



Staff Report Item 12

TO: East Bay Community Energy Board of Directors

FROM: Jessie Denver, Distributed Energy Resources Program Manager -
Transportation Electrification and Community Resilience

SUBJECT: California Electric Vehicle Infrastructure Project Funding
(Action Item)

DATE: May 20, 2020

RECOMMENDATION

Adopt a Resolution approving participation in the California Energy Commission’s 2021 round of the California Electric Vehicle Infrastructure Project (CALeVIP) in Alameda County and authorize the Chief Executive Officer to execute an agreement with the electric vehicle charging incentives as part of CALeVIP.

BACKGROUND

The California Energy Commission’s (“CEC”) California Electric Vehicle Infrastructure Project (“CALeVIP”) investment program brings critical state funding to regions and counties with the greatest need for electric vehicle (“EV”) charging infrastructure.¹ Paired with investment from a lead co-funding project partner, the goal of CALeVIP is to provide robust financial incentives to meet California’s mandate of 1.5 million zero emission vehicles (“ZEV”) on roadways and 250,000 chargers by 2025. The state also has a goal of 5 million ZEVs in operation by 2030.

ZEVs include pure battery plug-in EVs, plug-in hybrid EVs, and hydrogen fuel cell EVs and are transportation technologies essential to achieving California’s renewable energy, air quality, and climate change goals.² In Alameda County today there are approximately 35,000 light duty ZEVs registered to drivers.³ To meet the states goals this figure will need to increase to approximately 59,000 ZEVs by 2025 and 197,541 light, medium and heavy-duty ZEVs by 2030.

A lack of charging infrastructure is a clear and significant barrier to market adoption of EVs in Alameda County with only 1,209 Level 2 (“L2”) and 244 DC Fast Chargers (“DCFC”) publicly available. To that end, throughout 2019/20 EBCE coordinated with the CEC and CSE on proposed

¹ Please see prior staff Board updates in May, September and December 2019, and on January 22, 2020.

² <https://www.cpuc.ca.gov/zev/>

³ DMV.ca.gov. Fuel Type by County as of 1/1/2019

Alameda County CALeVIP program details that if approved would enable launch of countywide incentives for EV charging infrastructure in 2021. It is important to note that San Joaquin County currently has a CALeVIP program for customers in the City of Tracy.⁴

This advanced coordination with the CEC (a state public agency) included EBCE's submittal of a required, non-binding Letter of Intent ("LOI") for the proposed 4-year incentive program. The LOI included an investment request from the CEC of \$15-\$33M. This request was based on the state's estimated budget availability for 2021 CALeVIP projects, and the CEC's charging infrastructure gap analysis for Alameda County. Historically the CEC has funded 50% of the gap in L2 charging availability and 30% of the gap in DCFC availability through CALeVIP programs. If funded at these levels a 2021 Alameda County program would see a CEC investment in Alameda County of approximately \$21M. Based on CEC investment only and CALeVIP incentive level requirements this would result in the deployment of at least 2,633 new L2 charging stations and an additional 145 DCFCs.

As the lead project co-funding partner, through the LOI, EBCE committed to providing an additional \$16M of funding (\$4M/year; 2021-2024) to address an even larger share of the L2 and DCFC gap beyond the CEC's estimated investment noted above.

The CEC will make its 2021 CALeVIP program selection in July 2020. Co-funding partners under consideration for CALeVIP investment have been coordinating with the CEC on programmatic details which are describe in more detail below. Through this coordination EBCE has also determined its co-funding budget allocations:

- \$14.5M for L2 and DCFC incentives for EBCE eligible customers
- \$1,015,000 for program administration by CSE

In addition, the previously approved Local Development budget allocation of \$1.5M from fiscal year 2020 will be allocated to L2 and DCFC infrastructure that will be owned by EBCE. EBCE will leverage CEC CALeVIP incentive funds for these projects.

Approving this recommendation will allow EBCE to implement CALeVIP countywide. Approving the recommendation will also allow EBCE to accelerate formal program launch once CALeVIP projects are confirmed by the CEC by granting authority to the CEO to execute an agreement with CSE, the CEC's CALeVIP program administrator. In addition to the CEC's investment of an estimated \$15-\$33M, the agreement would require EBCE to contribute, as the primary co-funding partner, \$15,515,000 over the next 4 years as described above.

Should the CEC decide to invest in an Alameda County CALeVIP program at a funding level that is less than EBCE's co-funding investment staff will return to the Board to discuss potential modifications to EBCE's co-funding commitment.

DISCUSSION

CALeVIP Program Introduction

CALeVIP is a CEC funded EV charging infrastructure incentive program. The CEC co-funds the program with a lead partner organization which historically has been another public agency or

⁴ <https://calevip.org/incentive-project/san-joaquin-valley>

a load serving entity like a Community Choice Aggregation program. Program administration is managed by CSE, which was competitively selected by the CEC.⁵

The following outlines the high-level process, technology, incentive and site eligibility requirements for a countywide CALeVIP project (“Pillar Requirements”). These CEC requirements have been developed based on best practices and input from stakeholders through statewide public workshops. These Pillar Requirements **cannot be modified**.

Process Requirements

- The CEC uses the Electric Vehicle Infrastructure Protection Tool (EVI-Pro) to determine funding levels for each charging technology (L2, DCFC) within each county or region.
- CEC funding will not be negotiable
- Applications submitted by stakeholders (site hosts/property owners, developers, etc.) will be approved on a first-come, first-served basis once all required application documents are submitted
- Applications must be submitted online
- Applications are not competitively scored or reviewed against one-or-another
- 25% of the project budget must be allocated to disadvantaged communities (“DAC”) per CalEnviroScreen 3.0 and low-income designated communities (“LIC”) per AB 1550.

