



**Item C7
Staff Report Item 19**

TO: East Bay Community Energy Board of Directors

FROM: JP Ross, Senior Director Local Development, Innovation and Electrification

SUBJECT: Local Development Budget Update (Informational Item)

DATE: July 15, 2020

Recommendation

Receive update on Local Development Activities.

Background and Discussion

On June 17, 2020 the Board approved the Local Development budget of \$6.34M proposed by Staff. The following report describes the Local Development activities and initiatives that are currently in process and planned for the remainder of FY'21. Individual program budgets are inclusive of funds from FY'20 and FY'21 as there are programs that cross fiscal years.

Budget Overview

The following budget summary is inclusive of the approved FY'20 \$6.84M and FY'21 \$6.34 budgets. The Spent/Committed column indicates budget areas where invoices have either been paid or program funds are committed and in contract. The Planned column indicates areas where the Local Development team has planned activities that have not yet been contracted.

July '20 Local Development Committed to Date (\$000)		
Program Areas	Spent/Committed	Planned
Demand Response	(\$195)	(\$100)
Energy Efficiency	(\$500)	(\$340)
Building Electrification	(\$782)	(\$950)
Vehicle Electrification	(\$490)	(\$6,190)
Collaborative Procurement	(\$810)	(\$968)
Community Investment Fund	(\$240)	
Sponsorships/Events	(\$65)	
Capital Set Aside	(\$1,200)	
COVID-19 Relief Fund	(\$1,250)	
Sub-Total LDBP Operating Budget	(\$5,532)	(\$8,548)
Non Operational Revenue		
BAAQMD Grant	\$150	
Grants and LCFS Credits	\$750	
LDBP Operating Budget	(\$13,180)	
Additional Local Development Spending		
LDBP Staff Costs	(\$825)	
LDBP Reserve Funds - DC Fast Charging Pilot		(\$1,400)

Program Metrics and Success Criteria

Programs will be evaluated based on a set of success criteria that staff is developing in coordination with the Community Advisory Committee. Criteria include:

- Environmental Benefits of greenhouse gas and criteria pollutant emissions reductions.
- Economic Benefits of jobs created and cost savings
- Social Benefits for impacted and disadvantaged communities

Staffing

- Budget: \$825k

The Local Development team now includes four (4) full time staff. EBCE will add a fellow in the fall to augment staff and focus on Building Electrification and Energy Efficiency. Staffing costs do not come from the local development budget but are included herein as a line item for informational purposes.

Local Development Leveraging

Local development programs are able to leverage external sources of both public and private investment in Alameda County creating immediate local economic benefits and jobs. The California Electric Vehicle Incentive Program (CalEVIP) will add \$16-\$30 Million in state funded incentives for the development of EV charging infrastructure as well as private capital from developers. Current EVIP incentives are covering 57% of the total cost of EV charging, meaning that private capital is covering the remaining 43%. If the CEC provides \$20 million, then the return on EBCE's \$16 million investment will be ~400%. Heat pump water heaters have a similar return. EBCE is providing a \$1,000 incentive which will also leverage a \$1,000 BayREN incentive as well as customer investment to deliver a 400% return.

The resilience program, which will deliver solar and storage to residential and commercial customers has an even larger return. This stems from the fact that most of the investment is coming from end customers and federal tax credits. In addition, the program leverages the procurement value of Load Modification for RA, reducing the spend from the Local Development budget.

Local development investments for 4 programs, EVIP, Heat Pump Water Heaters, Energy Efficiency and the Resilience Program will result in \$140M in investment in Alameda County over the next 4 years from a \$20M investment by EBCE, a 7X return.

In addition to Local Programs, EBCE has also invested in local utility scale renewable projects like the Summit Wind project and the Oakland Clean Energy Initiative. This 57MW wind project and 47MW storage project will result in local investment and jobs in Alameda County. These two agreements will result in the local investment of over \$180 million dollars, much of which will be delivered in early years for construction of the projects.

Local Development Programs

Energy Efficiency

Developing Cost Effective Energy Efficiency Opportunities

Budget \$725,000

Timeframe: In-Process

Recurve finalized the baseline analysis of EBCE's customer data, paving the way for EBCE to move forward with designing time-based pay-for-performance pilots in our service area. In June, the EBCE Board approved an amendment to the agreement with Recurve, enabling staff to move forward with designing and delivering these pilot

programs. The Low Income Energy Efficiency RFP was released in late June with an anticipated program launch in August of this year; programs targeting residential and commercial customers with high peak energy use will roll out in early Q3 (hoping for August launch date.) The results of these pilots will inform development of an energy efficiency filing at the California Public Utilities Commission, allowing EBCE to access ratepayer funds collected from EBCE customers for the purposes of implementing energy efficiency programs.

Energy Efficiency Strategy Development

Budget \$100,000

Timeframe: In-Process

State law allows CCAs to access public purpose funding for EE programs, and several CCAs including MCE, Lancaster and Redwood Coast Energy Authority have successfully applied to administer these funds. EBCE staff evaluated the potential for applying to receive funds from the California Public Utilities Commission to implement energy efficiency programs and determined that there is significant potential budget available to support EBCE's energy efficiency programs. EBCE is currently implementing pay-for-performance pilots and hopes to leverage the data gained in these pilots to support a robust energy efficiency portfolio. EBCE anticipates soliciting support from a technical consultant in Q3 of this year, targeting a filing date of Q1 2021.

EBCE plans to submit a "petition to modify" (PTM) for CPUC Decision 14-01-033; the Decision which sets regulations for CCA energy efficiency administration. The aim of the PTM is to adjust the calculation used by the CPUC to determine the amount of funding a CCA is eligible to receive for the administration of EE programs. The current calculation, which was adopted in 2014, does not account for changes in the structure of the energy efficiency framework due to subsequent decisions. The goal of the PTM would be to provide clarity to CCAs on available budgets for programs, possibly resulting in additional funding available to implement programs. The PTM would be filed either in advance of, or concurrent to, EBCE's funding request (Q4 2020 - Q1 2021.)

