

DOCKETED

Docket Number:	21-TRAN-03
Project Title:	Zero Emission Vehicle Infrastructure Barriers and Opportunities
TN #:	241396
Document Title:	East Bay Community Energy (EBCE) comments in response to ZIP workshop
Description:	N/A
Filer:	System
Organization:	East Bay Community Energy (EBCE)
Submitter Role:	Public Agency
Submission Date:	2/3/2022 4:57:58 PM
Docketed Date:	2/3/2022

*Comment Received From: Paul D. Hernandez
Submitted On: 2/3/2022
Docket Number: 21-TRAN-03*

East Bay Community Energy (EBCE) comments in response to ZIP workshop

Please see the revised document submitted by EBCE, to replace the former document, which contained minor typos. Please remove the previous document and replace it with the attached.

Thank you,

-Paul D. Hernandez

Additional submitted attachment is included below.



Date: February 3, 2022

To: California Energy Commission
Re: Docket No. 21-TRAN-03
Submitted via electronic commenting system to Docket 21-TRAN-03

Re: Comments of East Bay Community Energy on California Energy Commission's Workshop on the Zero-Emission Vehicle Infrastructure Plan

IN THE MATTER OF: The Zero-Emission Vehicle Infrastructure Plan; Docket No. 21-TRAN-03; RE: Staff Workshop on the Zero-Emission Vehicle Infrastructure Plan

East Bay Community Energy (EBCE) is pleased to provide these comments in response to the workshop on the Zero-Emission Vehicle Infrastructure Plan (ZIP), held Thursday, January 20, 2022. EBCE provides these comments based on our extensive experiences as the default Load Serving Entity (LSE) for Alameda County and EBCE's initiatives focused on deploying EV charging infrastructure in alignment with regional, statewide, and national objectives.

Introduction

EBCE secures electrical energy and manages energy-related climate change programs, including Transportation Electrification (TE), on behalf of our Joint Power Authority (JPA) member communities' residents and businesses. As the nonprofit public power provider and default LSE, EBCE delivers electricity with higher renewable energy content at a reduced cost to customers through the incumbent investor-owned utility's transmission and distribution system (PG&E).¹ Since EBCE's 2018 launch, two additional cities in Alameda County (Newark and Pleasanton) have joined the JPA along with the City of Tracy in San Joaquin County

EBCE's current TE initiatives include:

- **Alameda County CALeVIP.** EBCE is partnering with California Energy Commission (Energy Commission) to distribute \$17.3 million to incentivize the deployment of publicly accessible Level 2 and Direct Current Fast Chargers. Equity and access for renters in

¹ Assembly Bill 117 (Stat. 2002, ch. 838, codified at Public Utilities Code Section 366.2).

multifamily housing requirements were prioritized, and the program launched December 1, 2021, with demand rapidly outstripping supply;

- **Zero-Emission Medium-Duty/Heavy-Duty Goods Movement.** EBCE is leading a 2-year Energy Commission-funded project to develop a Blueprint that will help plan for future ZEV freight and first-to-last mile market development activities in our service territory. EBCE is also providing targeted MD/HD goods movement stakeholders with free technical assistance that includes fleet electrification assessments and a rebate application concierge service. CALSTART is EBCE's technical consultant and partner;
- **EBCE-Owned Direct Current Fast Charger Hubs.** EBCE is building 40 to 50 DCFC hubs in its service area over the next 10 years. Phase I Projects will include projects in Oakland, Livermore, and Piedmont. Phase II Projects may include Berkeley, Hayward, San Leandro, Fremont, Dublin, and Oakland;
- **EBCE and PG&E Vehicle-to-Grid Integration (VGI) Project.** EBCE is working on a pending commercial goods movement VGI pilot with PG&E who is leveraging EBCE's MD/HD efforts including outreach to target stakeholders;
- **Municipal Fleet Electrification Technical Assistance Program.** EBCE is providing free technical assistance to develop municipal fleet electrification plans for its JPA members and providing these local government partners with a Charging-as-a-Service product;
- **Brownfield Revitalization.** Through a U.S. EPA grant, EBCE is conducting feasibility assessments of brownfields in our service area for fast-charging hub revitalization (light and MD/HD use cases), supported by onsite solar and battery energy storage systems where applicable.

Based on these localized and community-driven efforts, which are rooted in regional data analysis and expertise, EBCE provides the following feedback, for potential integration into the ZIP.