The incentives are focused on L2 and DCFCs and under CALeVIP these charging stations can be public or private for MUDs, commercial or retail spaces, public facilities, workplaces, faith-based organizations, curbside, and at locations where fleets are domiciled. All charging stations must be shared and not designated for a specific vehicle. Incentives through CALeVIP are not available for single family homes.

Incentives will cover a portion of the costs of both the hardware as well as the electrical infrastructure upgrades needed to deploy the charging stations. Property owners who install chargers that receive incentives through the CALeVIP program are responsible for any ongoing operational expenses for the chargers. CALeVIP funds may only be used for chargers at existing buildings. Incentives are structured as described in Table 1 below.

Table 1. CALeVIP Incentives Levels

Power Level	General Market Rebate	DAC/LIC Rebate
6.2 kW or greater (Level 2)	\$4,500 per connector or 75% of project costs, whichever is less	See Adders
50 kW - 99.99 kW (DCFC)	\$50K or 75% of the total project cost, whichever is less	\$60K or 75% of the total project cost, whichever is less
100 kW + (DCFC)	Up to \$70K or 75% of the total project cost, whichever is less	\$80K or 75% of the total project cost, whichever is less
Level 2 Adders		

⁵ California Energy Commission Contract number ARV-16-017

MUDs	Up to \$1,000 per connector	Up to \$500 per connector for DAC/LIC site
------	-----------------------------	--

Because the CEC is funding multiple CALeVIP projects statewide at the same time, the Pillar Requirements help ensure consistency across programs and streamlined program administration for CSE. It is important to note however that while the CALeVIP Pillar Requirements are not negotiable, the CEC does consider recommendations from co-funding partners that result in incentives going above and beyond the Pillar Requirements.

To that end, EBCE evaluated the ecosystem of charging infrastructure needs in Alameda County against the Pillar Requirements and submitted a number of recommendations to the CEC for consideration including:

- Allocation of CALeVIP funds for DCFC hubs near Multi-Unit Dwelling (MUD) “hotspots”
- Inclusion of an affordable housing adder for MUD properties outside of DAC/LIC eligibility areas
- EBCE customer retention clause

EBCE discussed these recommendations with the CEC and CSE over the last 4-6 months. In May 2020 the CEC tentatively approved both the allocation of investment funds for DCFC hubs near MUD hotspots and the inclusion of an adder for affordable MUDs outside of DAC/LIC eligibility areas. Each are described in more detail below. EBCE will continue to work with the CEC and CSE on associated implementation details. EBCE will also continue to explore with CSE how to potentially implement a customer retention clause.

The CEC will select 2021 CALeVIP projects in June or July 2020. If the Alameda County CALeVIP program is selected, each of these proposed program modifications will be presented to stakeholders statewide through CEC public workshops later this year. Stakeholders will have the opportunity to submit public comment as to whether these modifications are beneficial or a barrier to EV charging infrastructure deployment, and those comments will be considered by the CEC prior to CALeVIP program launch in 2021.

Tentatively Approved Incentive Modifications: MUDs

Dedicated Investment for DCFC Hubs Near MUD Hotspots

Adoption of EVs by renters has been slow due to a lack of convenient charging infrastructure at or near where they live. Alameda County’s MUD portfolio is predominantly 50+ years old and because of their vintage does not likely have the electrical capacity to accommodate EV charging. As a result, significant investment by MUD property owners may be required to upgrade their electrical service in order to install charging stations for tenants. Charging at MUDs is further complicated by assigned parking in lots and garages (e.g., EV charging is not shared).

To ensure CALeVIP investments are equitable and have the biggest near-term benefit to our community, EBCE recommended to the CEC that a percentage of the DCFC incentive funds have

a geographic siting requirement that would result in hubs of fast chargers deployed near dense concentrations of MUDs (i.e., hotspots) throughout Alameda County.

To support this recommendation EBCE mapped MUD parcel and building data to identify MUDs with 5+ units located within a quarter mile of other MUDs. This data then incorporated geographic DAC and LIC eligibility boundaries. Finally, EBCE mapped existing L2 and DCFC infrastructure with the MUD hotspots and DAC/LIC boundaries to demonstrate the significant lack of charging station availability to renters in Alameda County. This analysis resulted in the CEC tentatively approving EBCE's requested modification to the CALeVIP requirements.

Affordable MUD Adder

The CECs Pillar Requirements include a L2 adder for MUDs, and another L2 adder for MUDs in DAC/LIC eligibility areas. EBCE identified that affordable MUD property owners with buildings outside of DAC/LIC eligibility areas, despite serving low-income residents, would not have equitable access to these adders. To support its request to the CEC for an additional adder that would meet the needs of these property owners, EBCE mapped affordable MUDs countywide and found that 27% of affordable MUDs are actually outside of the DAC/LIC eligibility areas. In turn, the CEC tentatively approved EBCEs request to ensure affordable MUD property owners who manage sites across Alameda County have the ability to deploy L2 charging infrastructure equitably for their tenants where technically and economically feasible.

Should the CEC opt to fund the 2021 Alameda County CALeVIP program, EBCE staff will provide regular updates to the Board on these tentatively approved modifications. Staff will also seek to engage the Board and Community Advisory Committee in creating a robust pipeline of eligible projects prior to program launch.

Agreement with Center for Sustainable Energy

CSE is a nonprofit energy organization that provides administration and advisory services.⁶ As indicated above, the CEC selected CSE through a competitive solicitation to implement the CALeVIP program.⁷ CSE is the only entity authorized by the CEC to administer any CEC funding under the program.⁸ A condition of participation in CALeVIP is contracting with CSE to provide incentive rebate management during the term of the project. For these reasons, EBCE did not engage in a competitive procurement to award a contract to CSE.