Building Electrification

Reach Code Initiative

Budget \$300k - add spent

Timeframe: In-Process

EBCE has made good progress encouraging local jurisdictions to adopt Reach Codes, codes that go further than the existing State of California standards for energy efficiency in buildings (Title 24.) EBCE has been supporting cities that pursue reach codes that encourage the installation of EV infrastructure and discourage natural gas in new construction, offering technical assistance for completing these Reach Codes and offering a \$10,000 award for any City that brings a Reach Code ordinance to their governing board. Thus far, the City of Hayward and the City of Berkeley have taken action; the cities of Fremont, Emeryville, Albany, and Oakland are developing ordinances and plan to bring those to the Board by the end of 2020. The City of

Piedmont is bringing a “first of it’s kind” Reach Code that promotes EV, distributed generation, and building electrification for existing buildings to its council on July 6, 2020.

High Rise Multi-Family Technical Assistance

Budget \$67,000

Timeframe: In-Process

EBCE has offered technical assistance to developers of new high-rise multifamily buildings to promote these developers to build all-electric buildings. After several months of implementation, EBCE found that we were reaching developers too late in the process to encourage significant change to building design. EBCE staff worked with technical consultant Associate for Energy Affordability to re-design the program and is now offering webinars to mechanical engineering and plumbing firms (MEPs) that design high-rise multifamily building to teach these firms how to design all-electric. Outreach for this webinar is starting in July and the program is targeting 15 webinars of 60-180 minutes for MEP firms by the end of the calendar year.

Heat Pump Hot Water Heater Incentive Program

Budget \$550,000

Timeframe: Launched June 1, 2020

Heat Pump Water heaters are an efficient technology to heat water with electricity. Currently approximately 99% of domestic water heating is done with natural gas, and half of the gas use in homes is for water heating. EBCE has partnered with Stopwaste, MCE, CleanPowerSF, City of Palo Alto Municipal Utility, and Healdsburg Municipal Utility to offer an incentive program targeting installers of heat pumps. Through the program, an installer can qualify for a \$1,000 incentive for replacing a natural gas or electric resistance water heater with a highly efficient heat pump unit. The program is targeted to installers as approximately 85% of water heaters are replaced upon failure; offering the incentive to the installer should reduce the upfront cost of the equipment without adding additional administrative steps. EBCE has contributed \$300,000 to this program and targets the installation of 250 heat pumps; if this program is successful, EBCE has earmarked an additional \$250,000 to contribute to the program.

Induction Cooking Campaign

Budget \$360,000

Timeframe: Q3 2020

Electrification is key to responding to the climate crisis and moving away from burning natural gas in buildings. People are very attached to gas cooking and have a strong aversion to electric ranges, based on previous experience with traditional electric coil stovetops that are slow to respond and difficult to control. This emotional attachment is evident with the legal challenge to the City of Berkeley natural gas ban, which is being led by the California Restaurant Association. To address this, EBCE has developed a two-pronged approach targeting both consumer awareness as well as increasing exposure to the technology among area chefs. For the former, EBCE has developed induction cooktop lending kits, available to each of EBCE’s member

agencies, for use in outreach and to lend to customers in their service area for hands on use. This program is currently available, but uptake is delayed by concerns over potential COVID-19 transmission. To capture the chef community, EBCE is developing an induction grant program to promote the electrification of commissary kitchens, kitchens typically used by many chefs. EBCE is exploring if partial or full commissary kitchen electrification can be a cost-effective way to expose a larger number of chefs to induction cooking.

Transportation Electrification:

Municipal Fleet Electrification

- Budget \$400k
- Timeframe: In-Process

EBCE continues to provide ongoing technical assistance to four (4) member communities (Albany, Berkeley, Dublin, Oakland) to complete rapid fleet electrification assessments and plans. The goal of this project is to enable each community to have a plan on how to electrify their municipal fleets by 2030, and to approve policies in 2021 that would set them on path to achieving goal.

The City of Berkeley's plan is the first to be completed and will be presented by City staff at their July Council meeting. Albany's project is currently on hold due to COVID-19 delays. Dublin's scope of work is progressing, and Oakland project will kick-off this fall once their fleet operations team has collected new vehicle telematics data which will inform their assessment.

Each of the initial project cities has expressed interest in EBCE's technical assistance and committed to participation by deadline EBCE established Summer 2019. Since then, additional members have committed to participating as well. Remaining budget allows for Hayward and Alameda County to join this Local Development activity. Additional fleet electrification assessments and plans for EBCE's remaining member communities is TBD based on increased budget approval in the next fiscal year.

This work also connects to EBCE's collaboration with the California Energy Commission (CEC) to bring a major EV charging infrastructure program to Alameda County in 2021. Helping member communities understand where they need charging infrastructure to support municipal fleet electrification will enable them to more easily access these incentive dollars should EBCE's CALeVIP project be approved (see CALeVIP description below).

California Energy Commission Electric Vehicle Incentive Program (CALeVIP)

- Budget \$14.5M for incentives (over the next 4 years) and \$1.5M from FY20 budget for EBCE owned charging infrastructure assets
- Timeframe: In-Process

EBCE continues to collaborate with the CEC on bringing investment dollars for publicly accessible EV charging infrastructure to Alameda County in 2021 through the CALeVIP program. Alameda County is currently #1 on the CEC's charging infrastructure gap/need list of all counties or regions in the state.

In June 2020 the CEC informed EBCE that Alameda County is among the regions that the state will invest in for 2021. Based on the state's budget availability for 2021 projects the CEC's investment in Alameda County could range from \$15M-\$33M. The exact level of investment will not be known until August/September 2020.

The CEC's investment will be paired with investment from EBCE who as the lead co-funding project partner has committed to providing \$14.5M (over 4 years) to CALeVIP. This will amplify the impact of CALeVIP in our service area by providing robust financial incentives for EV charging infrastructure to meet California's mandate of 5 million ZEVs on roadways by 2030 (with 80,000 in Alameda County), and 250,000 chargers by 2025.

CALeVIP requires that 25% of the overall program budget is allocated to incentives in disadvantaged and/or low-income communities. Eligible incentive applicants include but are not limited to retail site hosts, workplaces, fleets, faith-based organizations, local governments, hospitals and more. Through CALeVIP an "adder" is available for both Level 2 and DC Fast Charging projects in these areas.

The Local Development team wanted to ensure that greater investment was being made in DC Fast Charging infrastructure that would meet the needs of renters in Alameda County generally. To do so the team mapped multi-unit dwellings (5+ units) to identify "hotspots" or areas with high concentrations of renters. This data was overlaid with the geographic boundaries of CalEnviroScreen 3.0 disadvantage communities and AB 1550 low-income census tract designation. Interstates in EBCE's service area were also mapped along with existing charging infrastructure to demonstrate the significant gap public charging accessibility that exists in these areas.

