of San Joaquin County residents (n=400; over 50% sample from Stockton), we learned that a significant portion of residents do not view themselves as part of the East Bay. Many, in fact, actively rejected inclusion in the East Bay because they associate it with high prices or values that don't align with their own. We must evolve our identity - specifically our name - to ensure that all members of our community feel included and served, and to facilitate any future expansion we may wish to pursue.

#### **Naming Process**

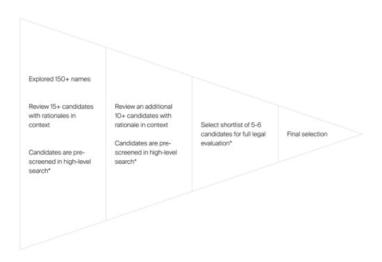
We have begun the process of ideating and evaluating potential new names for the agency. With this process, we seek to ensure that:

- a given name conveys the desired meaning and tone
- appealing url and social handles are available
- the name does not have any unintended or negative connotations in the major languages spoken in our service territory
- the name is free from trademark encumbrances that would prevent us from using it and potentially trademarking it.

If a new name is adopted, it would be a "dba" or doing business as name. We are not seeking to change the name of the JPA.

The naming process (outlined in Image 1) began with a broad consideration of names that met a defined set of criteria. Promising names were then subject to a high-level availability search. Those names that survived the availability search were presented to staff for feedback. The strongest candidates were then shared with ad hoc committees of the Board and CAC. Input from those meetings in being incorporated and will inform the ongoing process.

Image 1.



#### **Next Steps**

Pending the outcome of our ongoing stakeholder engagement efforts, we are scheduled to bring a candidate name before the Board for adoption at the May meeting of the board.

#### Fiscal Impact

Fiscal impact is driven by the need to communicate any changes to our brand identity and the creation / recreation of branded materials. Actual costs will be determined once the full extent and timing of changes are known.

#### <u>Attachments</u>

A. Brand Evolution Background - BOD 041923 (PowerPoint presentation)

**APRIL 2023** 

# EBCE Brand Evolution Background & Next Steps





#### Attachment Staff Report Item 14A

#### Agenda

Background & Rationale

Insights

Stakeholder Engagement

What's Next



## Background & Rationale

#### In the Beginning...

When we launched EBCE, our primary objective was to <u>educate</u>:

- What is a CCA?
- How does your bill work?
- EBCE is not a scam...





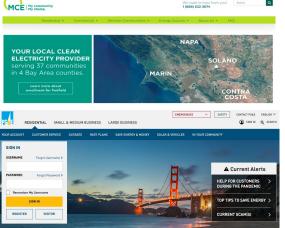
### A Brand Expression to Support Education and Trust

#### Our brand expression is:

- Very literal; we have a highly descriptive name and logo
- Self-referential; our messaging has traditionally focused on what we do (as opposed to what that means for the consumer)
- Familiar; our "look" is similar to many other CCAs or IOUs











#### We've Been Successful

On track to implement the strategy for 100% clean by 2030 95% average retention rate across our service area



2022 National Notable Achievement Award for Land Revitalization Team Excellence



**\$21 million** spent on local programs like battery energy storage, induction cooking, and electric heat pump water heaters

#### Steady expansion

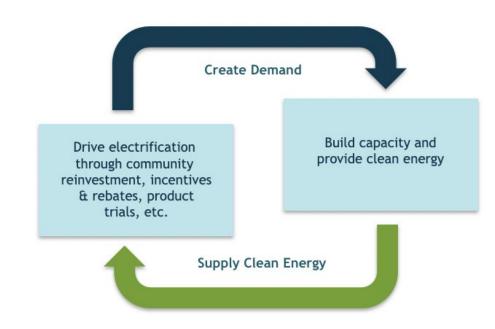
of our service area; Pleasanton, Newark + Tracy 2022; Stockton 2024