If the Alameda County CALeVIP program is selected by the CEC for investment funding, it would launch in 2021 and run for a 4-year term (or the date when incentive funds are fully paid out). Under the standard services agreement with CSE, EBCE would contribute an amount not to exceed \$15,515,000 for EV charging infrastructure incentives and the design and implementation of the CALeVIP program. This includes EBCE's partner co-funding for incentives (\$14.5M) and also includes a fee that EBCE is responsible for, payable in several installments, to compensate CSE for services related to the development and administration of the program (NTE \$1,015,000).

Utilizing CSE service's is critical to implementing successful infrastructure program. Per the proposed scope of work, CSE will provide the following:

⁶ <https://energycenter.org/about-us>

⁷ <https://calevip.org/about-calevip>

⁸ California Energy Commission Contract number ARV-16-017

- 1) Incentive Project Design
- 2) Development and Configuration of Incentive Processing Website
- 3) EV Charger Incentive Project Marketing, Education, Outreach
- 4) EV Charging Incentive Project Administration
- 5) Technical Assistance to Target Customers
- 6) Data Collection
- 7) Administrative
- 8) Account and Funds Management

For reference to current CALeVIP projects administered by CSE on behalf of the CEC please visit <https://calevip.org/>.

Should the CEC select to fund the 2021 Alameda County CALeVIP program, EBCE and CSE will work to finalize the scope of work and agreement. Much of these details will be influenced by the tentatively approved Pillar Requirements described above, and their associated implementation details. Staff will provide regular updates to the Board throughout 2020 as EBCE ramps up to a 2021 CALeVIP program launch.

Alameda County CALeVIP Program Benefits

To address the impacts of transportation and goods movement, which represents the largest contributor of greenhouse gas emissions (“GHG”) and criteria air pollutants in California, an accelerated and comprehensive transition from gasoline and diesel-powered internal combustion engine (“ICE”) vehicles is needed.⁹

EBCE recognizes that the pathway to reducing these impacts is to increase sustainable trips - those made by transit, bicycling and walking - while simultaneously electrifying the remaining vehicles operating on Alameda County’s roads and highways. By enabling wider EV adoption through greater charger availability, CALeVIP will be an important factor in achieving a transition to EVs that improves human health, achieves climate goals and creates local economic development opportunities in Alameda County.

Health Benefits

As the geographic center of the San Francisco Bay Area, Alameda County connects the region with an extensive freeway network of almost 140 miles on six Interstates and four state routes. These freeways provide critical mobility for millions of commuters each day and are some of the most heavily used and congested roads in the Bay Area. Alameda County’s freeways also facilitate the movement of more goods than any other county in the Bay Area.

Daily more than 42 million miles are traveled on this network representing almost one-quarter of all regional travel. In turn, Alameda County’s residents are also disproportionately exposed to some of the highest levels of air pollution in the Bay Area.¹⁰

⁹ California’s 2017 Climate Change Scoping Plan

¹⁰ [Alameda County Freeway System Fact Sheet \(2018\)](#)

Gasoline and diesel-powered ICE vehicles produce smog-forming pollutants such as nitrogen oxide, as well as other air pollutants harmful to human health including particulate matter, carbon monoxide and sulfur dioxide.¹¹ EVs produce clear health benefits by offering zero exhaust emissions at street level, leading to cleaner and healthier communities, with particular benefits to the most vulnerable who tend to live close to highways, interstates and major roadways.

Greenhouse Gas Emission Reductions

By enabling wider EV adoption through greater charging availability, CALeVIP could be an important factor in providing significant GHG emission reductions that help EBCE’s local government partners achieve their Climate Action Plan goals. As shown on Table 2, charging infrastructure deployed through a 2021-2024 CALeVIP program could serve an estimated 35,000 new EVs by 2026 and result in 183,787 metric tons of annual carbon dioxide reductions.

Table 2. EV Projections, GHG Reductions and EBCE Load Growth

Year	2020	2022	2024	2026	2028	2030
Electric Vehicles	35,358	42,489	53,188	70,293	112,469	197,429
Growth Rate	10%	11%	12%	25%	31%	-
Cumulative New Vehicles		7,425	17,830	34,935	77,111	111,977
Emissions Reduction (Metric Tons)		39,062	93,800	183,787	405,665	589,084
Additional EBCE Load (MWh)		32,626	78,344	153,504	338,822	492,019
Additional Revenue (\$)		\$3,262,579	\$7,834,416	\$15,350,371	\$33,882,247	\$49,201,935

Local Economic Benefits

Historically EVs have tended to have a higher upfront cost compared to traditional ICE vehicles. However, many new models when paired with incentives are bringing EV options at or close to cost parity with gasoline and diesel-powered vehicles. Additionally, the used EV market is growing as early adopters come off their leases. These EVs, often originally priced above \$30,000, now start around \$6,000 for a model that is typically only three or four years old with under 40,000 miles. Whether new or used, EVs have a lower annual operating cost when compared to ICE vehicles. The CALeVIP program could bring potential economic benefits to Alameda County drivers from both fuel cost and maintenance savings.

The CALeVIP program requirements also stipulate that the installation of networked chargers in public places will shift charging to occur generally during the day when prices are low and when solar capacity is available. This will help EBCE reduce electric supply costs by reducing the amount of EV’s that are charging in the evening when electric supply costs are higher. This

¹¹ U.S. Department of Energy. <https://www.energy.gov/eere/electricvehicles/reducing-pollution-electric-vehicles>

will also help reduce GHG emissions, maximize vehicle miles traveled on EBCE’s clean electricity and save drivers money.

In addition to the other benefits noted above, transitioning more drivers and fleets to EVs is a revenue growth opportunity for EBCE through increased electrical load. As shown on Table 2, the approximately 35,000 new EVs estimated to be served by new charging infrastructure from CALeVIP by 2026 is expected to increase annual load by approximately 153.5 GWh and annual revenue by \$15.3M (e.g., a full return on investment of EBCE’s \$14.5M CALeVIP incentive co-funding).