This analysis resulted in initial approval by the CEC to allocate CALeVIP incentive dollars for DC Fast Charging infrastructure in these areas. That is, when industry applicants apply for CALeVIP incentives their project must be within proximity to the multi-unit dwelling hotspots. Directing DC Fast Charging incentives through CALeVIP to meet the needs of residents who do not own their homes and commuters traveling through Alameda County (including fleets and rideshare drivers) will support increased EV adoption. In turn, this will reduce criteria air pollutants improving human health outcomes for all residents, especially those in our most vulnerable communities located along our interstate corridors. This requirement will be workshopped by the CEC for statewide public comment in the fall (tentative timeline).

In addition to the multi-unit dwelling hotspot/DC Fast Charging analysis, the Local Development team also mapped affordable multi-unit dwellings throughout EBCE's

service area. This was to demonstrate to the CEC that a CALeVIP adder for Level 2 projects in multi-unit dwellings located in disadvantage and/or low-income areas is limiting for our affordable multi-unit dwelling providers. This is because these property owners and managers serve the same residential audience whether the development is in a disadvantaged and/or low-income area or outside of it. In turn, EBCE argued these stakeholders should have equal access to this adder across their portfolio of multi-unit dwellings. This analysis also resulted in initial approval by the CEC and will be workshopped for public comment as well. The Local Development team would be happy to present this and the multi-unit dwelling hotspot analysis to the Board this fall.

EBCE will continue to work with the CEC, and their CALeVIP administrator the Center for Sustainable Energy to finalize project components and agreements the remainder of the 2020 calendar year to ensure a streamlined program launch in 2021.

Streamlined EV Charging Infrastructure Permitting - AB 1236 Compliance

- Budget \$0 - Staff Time
- Timeframe: In-Process

On January 1, 2016 AB 1236 went into effect, requiring every city and county to adopt an ordinance (by September 30, 2017) that created an expedited, streamlined permitting process for EV charging infrastructure. It also required creation of a checklist of requirements consistent with the legislature's goals and intent of AB 1236 to be posted on a city's permitting website. In California today, 82% of local governments are not in compliance with AB 1236 which in turn is slowing deployment of charging infrastructure.

Per the CEC, all new CALeVIP projects starting calendar year 2021 will require full AB 1236 compliance for EV charging infrastructure incentive funds to be distributed. In turn, EBCE began providing technical assistance to current and pending members, and the City of Alameda, to help each jurisdiction become compliant. EBCE had set a goal of streamlining the entirety of Alameda County by March 2020. Due to COVID-19 related delays, this goal has been reached in all but two communities: Albany and Newark. The Local Development team is working with City staff to ensure compliance by the end of 2020. We will also continue to coordinate with the Governor's office to update their EVCS Permit Streamlining Map as each these remaining communities ordinances and checklists are approved.

Publicly Accessible Charging Investment

- Budget \$1.4M from Local Development Reserve Funds
- Timeframe: In-process

EBCE has been in discussion with municipal partners who have interest in hosting EBCE owned DC Fast and/or Level 2 chargers. Due to COVID-19 delays, coordination with the City of Oakland's potential projects has been put on hold.

Since our last Board update, the Local Development team also began coordinating a pilot project with the City of Piedmont to deploy 3-4 Level 2 chargers on streetlights (e.g., curbside charging), as well as 1-2 publicly accessible DC Fast Charger located in their Community Hall parking lot. The City of Piedmont currently has no publicly available charging infrastructure despite its proximity the busy retail area of Grand Lake. Additionally, within 1.5 miles of Piedmont's Community Hall there are more than 100 multi-unit dwellings (5+ units) in the Grand Lake/Lakeshore area. Deploying publicly available charging infrastructure near where renters live will enable greater EV adoption by all drivers, and not just those with access at home.

This pilot project is unique as the deployment of streetlight mounted Level 2 chargers will be the first-of-its-kind in EBCE's service area. This site is also just a few blocks from businesses including a local grocery store and bank, schools and a park to ensure high utilization. Utilization data from these chargers will provide EBCE with valuable data to inform future organizational technology investments, and project siting decisions.

The pilot project was presented to the Piedmont Parks Commission on July 1, 2020, who unanimously approved recommending the City Council also support the project. EBCE will bring the project for consideration and approval in September/October. Near term, EBCE plans to issue a competitive solicitation for services that support implementation of the pilot project. Proposals/bids will be considered by EBCE who will select a vendor. EBCE will then seek project approval by Piedmont's City Council, and EBCE's Board.

The Local Development team anticipates project costs will not exceed \$200,000. EBCE will use Local Development Reserve Funds to help develop this project and then recover those funds through both Low Carbon Fuel Standard (LCFS) credits and revenue generated from the chargers. EBCE has also submitted an Alameda County Transportation Commission Transportation Fund for Clean Air (TFCA) application to leverage \$120,000 for project costs.

Finally, EBCE has kicked off work to develop an economic pro forma that will inform potential organizational investment in a network of publicly accessible DC Fast Chargers throughout our service area. Varying geographical locations and use cases will be considered. This include but is not limited to locating charging hubs near multi-unit dwelling "hotspots", and within convenient proximity to interstate on/off ramps and retail. The Berkeley based technical consulting firm Olivine is supporting this scope which will be completed Fall 2020.

Medium and Heavy-duty Vehicle Electrification

- Budget \$300k
- Timeframe: In-process

In 2019 EBCE requested and received light, medium and heavy-duty (M/HD) vehicle registration data from the Department of Motor Vehicle. EBCE plans to launch a scope

of work with CALSTART, an industry leading nonprofit organization with offices in Berkeley, in July/August to analyze this information to understand the ecosystem of M/HD vehicles in our service area. This collaborative effort will result in engaging targeted stakeholders (e.g., fleets/fleet users) in technical assistance that aims to make the transition to zero emission trucks and vans simple and cost effective. The goal of the pilot project will be to enable rapid scaling of Class 3-6 vehicle electrification, establishing EBCE's service area as first mover market in California. The Local Development team also plans to pursue grant funding opportunities with CALSTART that help achieve this goal.

Through this scope school buses in EBCE's service area will also be assessed and CALSTART will help the Local Development team develop an engagement strategy for implementation at a later date (e.g., COVID-19 delays). Finally, his collaboration also aims to help prepare fleets for pending 2021-2024 CALeVIP charging infrastructure incentive (see above).

In addition to the M/HD fleets noted above, EBCE will reconvene with its transit agency partners to identify collaborative opportunities that support their requirements under the state's Innovative Clean Transit regulation.