Comments

Hydrogen for light-duty vehicles

To maximize greenhouse gas (GHG) emissions reduction from the hydrogen sector, EBCE encourages Energy Commission to prioritize green hydrogen projects, which would be generated from renewable energy (RE) resources. Such initiatives would align with existing state law requirements for RE content (e.g., Senate Bill 1505), and encourage the use of the Low Carbon Fuel Standard program (through which hydrogen with 40% RE can earn credits). Focusing on green hydrogen will also support wider initiatives to lower methane emissions consistent with state policy drivers (e.g., Senate Bill 1383) and federal commitments like the

U.S. Methane Emissions Reduction Action Plan.² In this regard, EBCE encourages Energy Commission to work with stakeholders that have committed to delivering 100% decarbonized hydrogen to the mobility markets by 2030,³ to actualize this strategy. EBCE intends on working with local hydrogen producers to explore the prospect of generating green hydrogen within our service territory.

Charging and hydrogen for medium-and heavy-duty vehicles

EBCE is pleased that Energy Commission is soliciting feedback on MD/HD infrastructure initiatives. EBCE shares insight into the regional blueprint (discussed earlier), which is intended to help bolster MD/HD infrastructure growth within EBCE's service area. EBCE specifically encourages the ZIP to reference EBCE's efforts as an initiative underway that is intended to help accelerate the MD/HD ZEV transition.

EBCE's service area is among the most strategic trade locations with connections to regional, state, national, and international markets. Alameda County provides the majority of fundamental goods movement infrastructure in Northern California, including the Port of Oakland (Port) and Oakland International Airport (OAK). This ecosystem is key to the County's economy with 30% of employment coming from goods movement-dependent industries.⁴ It also includes diverse elements of the supply chain – from local deliveries, to electronic components inputs serving the tech industry, to Central Valley produce that utilizes the County's infrastructure as an agricultural export gateway. In total, 32% of all goods movement by weight (36% by value) in the nine-county San Francisco Bay Area (Bay Area) has an origin or destination in Alameda County or uses the international gateway infrastructure.⁵



Project Summary. By several measures, the Bay Area is one of the most important gateways for international, domestic, and interregional trade in the U.S. The Port is the 5th busiest container port in the U.S., and OAK moves 1.5 million tons of air freight annually.⁶ While each of these hubs 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 – 2045.⁷

² U.S. Methane Emissions Reduction Plan; Website Access: [U.S. Methane Emissions Reduction Action Plan \(whitehouse.gov\)](https://www.whitehouse.gov)

³ Hydrogen Council; Website Access: <https://hydrogencouncil.com/en/our-2030-goal/>

⁴ Alameda CTC Goods Movement Fact Sheet (2020).

⁵ Alameda CTC Goods Movement Plan (2016).

⁶ <https://open-data-demo.mtc.ca.gov/dataset/Vital-Signs-Airport-Activity-Freight-Bay-Area/kphh-jb6a>

⁷ Website Access: <https://faf.ornl.gov/fafweb/>

To date, much of the focus on ZE goods movement has been centered on Port activities. However, Port drayage trucks are a minor source of local emissions. In 2019, the Bay Area Air Quality Management District (BAAQMD) performed a health risk assessment of emissions in West Oakland and concluded:

- Drayage truck emissions represented 2% of the total local contribution to diesel particulate matter (DPM) concentrations in West Oakland.
- Local DPM concentrations from broader Port-related sources were estimated to be 30%. These emissions are driven by *non-on road* multimodal transportation and equipment sources, which are not applicable to the scope of the CEC's MD/HD Blueprint.
- DPM emissions from **non-Port MD/HD vehicles comprised over 40% of the local DPM** (combined highway and street).
- 24% of the combined highway and street incremental local cancer risk in West Oakland is **attributable to MD/HD non-Port trucks**.⁸

An analysis of MD/HD Department of Motor Vehicle (DMV) registration and I.H.S data by EBCE supports the need to look beyond drayage trucks operating at the Port to comprehensively transition to a ZE goods movement economy. In Alameda County and the City of Tracy there are more than 45,000 **Class 3-8 vehicles registered** to businesses and independent operators. Of this, an estimated 40% are domiciled in disadvantaged or low-income communities (DAC/LIC).⁹ Many of these vehicles will recharge at facilities where they are domiciled or at third-party logistic facilities where they do business while many others will need access to convenient common fast charging yards that operate much like a wholesale gas station. These private facilities are outside of the Port's jurisdiction and planning for this infrastructure must begin today. EBCE is eager to share learnings from its MD/HD goods movement initiatives with the Energy Commission as they are gathered to help further guide the policy framework for widespread infrastructure deployment. EBCE requests that Energy Commission consider referencing this initiative in the emergent ZIP framework.

Direct current fast charging for light-duty electric vehicles

EBCE encourages Energy Commission to rethink its equity-focused strategies, specifically as it relates to channeling resources to low-and-moderate income households. Specifically, EBCE encourages Energy Commission to go beyond census tract level information to identify localized impact. To do this, Energy Commission should assess the use of more granular metrics that can help identify specific and targeted households.