As previously described, EBCE will leverage \$1.5M from a fiscal year 2020 Local Development budget allocation to own L2 and DCFC infrastructure. EBCE will leverage CEC CALeVIP incentives to reduce project costs and maximize the impact of EBCE’s investment. As the owner of charging infrastructure EBCE will generate additional revenue through the California Air Resources Board’s Low Carbon Fuel Standard Credit (“LCFS”) program. Through this program credits are generated for the use of electricity as a transportation fuel and then sold. LCFS revenue generation potential is not currently reflected on Table 2.

Finally, in March 2020 the CEC determined that fuel providers were an essential service that were to remain open during the state’s COVID-19 response. Among the list of legacy fossil fuel providers was EV chargers, and all elements of the fuel supply chain.¹² Because there is such a significant need for critical EV charging infrastructure in Alameda County, CALeVIP could be an important factor in stimulating the economy and creating much needed local jobs. These opportunities include but are not limited to sales, project design and engineering, electrical upgrades, installation, and operations and maintenance of charging infrastructure.

Fiscal/Policy Impact

Policy Summary

The recommended actions support the goals and priorities of EBCE’s Local Development Business Plan. Investment in an Alameda County CALeVIP program also supports EBCE’s local government partner’s Climate Action Plan goals while supporting the states goals to improve air quality, combat climate change and reduce petroleum use.

Cost Summary

1. Total Program Costs: \$15,515,000
2. Cost Elements of Agreement/Contract:
 - a. Program Incentive Payments: \$14,500,000
 - b. Center for Sustainable Energy Service Fees: Not to exceed \$1,015,000
 - i. 7% of total EBCE co-funding incentive funds

EBCE will utilize \$1.5M from a fiscal year 2020 Local Development budget allocation to own L2 and DCFC infrastructure. The CEC’s investment in Alameda County CALeVIP incentives will be leveraged.

¹² <https://www.energy.ca.gov/news/2020-03/state-clarifies-fuel-providers-are-open-business-essential-services-during-covid>

The total estimated fiscal impact is based on the estimated number of customer applications and timing to install charging infrastructure. The CEC is also aware that entities like EBCE operate on an annual budgeting cycle and will allocate funds accordingly. Projected program expenditures by fiscal year are as follows:

Fiscal Year	Estimated Expense	Description
2020-2021	\$3,878,750	Initial program launch service fees including marketing and operating costs + incentive payments
2021-2022	\$3,878,750	Program incentive payments to customers + service fees;
2022-2023	\$3,878,750	Program incentive payments to customers + service fees
2023-2024	\$3,878,750	Program incentive payments to customers + service fees
2021-2024	\$15,515,000 (not to exceed)	Total Program Costs

Source of Funding

All program costs will be funded through Local Development.

Attachments:

- A. Resolution authorizing participation in the California Energy Commission’s 2021 Round of the California Electric Vehicle Infrastructure Project (CALeVIP) in Alameda County and authorizing the Chief Executive Officer to execute an agreement with the Center for Sustainable Energy to provide project administration for electric vehicle charging incentives as CALeVIP
- B. Appendix Documents
- C. CALeVIP presentation

RESOLUTION NO. R-2020-__

A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE EAST BAY COMMUNITY ENERGY AUTHORITY APPROVING PARTICIPATION IN THE
CALIFORNIA ENERGY COMMISSION'S 2021 ROUND OF THE CALIFORNIA ELECTRIC
VEHICLE INFRASTRUCTURE PROJECT (CALeVIP) IN ALAMEDA COUNTY, AND
AUTHORIZING THE CHIEF EXECUTIVE OFFICER TO EXECUTE AN AGREEMENT WITH THE
CENTER FOR SUSTAINABLE ENERGY TO PROVIDE PROJECT ADMINISTRATION FOR
ELECTRIC VEHICLE CHARGING INCENTIVES AS PART OF CALeVIP IN AN AMOUNT NOT TO
EXCEED \$15,515,000 OVER FOUR YEARS

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, On July 18, 2018, the Board approved the Local Development Business Plan (“LDBP”) and budget. The LDBP identifies a series of local development early actions, including transportation electrification, and outlines and defines a series of policy principles and metrics to measure the impact on Alameda County.

WHEREAS, supporting electric vehicle (“EV”) charging infrastructure is an important component to accelerate EV adoption, reducing greenhouse gas emissions, improving the local economy, and increasing EBCE load; and

WHEREAS, EBCE submitted a required letter of intent (“LOI”) to the California Energy Commission, attached hereto as “Exhibit A” to attract the State-funded California Electric Vehicle Incentive Project (“CALeVIP”) to Alameda County; and

WHEREAS, CALeVIP, which is funded by the California Energy Commission and implemented by the Center for Sustainable Energy, provides incentives for EV charger installations and works with local lead co-funding partners to develop and implement projects that meet current and future regional EV needs for Level 2 and DC fast charging; and

WHEREAS, the LOI requested \$15-33 million from the California Energy Commission and committed EBCE to approximately \$16 million over a four (4) year period beginning in 2021 to expand and accelerate the deployment of Level 2 and DC Fast Chargers throughout Alameda County; and

WHEREAS, in July 2020 the California Energy Commission will announce the candidates selected to be a CALeVIP program area and receive State investment for EV charging infrastructure incentives in 2021; and

WHEREAS, EBCE has been identified as an especially strong candidate by the California Energy Commission and has commenced negotiations with the Center for Sustainable Energy on the core terms of an agreement for project administration to avoid delays in the deployment of EV charging infrastructure incentives should Alameda County be selected as a CALeVIP program area; and

WHEREAS, the Board desires to further engage with the Center for Sustainable Energy to solidify EBCE's commitments to the CALeVIP program in the event Alameda County is selected as a program area in July 2020, which will ensure that the deployment of the agreed upon EV charging infrastructure incentives can begin as quickly as possible in 2021.

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

Section 1. Upon the selection of Alameda County as a program area under the California Electric Vehicle Infrastructure Project, the Board hereby approves EBCE's participation in the California Electric Vehicle Infrastructure Project.