Statewide Vehicle Grid Integration Working Group

- Budget \$0 - Staff Time
- Timeframe: Complete

Between August 2019 and June 2020 EBCE's Local Development team engaged as an active member of the statewide joint agency VGI Working Group. The Working Group was made up of diverse representatives including the joint agencies, IOUs, CCAs (e.g., EBCE, PCE), EV manufacturers, battery manufacturers, charging network providers, advocacy and research groups, industry associations, and ratepayer interest groups. Electric vehicle grid integration (VGI) means any method of altering the time, charging level or location at which grid-connected EVs charge or discharge, in a manner that optimizes EV interaction with the electrical grid and provides net benefits to ratepayers by doing any of the following: a) increasing electric grid asset utilization; b) avoiding otherwise necessary distribution infrastructure upgrades; c) integrating renewable energy resources; d) reducing the cost of electricity supply; and e) offering reliability services.

To help realize these goals the California Independent System Operator, CEC, California Air Resources Board, and the CPUC jointly created the VGI Working Group to address VGI use cases that could provide value near term and determine how that value could be captured. The VGI Working Group was also asked to address what policies needed to be changed or adopted to allow additional VGI and vehicle to grid (V2G) use cases to be deployed in the future.

What emerged from this effort was over 300 VGI use cases that could provide value by 2022. These use cases address BGI across a range of sectors including residential,

commercial, rideshare and fleets. The use cases also address a variety of applications, approaches to control charging and/or discharging, and types of charging. Across all use cases, light, medium and heavy-duty vehicles were considered.

The Working Group built off its successful use case development to create 92 individual policy recommendations that could be implemented near term (2020-2022), medium-term (2023-2025) and long-term (2026-2030). These recommendations were separated into the following 11 categories, which will now be considered by the joint agencies, IOUs, CCAs and others for development.

#	Category
1	Reform retail rates
2	Develop and fund government and LSE customer programs, incentives, and DER procurements
3	Design wholesale market rules and access
4	Understand and transform VGI markets by funding and launching data programs, studies and task forces
5	Accelerate use of EVs for bi-directional non-grid-export power and PSPS resiliency and backup
6	Develop EV bi-directional grid-export power including interconnection rules
7	Fund and launch demonstrations and other activities to accelerate and validate commercialization
8	Develop, approve, and support adoption of technical standards not related to interconnection
9	Fund and launch market education & coordination
10	Enhance coordination and consistency between agencies and state goals
11	Conduct other non-VGI-specific programs and activities to increase EV adoption

EBCE will continue to engage in all VGI related regulatory initiatives to ensure CCAs are represented in future decision-making processes. The Local Development team will also work internally to identify actions EBCE may want to develop and implement near term. The VGI Working Group final report, and all supporting documentation can be found here: <https://gridworks.org/materials-produced-by-the-vgi-working-group/>

CPUC DRIVE OIR Proceeding: Transportation Electrification Framework (TEF)

- Budget \$0 - Staff Time
- Timeframe: In-process

Local Development staff have organized a group of Northern California CCAs to engage in this critical CPUC proceeding. Through this effort, the CPUC is developing the framework for 10-year Investor Owned Utility (IOU) transportation electrification plans that would be implemented with ratepayer dollars. The Joint CCAs have worked together to submit comments on the various sections of the TEF and have stated that the IOUs should not be the only administrators of these funds. The Joint CCAs intend to work through this proceeding to gain approval for CCAs to also become administrators of transportation electrification funding, and implementers of pilot projects. This important collaborative effort is anticipated to be ongoing for the next 1-2 years.

Low Carbon Fuel Standard Credits: Residential

- Budget \$0 - Staff Time
- Timeframe: In-process

Under the AB 32 Scoping Plan, CARB identified the Low Carbon Fuel Standard (LCFS) as one early action to reduce California's GHG emissions. The LCFS is designed to decrease the carbon intensity of transportation fuel and provide an increasing range of low-carbon and renewable alternatives (e.g., electricity), which reduce petroleum dependency and achieve air quality benefits. For using electricity as a transportation fuel, credits can be generated and claimed by various stakeholders including CCAs.

Within the LCFS regulation CCAs should be able to claim what's known as the *incremental value* of residential EV charging LCFS credits. In doing so CCAs would gain valuable LCFS credit revenue that could be reinvested into ongoing transportation electrification programs. However, the current regulation only allows for an Electrical Distribution Utility (e.g., IOU) to claim the incremental value of these credits without submitting actual metered data for a residential EV charging event. This is despite the fact that an individual residential customer may not be an IOU electricity customer (e.g., CCA customer). As currently written, CCAs are only able to gain access to the LCFS credits by submitting metered data associated with EV charging events. That means that CCAs must invest in deploying single family residential charging infrastructure if they want to claim these credits. This in turn is cost prohibitive and keeps CCAs from accessing the incremental values of these credits.

As a result, over the last 8 months EBCE and a group of northern California CCAs have been working to change the current regulation so that it allows equitable access to the incremental value of these credits without metered data. The CCAs have worked together to raise the issue to the Governor's Office who is now engaged in the conversation with CARB regarding this discrepancy.

EBCE hopes CARB will reevaluate its regulation by fall 2020 and enable CCAs to claim the nonmetered, incremental credits for the residential customers we serve. Should CARB adopt the new language proposed by the CCAs, EBCE would use the same formula the EDUs currently use to estimate electricity consumption for the incremental credit calculations and begin to book and claim these credits in 2021.

U.S. EPA Land Revitalization Grant - Alameda County Brownfields Redevelopment to EV Charging Infrastructure

- Budget \$30,000 - EPA funding goes directly to EPA technical assistance contractor (ICF); EBCE staff time \$0
- Timeframe: In-process

Alameda County's interstates experience a disproportionate amount of regional congestion, with one of the highest volumes of medium and heavy-duty truck traffic in California due to its designated freight corridors and through county commuter vehicle miles traveled. Neighboring communities along these corridors are particularly exposed to higher levels of criteria air pollutants and have increased incidences of health impacts compared to those in the Bay Area, California and the United States. Many of these neighborhoods are designated as environmental justice and/or disadvantaged

communities, and many are also designated Opportunity Zones. In addition to meeting state EV goals, these communities stand to benefit from addressing air quality induced health disparities.

