



## Staff Report Item 16

**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

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### **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:**

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.

**Loan Summary**

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
Forecasted Interest Income:	\$1,245,855
Loan to Value Ratio:	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 5<sup>th</sup>, 2023.

**Attachments**

- 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; and

**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; and

**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; and

**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; and

**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.

Section 2. The loan approved pursuant to Section 1 of this Resolution is for an essential public project.

ADOPTED AND APPROVED this 19<sup>th</sup> day of April, 2023.

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Elisa Márquez, Chair

ATTEST:

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Adrian Bankhead, Clerk of the Board



APRIL 2023

# Forum Mobility - Greenville Charging Infrastructure Loan





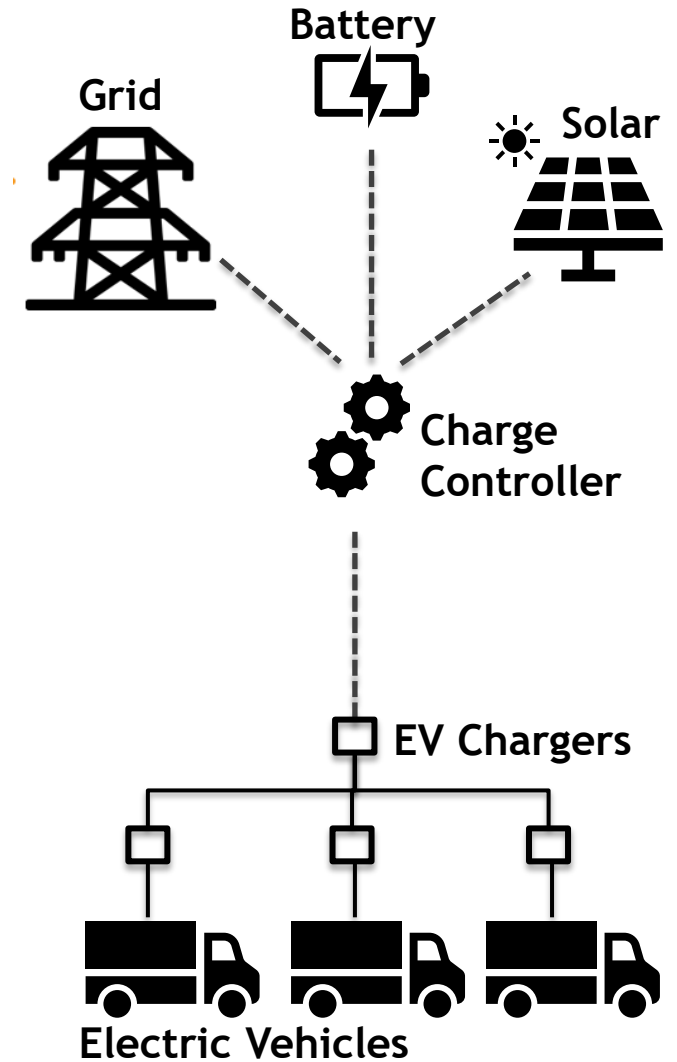
# MD/HD Charging Program Loan Overview

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:
  - Full Service – truck, charging, vehicle servicing, & software optimization – multi-year contract with known pricing
  - Charging as a Service – 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-year 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