Section 2. Upon the selection of Alameda County as a program area under the California Electric Vehicle Infrastructure Project, the Board hereby approves a co-funding contribution to the California Electric Vehicle Infrastructure Project investment program in Alameda County, in an amount not to exceed a total of \$15,515,000 over four years, and \$3,878,750 per year.

Section 3. Upon the selection of Alameda County as a program area under the California Electric Vehicle Infrastructure Project, the Board hereby authorizes the Chief Executive Officer to execute an agreement with the Center for Sustainable Energy for the deployment of electric vehicle charging infrastructure incentives pursuant to the terms of that agreement, and in an amount not to exceed \$15,515,000 over four years or until such funds are depleted, provided that any such agreement is approved as to form by the General Counsel.

Section 4. The CEO is further authorized to execute any clarifying or clerical changes to an any agreement executed in accordance with this resolution, provided that such changes are reviewed by General Counsel.

ADOPTED AND APPROVED this 20th day of May, 2020.

Dan Kalb, Chair

ATTEST:

Stephanie Cabrera, Clerk of the Board

September 16, 2019

Brian Fauble
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Subject: California Electric Vehicle Infrastructure Project (CALeVIP)

Dear Mr. Fauble:

The East Bay Community Energy Authority (EBCEA) is a Joint Power Authority public agency located within Alameda County (County), formed in December 2016 for implementing a community choice aggregation program, which has been named East Bay Community Energy (EBCE). Member agencies of EBCE include eleven municipalities as well as the unincorporated areas of the County itself, which have elected to allow EBCE to provide cleaner electric generation service at lower rates within their respective jurisdictions.

Approved in 2018, EBCE's Local Development Business Plan (LDBP) provides a comprehensive framework for accelerating the development of clean energy assets within the County. The LDBP identifies priority strategies, programs, and mechanisms to accelerate the integration of local distributed energy resources like electric vehicles (EV) and supporting charging infrastructure in ways that enhance EBCE's long-term stability and reliability as an agency the community will depend on for years to come.

Today there are over 26,000 EVs in operation throughout Alameda County and that number will need to grow to 80,000 to meet the State's goal of 1.5 million zero emission vehicles (ZEV) on the road by 2025. The County has been identified by the CEC as a high need area for the deployment of EV charging infrastructure to meet these goals.

Therefore, EBCE is pleased to submit this Letter of Intent that it will, in good faith, work with the California Energy Commission (CEC) and the CALeVIP implementer, Center for Sustainable Energy (CSE), through the months of July 2019 to July 2020 to develop the framework of a regional EV charging infrastructure incentive project under the CALeVIP program.

The EVI-Pro modeling tool estimates that to meet the state's 2025 ZEV goal a low-end investment of approximately \$26,233,500 is required in Alameda County for Level 2 and Direct Current Fast Charging (50% and 30% of need respectively). EBCE appreciates the state's consideration of all levels of investment and respectfully requests the CEC evaluate making an investment that will address 50% of the low-end need for both eligible charging technologies.

EBCE is committed to amplifying the CEC's impact and will provide an additional \$4,000,000 per year for four (4) years (e.g., \$16,000,000 total) towards CALeVIP. EBCE will also consider and act on a funding agreement in 2020 so that the CEC may rely upon EBCE's funding commitment in finalizing the 2021 CALeVIP project roadmap. Finally, EBCE is working to identify additional regional stakeholder investments and will provide the CEC and CSE timely updates on new funding contributions as they are confirmed.

Accelerating transportation electrification in collaboration with our member agencies and partners is a priority for EBCE. We respectfully request the CEC include Alameda County in the 2021 funding allocation at the levels noted in this Letter of Intent under CALeVIP and appreciate your consideration of our ambitious collective efforts.

Sincerely,



Nick Chaset
Chief Executive Officer
East Bay Community Energy



February 25, 2020

Mr. Nick Chaset, Chief Executive Officer
East Bay Community Energy
111 Broadway Street, Floor 5
Oakland, CA 94607

Dear Mr. Chaset: *Nick*

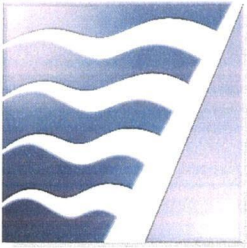
Thank you for your response to the 2021 CALeVIP Partnership Engagement request for information. We appreciate East Bay Community Energy's interest in CALeVIP and commitment to California's goal of reaching 1.5 million zero-emission vehicles on our roads by 2025.

We invite you to continue working with us at the California Energy Commission (CEC) and with the CALeVIP implementer, the Center for Sustainable Energy (CSE). Phase II of the Partnership Engagement Process is a preliminary design phase, which we expect to conclude by May 2020. Although the CEC cannot guarantee your project will continue into Phase III, we pledge that CEC and CSE staff will work cooperatively with you to design a potential 2021 CALeVIP project. CSE will contact you with specific instructions to begin the Phase II Preliminary Design process.

Please let me or Brian Fauble at the CEC (brian.fauble@energy.ca.gov, 916-654-3974) know if you have any questions. We look forward to working with you.

Sincerely,

Kevin Barker
Deputy Director
Fuels and Transportation Division



**BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT**

ALAMEDA COUNTY

John J. Bauters
Pauline Russo Cutter
Scott Haggerty
Nate Miley

CONTRA COSTA COUNTY

John Gioia
David Hudson
Karen Mitchoff
(Secretary)
Mark Ross

MARIN COUNTY

Katie Rice

NAPA COUNTY

Brad Wagenknecht

SAN FRANCISCO COUNTY

VACANT

Shamann Walton
Tyron Jue
(SF Mayor's Appointee)

SAN MATEO COUNTY

David J. Canepa
Carole Groom
Davina Hurt

SANTA CLARA COUNTY

Margaret Abe-Koga
Cindy Chavez
(Vice Chair)
Liz Kniss
Rod G. Sinks
(Chair)

SOLANO COUNTY

James Sperring
Lori Wilson

SONOMA COUNTY

Teresa Barrett
Shirlee Zane

Jack P. Broadbent
EXECUTIVE OFFICER/APCO

February 4, 2020

Brian Fauble
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Subject: California Electric Vehicle Infrastructure Project (CALeVIP)

Mr. Fauble,

The Bay Area Air Quality Management District (Air District) is submitting this letter of strong support for the application by East Bay Community Energy (EBCE) to have CALeVIP funding allocated to Alameda County in 2021.