In 2020 the Local Development team applied for federal technical assistance from U.S. EPA to determine the market potential to support redevelopment of the dozens of brownfields in Alameda County into DC Fast Charging hubs. EPA received dozens of applications across the U.S. and awarded 4 projects including EBCEs.

Deployment of these DC Fast Charging hubs would help achieve the goal of increasing publicly accessible charging infrastructure, brownfields infill reuse, reducing air pollutants and GHG emissions from the transportation and goods movement sector, and reducing legacy toxic exposure from brownfields to nearby neighborhoods.

EBCE is currently working with the U.S. EPA team to identify 2-3 brownfields along I-880 and determine the feasibility of redeveloping these properties into DC Fast Charging hubs to support two primary use cases: 1) commuters, including rideshare drivers and 2) light and/or medium-duty commercial fleet vehicles. U.S. EPA site selection and prioritization includes the following considerations:

- a. Site size requirements
- b. Property ownership
- c. Electric system suitability
- d. Other site-specific and location considerations:
 - Traffic volume and flow patterns
 - Neighborhood attributes (industrial, commercial, safety, convenient to residential/commercial/freeway on-off ramps, near amenities, etc.)
 - Status of environmental assessment and/or cleanup timeframe and costs

Through this technical assistance EBCE will better understand the economics of potentially redeveloping these sites for the proposed use cases. The outcome of this project will be incorporated into a larger U.S. EPA Brownfields Assessment grant application (Fall 2020), which if awarded would identify brownfield opportunities throughout EBCE's service area.

CEC's Advisory Committee for the Clean Transportation Program Investment Plan

- Budget \$0 - Staff Time
- Timeframe: In-process

Local Development staff has been appointed to the CEC's Advisory Committee for the Clean Transportation Program Investment Plan. This Advisory Committee was established to provide advice and guidance to the CEC, and to serve as a forum to consult on matters relative to developing the Clean Transportation Program Investment Plan. The Advisory Committee is composed of 34 members representing a wide range of interests in clean transportation and energy issues. EBCE is the first load serving entity and first CCA in the state to be appointed to the Advisory Committee.

Transportation Electrification Partnership

- Budget \$0 - Staff Time
- Timeframe: In-process

EBCE has become the first northern California member of the statewide Transportation Electrification Partnership (TEP). The TEP is an unprecedented partnership among public and private stakeholders to accelerate transportation electrification and zero emissions goods movement in California. EBCE's membership in the TEP is allowing the Local Development team to make connections with southern California stakeholders who also have operations in our service area, and to take best practices from the Los Angeles area and apply them in the East Bay.

The Local Development team also recently engaged with other TEP members on development of a \$150 billion federal stimulus proposal that urged Congress to make unprecedented investments in the nation's transportation infrastructure in direct response to the economic and health crisis caused by the COVID-19 pandemic. The proposal, submitted to Congressional leaders in June, calls for zero emissions vehicle manufacturing and innovation, infrastructure deployment, public and active transit, job training, high-quality workforce standards, and support for related startups and small business. The TEP proposal found that with an investment of \$150 billion in stimulus 2.3 million jobs in would be created across the U.S. in the transportation electrification sector, with 1.4 million of those jobs expected to build out charging infrastructure alone.

The TEP membership has also developed a proposal for development of a statewide EV Authority that would be tasked with coordinating the numerous transportation and goods movement electrification efforts underway by state agencies and investor owned utilities. The Local Development team also contributed to this proposal and will continue to engage with the TEP to ensure our service area benefits these and other potential developments.

Electric Carshare Pilot at Multi-Unit Affordable Housing

- Budget \$40k
- Timeframe: Planned

EBCE is continuing to collaborate with on-demand electric car share provider Envoy to co-fund deployment of charging infrastructure at multiple EAH affordable multi-unit dwelling properties. Envoy's car share program enables residents who struggle to find reliable transportation an affordable, zero emission mobility option. Envoy was awarded a grant from the CEC to develop projects in the Bay Area. However, the EAH sites in Alameda County exceeded the grants allowable per project spending limit. EBCE is leveraging the CEC's investment and providing gap funding to Envoy in the form of an additional grant to enable development of these affordable MUD projects. Our investment will establish new collaborative relationships with EAH and Envoy while providing EBCE with valuable insight on deployment of charging infrastructure in existing MUDs and charging utilization by electric car share users.

Due to COVID-19 delays project implementation is ongoing. The Local Development team will continue to monitor the projects progress throughout the remainder of 2020.

Zero Emission Off-Road Equipment - Forklift Incentive Program

- Budget \$0
- Timeframe: Completed

EBCE reviewed the applicable incentive programs that are helping with the transition to zero emission forklifts. These include EV Fleet administered by PG&E, and the State's CORE program administered by CALSTART. This analysis was to help the Local Development team to determine if gaps in funding existed, and whether EBCE should fill those gaps. EBCE has determined that significant gaps do not exist and development of an additional incentive program is not necessary.

Resilience:

EBCE is engaging in a variety of efforts to support enhanced community resilience in the face of increased Pacific Gas and Electric (PG&E) public safety power shutoffs (PSPS) events, and the ongoing threat of a major disaster (e.g., earthquake) in the San Francisco Bay Area. We are committed to investing resources that increase deployment of solar and/or battery energy storage systems (BES) to enable residents, businesses and our local government partners to retain essential power supply during a grid outage. EBCE efforts have been prioritized to focus on solutions for critical municipal facilities and our most vulnerable customers including low-income residents and disadvantaged communities (DAC), and those with electricity dependent medical conditions.

Through the initiatives described below, EBCE is addressing customer identification, outreach, technical assistance and providing procurement pathways that reduce the cost and complexity of BES systems. In turn, EBCE is in a unique position to promote other incentives like the Self-Generation Incentive Program (SGIP) to maximize participation and minimize costs of participation. With this funding our outreach efforts will amplify, enabling EBCE to reach our most vulnerable customers and the municipal and commercial organizations/businesses that serve them.

These resilience initiatives and programs are utilizing budgets from both the Collaborative Procurement and Enhanced NEM areas of the Local Development Business Plan budget. EBCE is using its purchasing power to reduce costs and providing innovative ongoing incentives to increase customer participation.

Critical Public Facilities Resilience

- Budget \$300k (BAAQMD Grant Funded)
- Timeframe: In-Process

Over the last 12-months EBCE has worked through a Bay Area Air Quality Management District Climate Protection grant to: 1) identify critical municipal facilities designated to serve the community in time of emergency/grid outage, 2) assess the potential for solar and battery energy storage system deployment, 3) size resilience systems, and 4) develop a procurement pathway that reduces the cost and complexity of project development.