**\$19 million** annual customer savings vs. what would have been paid for PG&E service

**1,015 megawatts** of new wind, solar, and battery storage, including projects in Alameda County

#### We Continue to Mature and Evolve to Better Serve งษา Communities

- We are moving from simply filling demand to <u>creating</u> it
- Growing capacity and expertise to stand up consumer- and commercialfacing programs that expose customers to electric alternatives and speed their adoption

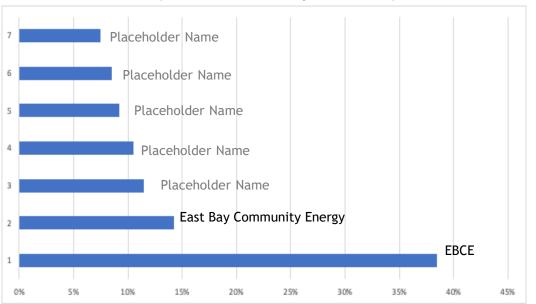




## Insights

#### Our Name is a Barrier to Success in San Joaquin County\*4

Q12. Which one of these names is your <u>least</u> favorite?



Q13: Why?

#### **EBCE**

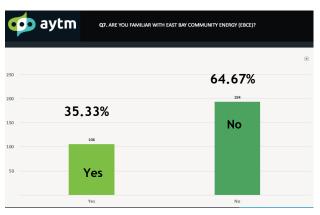
 Acronyms are off-putting; hard to remember

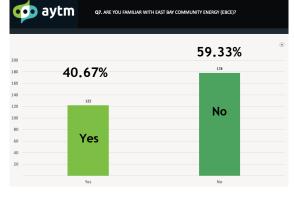
East Bay Community Energy

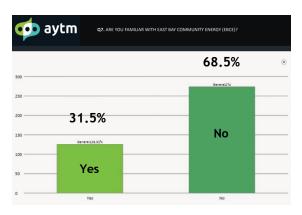
 SJC not part of East Bay;
 East Bay too expensive / doesn't represent my values



#### Q: Are you familiar with East Bay Community Energy (EBCE)?







2020 n=300

2021 - April

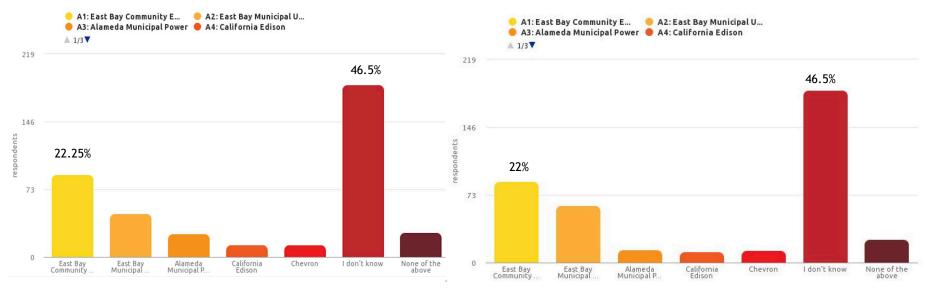
2021 - October



Takeaway: Aided awareness appears to be influenced by advertising (April 2021 survey conducted during time of heavy advertising), but is otherwise flat

#### **Unaided Awareness**

Question: PG&E manages the electricity system in your area. You also have an option for generation service (power plants). Is that...