The Air District is committed to increasing electric vehicle (EV) adoption to reduce emissions of criteria pollutants and greenhouse gases in the San Francisco Bay Area. In 2013, the Air District published the EV Readiness Plan setting EV adoption goals of 110,000 EV's by 2020 and 247,000 by 2025. The Air District's 2017 Clean Air Plan has set a longer-term goal of transitioning at least 90 percent of the Bay Area's fleet to zero-emission vehicles (ZEV) by 2050.

To support local and state ZEV goals, the Air District will continue to administer incentives through the *Charge!* Program. *Charge!* provides funding to purchase and install new publicly available Level 1, Level 2 and DC fast charging stations. Availability of both Air District, CEC and EBCE funds will enable stakeholders throughout Alameda County to deploy the significant amount of charging infrastructure necessary to transform the market for ZEVs.

The Air District collaborates closely with Community Choice Energy organizations across the region to align and leverage efforts including vehicle and infrastructure investments and we are excited to further advance this work in coordination with California Energy Commission and EBCE. We appreciate your close consideration.

Sincerely,

Anthony Fournier
Technology Implementation Officer

Connect with the
Bay Area Air District:





CALeVIP and EBCE

PRESENTED BY: Jessie Denver

DATE: May 20, 2020

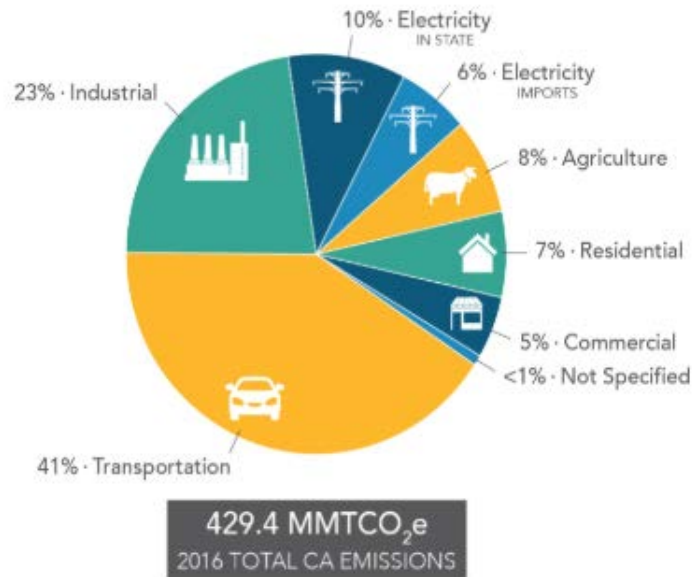
Agenda

- Intro
- Market Primer
- CALeVIP Program
- EBCE and CALeVIP

Introduction: CALeVIP

- CA Electric Vehicle Infrastructure Project
- EV charger incentive program to meet regional gaps/needs
- Meet state goals
- Funding: California Energy Commission
- Requires a co-funding partner

Note: San Joaquin County has a CALeVIP program in place currently that customers in the City of Tracy can access



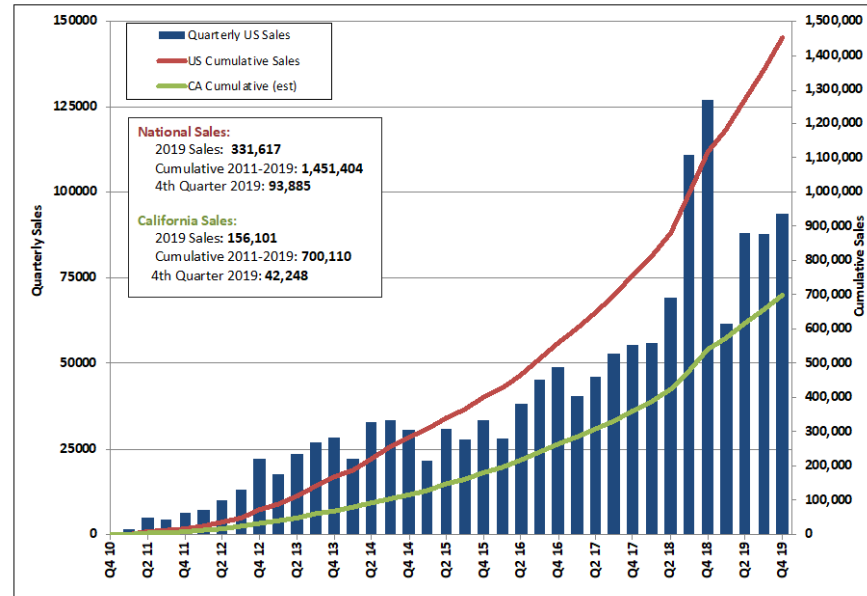
Introduction: State Goals

Executive Order B-48-18

- 5M Zero Emission Vehicles x 2030
 - Battery Electric Vehicles
 - Plug-in Hybrid EVs
 - Fuel Cell EVs
- 2025 Milestones
 - 1.5M ZEVs
 - 250,000 EV Chargers
 - Level 2 & DC Fast
- Alameda County
 - 2020: 35,000
 - 2025: 60,000
 - 2030: 200,000