The scope of this analysis is not limited to Alameda County as PCE is also project partner. In turn, the project portfolio has analyzed nearly 500 sites in Alameda and San Mateo counties which has been a significant coordination effort in a short period of time.

In 2020, EBCE and PCE issued a joint Request for Information to gain industry insight on potential procurement pathways that could be led by the CCAs on behalf of our local government partners. The results of the RFI are being assessed by the CCAs in real time. EBCE will develop recommendations for our local government partners regarding procurement next steps (e.g., RFP) and engage Board leadership in these individual local discussions.

Resource Adequacy and Resilience Procurement

- Budget estimated incremental cost of RA~\$300k/yr will start FY'21-FY'31)
- Timeframe: In-Process

EBCE has chosen 2 vendors, Sunrun and Enel X to partner with to delivery resilience to customers through PSPS events as well reduce EBCE's peak demand and Resource Adequacy obligation through Load Modification. EBCE will engage in co-marketing with our partners to encourage single and multi-family residential and commercial customers to participate. The goal is to deliver 10MW of Load Modification, resulting in over 1000 solar and storage systems delivered to our customers over the next 2 years. In order to support vulnerable communities, EBCE requires at least 20% of the installations be for low-income residents, medical baseline customers, and residents and businesses located in DACs. EBCE and partners will strive to enroll a much higher level of vulnerable communities in the program. This partnership will also deliver jobs and workforce development opportunities for Alameda County residents. Both Sunrun and Enel are committed to robust local hiring and apprenticeship commitments to ensure jobs are created equitably for our community.

CEC coordination to develop Load Modification

- Budget \$0 - Staff time
- Timeframe: In-Process

Medical Baseline Resilience Program

- Budget \$500k
- Timeframe: In-Process

In total 10,000 EBCE customers are on a PG&E Medical Baseline rate, which indicates they require special notification by the IOU when power shut offs may occur. During the October 2019 PG&E PSPS events, more than 1,000 of EBCE's 50,000 accounts affected by the grid outage were Medical Baseline customers. However, this total may not accurately capture all households with individuals that rely on electricity-dependent medical equipment as registration in PG&E's Medical Baseline program is not comprehensive.

In addition, Alameda County local public health and emergency management officials are seeking to develop a systematic way to rapidly identify and assist these residents during prolonged grid outages or disaster. There is broad acknowledgment among stakeholders that understanding the individual needs of these residents and scoping resilient, life-saving risk mitigation solutions would be useful for emergency planning and preparedness efforts. To that end, in November 2019 EBCE's Board of Directors approved a Resolution authorizing \$500,000 in funding to develop the Program for customers with electricity dependent medical equipment. The approved funding was intended to support completion of two primary activities during fiscal year 2020.

Comprehensive Plan: Collaborate with local public health and emergency management agencies, private sector medical providers, and a technical consultant to:

1. Determine appropriate pathways for identifying and conducting outreach to medical baseline and electricity dependent ("MB/ED") residents.
2. Record and map all MB/ED residents in Alameda County.
3. For residents in Tier 3 or Tier 2 HFTDs and/or households that experienced PSPS shut-offs, document individual MB/ED equipment needs, equipment electricity load, emergency preparedness solutions in place, and unique site conditions.
4. Scope technology readiness and cost, pair solutions with individual needs.
5. Where in-home solutions are not feasible, scope alternative risk mitigation plan with partner stakeholders.
6. Present findings, lessons learned and Comprehensive Plan on how and cost to scale solutions to EBCE Board.

Pilot Project: EBCE will partner with a major healthcare provider to identify the highest-risk electricity dependent patients (e.g., children) in the nine county Bay Area. EBCE will work with fellow CCAs who provide electrical service to these households, and the private sector, to co-fund and deploy solar + storage systems in advance of potential 2020 PSPS events. The goal of this pilot is to 1) deliver resilience solutions to high-risk children, 2) establish a standard operating procedure with medical institutions for conducting outreach and providing resilience solution to vulnerable customers.

Due to COVID-19 impacts, Alameda County staff coordinating with EBCE on the comprehensive plan development had to shift their focus to supporting community response efforts. In turn, some aspect of this scope of work have been delayed. EBCE

and its project consultant have made progress on tasks 2,4 and 5 in an effort to keep the project on track.

Additionally, medical institution staff engaged in the pilot project also had to focus solely on supporting their patient community. This includes social services staff EBCE planned to engage in conducting outreach to potential pilot participants. As a result, this scope of work is on hold. EBCE and medical institution representatives are in contact and will continue to adjust the project timeline to meet their needs.

Municipal RFI for Solar + Storage on Public Agency Buildings (non-critical sites)

- Budget \$0 - Staff Time
- Timeframe: Planned

Many public agency buildings have existing rooftops and parking lot areas without solar energy systems and/or existing solar energy systems that would benefit from the inclusion of battery energy storage. However, there are structural, electrical and financial consideration associated with deploying projects at scale across EBCE's service area. Additionally, adding energy storage systems to an existing solar installation is complicated due to existing contractual arrangements between the system owner and site host.

To support efficient development of resilience in our public agency customers, EBCE issued the previously mentioned RFI in 2020 to determine the best approach to retrofitting existing rooftop solar systems with storage. The results of the RFI are currently being assessed. It is likely that a subsequent RFP will not include the broader portfolio of public facilities that are not "critical". That is, the first RFP will focus on critical facilities and work to standardize both systems and contracts across multiple sites.

EBCE will take lessons learned from that pending RFP, and the Resource Adequacy + Resilience procurement to scope a separate procurement initiative that would address "all other" public facilities in our service area. Local Development staff is planning for this scope to be a 2021 initiative that will take a minimum of 12-months to coordinate (pending no further delays due to COVID-19).

Connected Communities

- Budget \$180k
- Timeframe: In-Process

EBCE has several zip codes with a large proportion of customers either living without power, or under threat of losing power. Eleven zip codes in EBCE's service area have average disconnection rates ranging from 10% to 15%, compared to PG&E's rate of 5.4%. In addition to low FERA enrollment overall in northern California, there is evidence of CARE under-enrollment in these zip codes: Close to 50% of the population lives below twice the Federal Poverty Level, but on average just over 30% are enrolled in CARE. Although EBCE never disconnects a customer for non-payment, we are developing a program to identify the causes of disconnections and test programs

to reduce disconnection rates. EBCE is developing a model to help predict which customers are at risk of disconnection as well as partnering with UC Berkeley to develop and test interventions that can help customers pay bills and avoid being disconnected. EBCE will be holding focus groups to talk with customers about the challenges they face paying their bills and identify solutions to reduce non-payment and the risk of disconnection.