May 2022

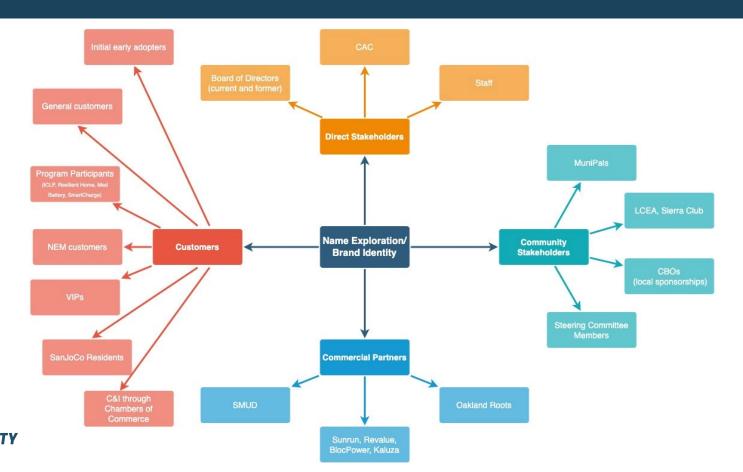
October 2022



## Stakeholder Engagement

#### Stakeholder Map

**EAST BAY** 



#### **Ad Hoc Committees**

| Name               | EBCE Role                        | Jurisdiction Role          |  |
|--------------------|----------------------------------|----------------------------|--|
| Elisa Márquez      | Current Chair                    | Supervisor, Alameda County |  |
| Dan Kalb           | Former Chair                     | Councilmember, Oakland     |  |
| Jaime Patiño       | Former Chair of MRL Subcommittee | Councilmember, Union City  |  |
| Matt Bedolla       | Director                         | Councilmember, Tracy       |  |
| Dan Wright         | Director                         | Councilmember, Stockton    |  |
| Anne-Olivia Eldred | Chair of CAC                     | Oakland resident           |  |
| Ed Hernandez       | Vice Chair of CAC                | San Leandro resident       |  |
| Jim Lutz           | At-Large Member of CAC           | Oakland resident           |  |



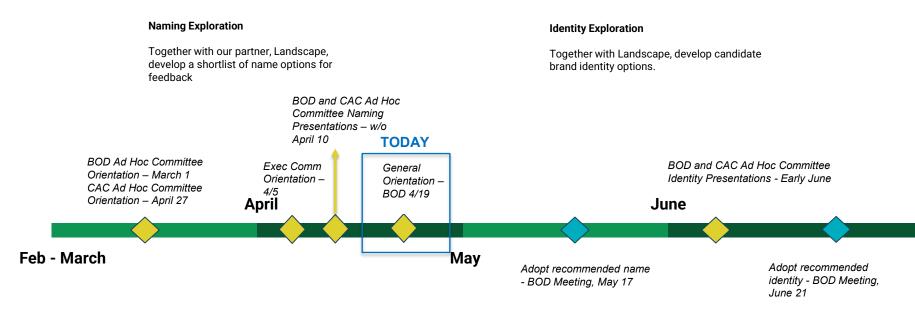
#### Outreach Plan

| January  | February  | March   | April  | May  | June  |
|--|---|---|--|--|---|
| Research (San Joaquin Co): - N = 400 - Awareness, priorities, reaction to name | Foundation sessions: BOD Ad Hoc committee: 1-hr meeting, bring up to speed- ask to be champions  1:1 with CAC Chair + Vice Chair, introduce the concept of the ad hoc committee; provide background and rationale | Research (Name): - Existing customers - Stakeholders  Presentation of process: MuniPals  Foundation session: Additional CAC ad hoc committee member | Presentation of process: Full Staff (4/3)  Exec Comm Review (4/5) Exec Comm review of name/identity process (standard meeting)  Input sessions (w/o 4/10): - BOD Ad Hoc Review of names - CAC Ad Hoc Review of names  CAC review of BOD info item via standard meeting and regular agenda review process  Board Meeting (4/19): Info on Name Process | Exec Comm Review (5/3) Exec Comm review of name/identity progress to date without sharing names (standard meeting)  Board Meeting (5/17): Approval of name | Input sessions: - BOD Ad Hoc Review of identity - CAC Ad hoc Review of identity  CAC review of BOD item via standard meeting and regular agenda review process  Board Meeting (6/21): approval of identity via standard mtg |



## **Next Steps**

#### **Brand Evolution Timeline**





Present short list of name for feedback; refine list with feedback. Perform legal and linguistic checks; present final selection to BOD for approval

#### Finalize & Approve Identity

Refine preferred identity direction. Present final identity to BOD for awareness.



## Thank You!