Quarterly Sales of Electric Cars



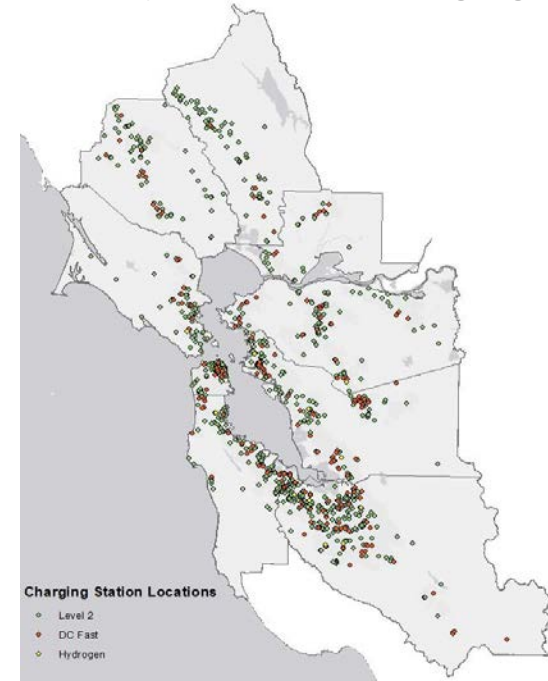
Note: CA sales fluctuate between 45- 50% of national sales. Sales are now reported by quarter and not by month.
Reference: www.hybridcars.com and www.insideevs.com

Q4 2019 Data Update.
Posted February 24, 2020




Market Primer: Barriers to EV Adoption

1. Too Expensive: 51%
2. Unable to charge away from home: 48%
3. Unable to charge at home: 30%

Publicly Available Charging



Market Primer: EV Charging 101

KNOW YOUR EV CHARGING STATIONS		
 <p>AC Level One</p>	 <p>AC Level Two</p>	 <p>DC Fast Charge</p>
<p>VOLTAGE 120v 1-Phase AC</p>	<p>VOLTAGE 208V or 240V 1-Phase AC</p>	<p>VOLTAGE 208V or 480V 3-Phase AC</p>
<p>AMPS 12–16 Amps</p>	<p>AMPS 12–80 Amps (Typ. 32 Amps)</p>	<p>AMPS <125 Amps (Typ. 60 Amps)</p>
<p>CHARGING LOADS 1.4 to 1.9 kW</p>	<p>CHARGING LOADS 2.5 to 19.2 kW (Typ. 7 kW)</p>	<p>CHARGING LOADS <90 kW (Typ. 50 kW)</p>
<p>CHARGE TIME FOR VEHICLE 3–5 Miles of Range Per Hour</p>	<p>CHARGE TIME FOR VEHICLE 10–20 Miles of Range Per Hour</p>	<p>CHARGE TIME FOR VEHICLE 80% Charge in 20–30 Minutes</p>

Source: UtahEV.org

CALeVIP: 2021 Program

- \$50M for Program Year 2021
- 3-4 regions will be selected
- Non-competitive
- **3 Variables in Selection**
 1. EVI-Pro Analysis
 - Alameda County #1 on gap/need list
 2. Partnership & Co-Funding
 - EBCE
 3. AB 1236 Compliance

Variable 1: Identifying the Gaps

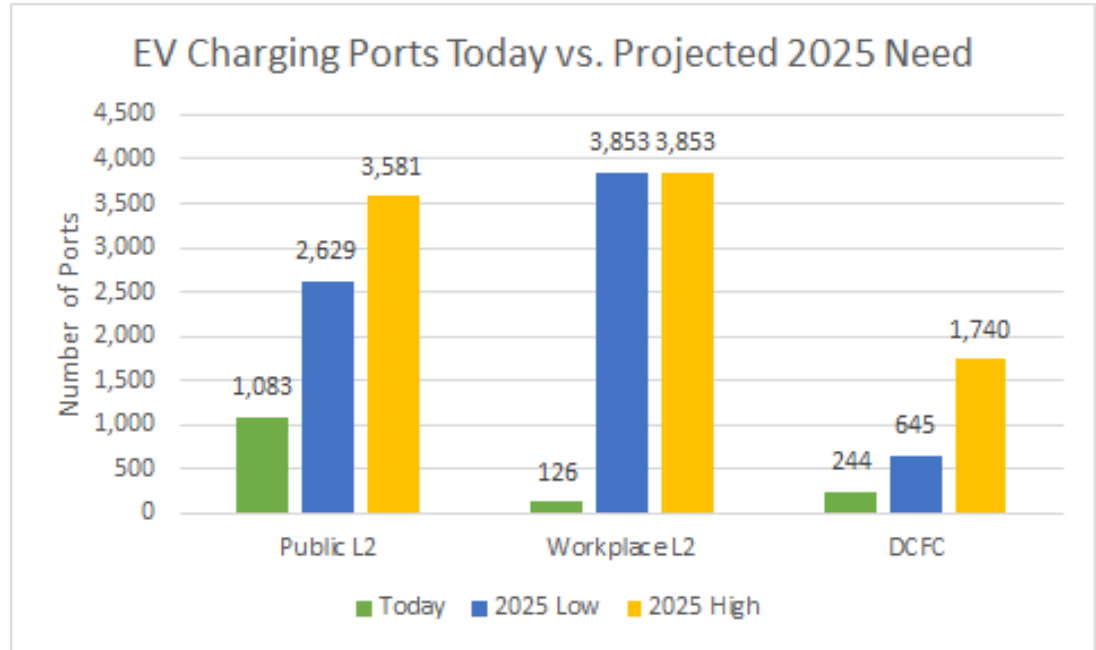
Level 2

- Multi-family, schools, hospitals, public facilities, fleets, workplaces
 - **NA: Single family homes**

DCFC

- Commercial/retail, gas stations, public facilities and more
- Must be public & open 24/7

Alameda County Gaps are Significant



Source: EVI Pro

Variable 2: Co-Funding Partner

- Match funding: CEC & EBCE
 - At least 1:1
 - EBCE Request to CEC: \$15-\$33M
 - EBCE Letter of Intent: \$16M
 - Revised to \$14.5M (over 4 years)
 - Will allocate \$1.5M from FY 20 budget to EBCE owned L2 & DCFC
- Benefits
 - Aligns with EBCE & City/County air quality & climate goals
 - One-time opportunity for Alameda County to leverage CEC investment
 - Incentives cover range of customer costs
 - Load & revenue growth opportunity
 - Local economic development
 - Experienced Program Administrator
 - Center for Sustainable Energy
 - Fee: 7% of co-funding (\$1,015,000)
 - Website management, customer service, application & incentive processing, outreach & education, etc.