DAC Green Tariff (DAC-GT)/Community Solar Green Tariff (CS-GT)

- Budget \$0- Paid by CPUC public purpose funds
- Timeframe: In-Process

The CPUC has initiated a program to allow CCAs to develop community solar projects to deliver solar energy to CARE customers living in Disadvantaged Communities (DACs). EBCE has been allocated 6.78MW of solar that can be developed within EBCE territory and delivered to CARE customers living in DACs at a 20% discount to the already discounted (by 30%) CARE rates. EBCE will develop solar projects for this program and use enrollment in the additional discount as one of the tests to reduce disconnection rates in the Disconnections Program (above). EBCE will file the Tier 3 Advice Letter to the CPUC with the plan and budget for this program in Q3 and will plan to issue a solicitation for project development within Alameda County as soon as the CPUC issues an approval of the plan, likely at the end of 2020.

EBCE is working with PG&E and the CPUC to identify the process to serve DACs in Tracy and Newark (Pleasanton does not have any DACs as currently defined in CalEnviroScreen 3.0). PG&E has already issued a solicitation for its DAC-GT/CS-GT program and staff is coordinating to minimize the chances of PG&E enrolling customers or systems in communities that will soon be served by EBCE.

Community Investment Fund

Community Innovation Grants

- Budget \$240k
- Timeframe: In-Process

In June of 2018 EBCE initiated the first Community Innovation Grant solicitation. The 2019 Community Innovation Grants were for non-profit and community-based organizations to develop projects designed to deliver energy-related social and environmental benefits to residents of Alameda County. Six community-based organizations were awarded \$40,000 to support local programs for a total of \$240k. Staff has been coordinating with the recipients and tracking progress. The projects are in process, with some delays and modifications due to COVID-19 with expected completion by December 2020.

Fiscal Impact

Budget has been approved, there is no additional fiscal impact

Attachment

- A. LDBP Mid-Year update presentation



LOCAL DEVELOPMENT UPDATE

PRESENTED BY: The Local Programs Team

DATE: July 15, 2020



LOCAL DEVELOPMENT SPEND (FY'20+'21)

- Budget total is cumulative from \$6.84M FY'20 and \$6.34M FY'21 budgets
- Local development has commenced across all program areas
- Resilience initiatives are utilizing funds from Collaborative Procurement and Enhanced NEM LDBP Budgets
- Local development provided \$1.25M for COVID response funding in 2020

July '20 Local Development Committed to Date (\$000)		
Program Areas	Spent/Committed	Planned
Demand Response	(\$195)	(\$100)
Energy Efficiency	(\$500)	(\$340)
Building Electrification	(\$782)	(\$950)
Vehicle Electrification	(\$490)	(\$6,190)
Collaborative Procurement	(\$810)	(\$968)
Community Investment Fund	(\$240)	
Sponsorships/Events	(\$65)	
Capital Set Aside	(\$1,200)	
COVID-19 Relief Fund	(\$1,250)	
Sub-Total LDBP Operating Budget	(\$5,532)	(\$8,548)
Non Operational Revenue		
BAAQMD Grant	\$150	
Grants and LCFS Credits	\$750	
LDBP Operating Budget	(\$13,180)	
Additional Local Development Spending		
LDBP Staff Costs	(\$825)	
LDBP Reserve Funds - DC Fast Charging Pilot		(\$1,400)

Local Development Leverage

Local Development programs and local Alameda County utility scale investments deliver stimulus and job creation to Alameda County

- Programs like EVIP, Heat Pump Water Heater incentives, the Resilience Program and P4P EE incentives leverage public and private capital to amplify EBCE program funding
- EBCE's \$20M program budget for the above 4 programs will deliver >\$160M in local investment over the next 4 years
- EBCEs local procurement in Summit Wind and OCEI will also deliver local stimulus and construction jobs
- Summit Wind and OCEI contracted value are over \$180M

Connected Communities

EBCE has several zip codes with disconnection rates between 10%-15%, where customers are without power or under threat of losing power.

- Connected communities pilot will explore how to minimize arrears and the threat of disconnection in our most vulnerable customers
- Data and Analytics team is building and refining a disconnections prediction tool
- Will complete focus groups with CARE customers and customers in arrears to understand challenges in paying bills and potential solutions
- Will test interventions such as CARE enrollment, discounted electricity, payment education and solar PV systems as mechanisms to aid in bill payment
- Partnering with UCB to study arrears and use randomized studies to identify impacts of interventions and solutions

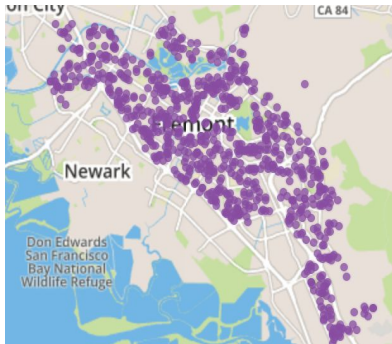
DAC/GT and CS/GT Program

EBCE has been allocated 6.78MW of solar capacity through the CPUC Disadvantaged Community Green Tariff (DAC/GT) and Community Solar Green Tariff (CS/GT) program to deliver solar electricity to CARE customers living in DACs

- this will allow EBCE to provide a 20% discount to CARE rates to ~2,500 CARE customers
- will file advice letter in Q3
- plan to issue a solicitation to develop local solar by Q1'21 based on CPUC approval of advice letter
- Evaluating how to approach the enrollment of Tracy and Newark CARE customers into EBCEs

Targeted Energy Efficiency

Using EBCE customer data and the Recurve platform to identify and deliver EE / flexible load to the right customers



Avg. Summer Load Shape, Day Type = all



Energy Efficiency Program Strategy

- EE pilots launched this year will provide learning lessons for larger, scaled programs
- CCAs are eligible to receive funding from ratepayer pool for energy efficiency programs
- Plan to file with the California Public Utilities Commission Q1 2021