While a census tract-level lens can broadly identify DACs, there may be ways to circumvent the intended investment to support low-income households. Specific to the multifamily housing sector, there may be ways to invest in market rate multifamily properties that comply with census tract level definitions (e.g., geographic location), but are not designated affordable housing and do not serve low-income residents. Conversely, affordable multifamily housing

⁸ *Owning our Air: West Oakland Community Action Plan (2019)*.

⁹ <https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/lowincomemapfull.htm>

properties located outside of DAC census tracts may fail to be fully recognized as potential investments, yet these properties serve the same low-income eligible populations as those within DACs. Not enabling affordable multifamily housing providers to have equitable access to funding, whether in or outside of DAC geographic boundaries, is inequitable. As such, EBCE encourages Energy Commission to evaluate the use of alternative identifiers, such as multifamily housing “hotspots.”

EBCE shares a successful use case for “hotspot” metrics. In 2021 EBCE and the California Energy Commission's (CEC) Electric Vehicle Incentive Project (CALeVIP) partnered to develop and co-fund the Alameda County Incentive Project (ACIP). The goal of this one-time program was to distribute funding that incentivized the deployment of publicly accessible Level 2 and DCFCs. Nearly half of Alameda County’s residents are renters, and most renters live in multifamily housing. Transitioning to EVs requires charging infrastructure near where people live. To ensure investments in fast charging infrastructure are deployed where they are needed most, EBCE created a multi-unit dwelling “hotspot” (MUD Hotspot) mapping tool.¹⁰ Development of EBCE’s MUD Hotspot mapping tool shaped DCFC incentive funding requirements. Half of the incentive budget for DCFCs were dedicated to project deployment in areas with dense concentrations of multifamily properties (MUD Hotspots) to help renters without access to home charging benefits from EVs near-term (not limited to DAC/LIC geographic boundaries).

Notably, EBCE and CEC were able to work together to integrate the use of EBCE’s data tools, to target investments consistent with these community needs as highlighted by EBCE. Moving forward, EBCE encourages Energy Commission to consider developing the “hotspot” process into a wider, state-driven effort to deploy resources more accurately to the highest-need communities.

Level 1 and Level 2 charging for light-duty electric vehicles

Recognizing the urgency to deploy EV charging infrastructure, EBCE provides the following observation with respect to Alameda County Incentive Project. Whereas Level 2 funding is still available in the program (with approx. \$2 million available as of the date of this correspondence), the program’s DCFC funding was oversubscribed within 4 minutes. As such, recognizing where there is higher demand for incentives, EBCE encourages Energy Commission to consider prioritizing DCFC funding over Level 2 funding.

With respect to MUD investments, should there be a continued focus on Level 2 charging in MUDs, there will be a need to ensure that proper technical assistance is provided. For Alameda County, approximately 90% of MUDs are 50 years or older, and as such installing EV chargers within MUDs can still trigger basic electrical capacity issues. As such, to ensure that these needs can be identified and addressed, there should be funding made available for concierge services with targeted technical assistance. EBCE has provided these services in the past in a

¹⁰ CalEVIP applicants can see whether they are located in a MUD Hotspot by visiting this link: <https://www.google.com/maps/d/u/0/viewer?mid=1liJxkT5Rgg7wdcTRpOxpIX6f0-tJjuEQ&ll=37.68066537992609%2C-121.9214665&z=10>.

technology-neutral manner and would encourage Energy Commission to maintain such a resource to support Level 2 MUD deployment.

Emerging technologies

EBCE appreciates Energy Commission's openness to receiving feedback regarding emerging technologies. EBCE encourages efforts to prioritize market-ready technologies before the focus on emerging technologies. There are immediate and pressing needs to deploy a substantial amount of market-ready EV chargers to meet our statewide goals, and as such the Energy Commission should maintain focus on accelerating this immediate need.

In this regard, EBCE encourages Energy Commission to evaluate emerging technology investments within the context of how they help accelerate these current EV infrastructure initiatives (e.g., solar, battery, vehicle-to-grid technology, others). This approach will help Energy Commission maximize the benefits of investments while remaining focused on the core goal of substantial infrastructure rollout.

Additional advisory

To maximize competitiveness while avoiding the collection of non-passing applications, EBCE encourages Energy Commission to begin to phase out first-come-first-serve programs. This includes CalEVIP. EBCE provides this feedback as a co-funder and partner within the Alameda County Incentive Project.

Conclusion

Thank you for reviewing our comments. EBCE appreciates the opportunity to provide this feedback to the Energy Commission, and encourages the integration of the concepts that we have shared into the emerging ZIP framework. Please reach out to Paul D. Hernandez, Principal Regulatory Analyst, Transportation Electrification, with any questions or for clarification (phernandez@ebce.org).

Respectfully Submitted,

-Paul D. Hernandez

Principal Regulatory Analyst, Transportation Electrification

East Bay Community Energy