CEC + EBCE: Funding the Gap

Workplace + Public L2 (Low gap)

- Need: 6,400+
- Existing: 1,209
- **Low gap: 5,200+**
- % addressed via **CEC CALeVIP Investment**: 50% of gap
 - **Quantity L2: 2,633**

Multi-family L2: (upper estimate): Need 7,000+

Public DCFC (Low gap)

- Need: 645
- Existing: 244
- **Low gap: 400+**
- % addressed via **CEC CALeVIP Investment**: 30% of gap
 - **Quantity DCFC: 145**

EBCE's co-funding will double the impact / close more of the gap!

- Incentives
- EBCE owned assets (\$1.5M FY 20 budget allocation)



Source: MCE

CEC + EBCE: Local Benefits

Emission Reductions + Load & Revenue Growth

Year	2020	2022	2024	2026	2028	2030
Electric Vehicles	35,358	42,489	53,188	70,293	112,469	197,429
Growth Rate	10%	11%	12%	25%	31%	-
Cumulative New Vehicles		7,425	17,830	34,935	77,111	111,977
Emissions Reduction (Metric Tons)		39,062	93,800	183,787	405,665	589,084
Additional EBCE Load (MWh)		32,626	78,344	153,504	338,822	492,019
Additional Revenue (\$)		\$3,262,579	\$7,834,416	\$15,350,371	\$33,882,247	\$49,201,935

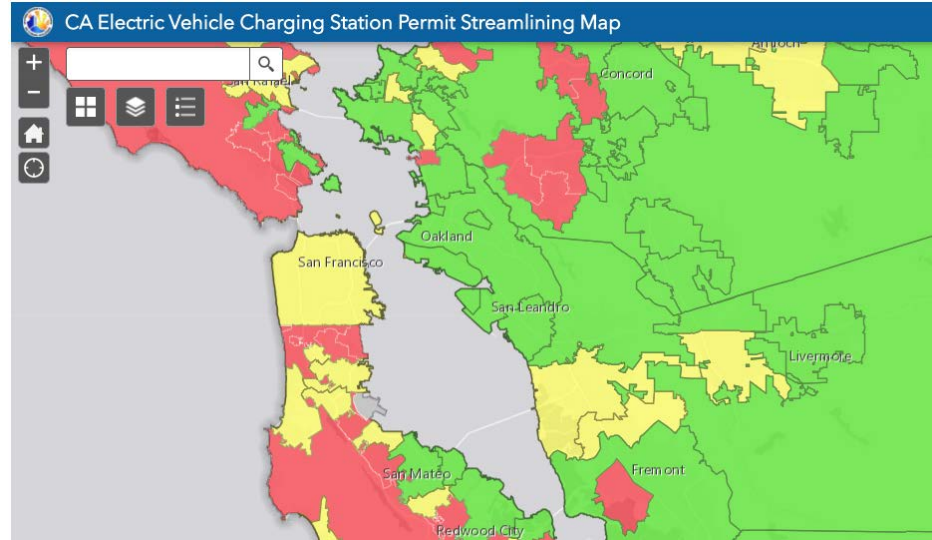
CALeVIP Co-Funding Partner Examples

- CALeVIP has funded approx. \$50 million in regional projects
 - Fresno County, San Joaquin County, LA & Orange County, Sacramento County
- Other CCAs have also committed to co-fund CALeVIP programs

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

Variable 3: AB 1236 Compliance

- Streamline EV Charging Infrastructure Permitting
- Required for all 2021 CALeVIP programs
- EBCE technical assistance to City/County partners
- Gov. Office ZEVe Award



Source: GO_BIZ AB1236 Compliance Map

CALeVIP Timeline

- 2019: Potential partners identified by CEC
- 2019: Letter of Intent signed w/non-binding funding commitment
 - EBCE: \$16M
- March 2020: Project customization due
- **May 2020: Pencils down – SOW, budget & agreement**
- **June/July 2020: CEC selects 2021 projects**
- **August 2020: Public workshop & comment period starts**
- 2021: Program launch

CALeVIP Public Workshops

Proposed Incentive Levels

Power Level	General Market Rebate	DAC/LIC Rebate
6.2 kW or greater (Level 2)	\$4,500 per connector or 75% of project costs, whichever is less	See Adders
50 kW – 99.99 kW (DCFC)	\$50K or 75% of the total project cost, whichever is less	\$60K or 75% of the total project cost, whichever is less
100 kW + (DCFC)	Up to \$70K or 75% of the total project cost, whichever is less	\$80K or 75% of the total project cost, whichever is less
Level 2 Adders		
MUDs	Up to \$1,000 per connector	Up to \$500 per connector for DAC/LIC site

- Affordable MUD adder (\$) for properties outside DAC/LIC TBD/pending
- MUD “hotspots” = DCFC funds required to be implemented geographically - % TBD/pending

EBCE Staff Recommendation to Board

- Approve EBCE's participation in 2021 CALeVIP program
- Approve EBCE co-funding for incentives: \$14.5M
- Approve EBCE to enter into an agreement with CSE to manage and administer CEC & EBCE funds for CALeVIP
 - Program admin fee: \$1,015,000