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REACH CODES

	Energy Efficiency	All-Electric Preferred	All-Electric (R)	All-Electric (NR)	Natural Gas Ban	All-Electric retrofit	Electric Vehicle (EV)	PV	Energy Storage
Albany	EXPLORING (CALGreen)	EXPLORING					EXPLORING	EXPLORING (NR)	
Berkeley		PASSED			PASSED		PRE-EXISTING	PASSED	
<u>Dublin</u>		EXPLORING					EXPLORING		
Emeryville		EXPLORING (NR)	EXPLORING				EXPLORING	EXPLORING	
Fremont			EXPLORING	EXPLORING		EXPLORING (readiness)	PRE-EXISTING, EXPLORING	PRE-EXISTING, EXPLORING	EXPLORING
Hayward		PASSED					PASSED	PASSED	
Oakland			EXPLORING	EXPLORING			PRE-EXISTING		
Piedmont		EXPLORING				EXPLORING	EXPLORING	EXPLORING	

HEAT PUMP WATER HEATER REBATES

- EBCE launched a program offering installers \$1,000 for heat pump water heaters installed in EBCE customer homes
- Leverages the BayREN Home+ program for an additional \$1,000 to the homeowner
- Regional program – participation across seven bay area counties
- Targeting 250 installations



INDUCTION COOKING CAMPAIGN

Commissary Kitchen Electrification

- Resistance to induction from chef community
- Need to get chefs experience with cooking on induction
- Commissary kitchens often have 20-60 chefs who use the space
- Accompanied by consumer awareness and induction cooktop lending programs

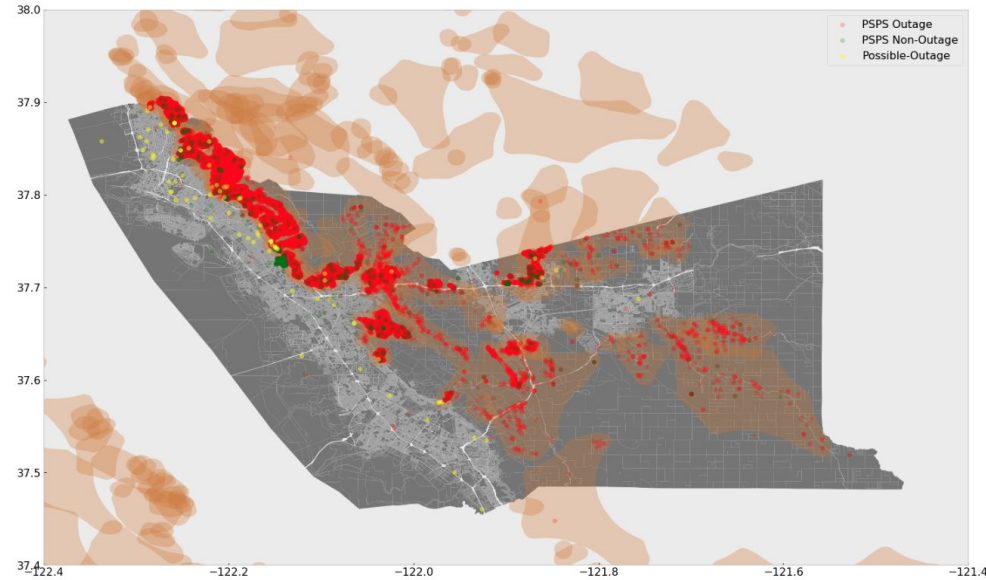


TECHNICAL ASSISTANCE FOR ALL-ELECTRIC MULTIFAMILY DEVELOPMENTS



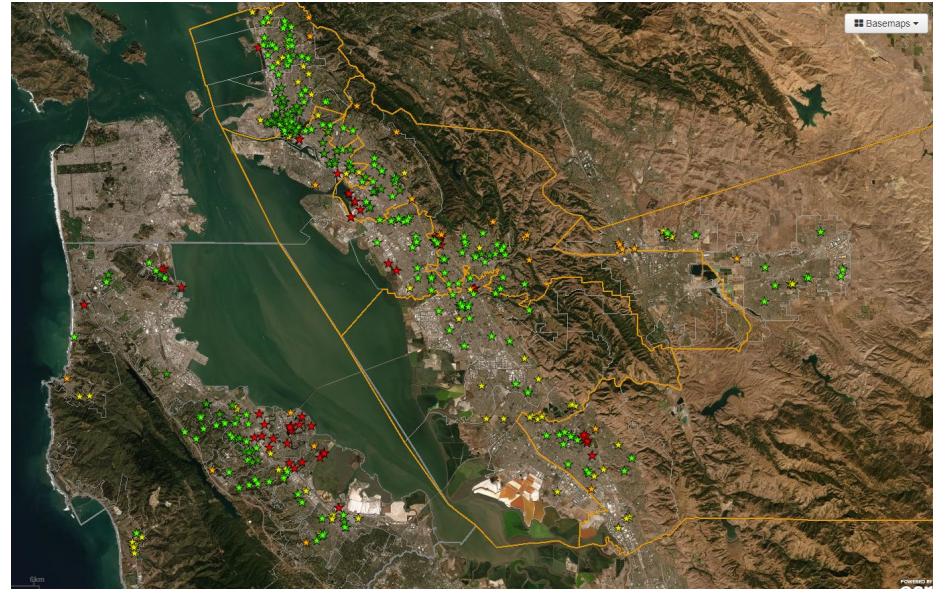
COMMUNITY RESILIENCE + RA

- Issued RFP for solar + storage systems + 10MW RA
- Plan to deploy ~2000 residential and 100s of commercial systems to increase resilience
- All systems will provide backup power
- Prioritizing frontline communities and requiring local workforce
- Customer engagement strategy to be developed with vendor(s)
- Program launch July, 2020



CRITICAL FACILITIES RESILIENCE

- Solar + Storage systems at municipal facilities sized for critical loads
- EBCE/PCE issued RFI to industry
 - gained insight on procurement pathways & role of CCAs
- Next steps:
 - Internal discussion on next steps in-process
 - External stakeholder coordination
 - RFP: end 2020 / early 2021



MEDICAL BASELINE PROGRAM

1. Pilot (on hold)
 - Solar + Storage on homes of electricity dependent pediatric patients of UCSF Benioff Children's Hospital
 - COVID-19 delays
2. Medical Baseline Comprehensive Plan (in-process)
 - pre COVID-19 County Public Health Dept. coordination
 - Consultant team reviewing resources to understand common durable medical devices, their load, and duration of use
 - Pairing with backup energy storage solutions
 - Developing budget for potential incentive program consideration in 2021
 - Next steps: County staff coordination to connect EBCE w/ local emergency response reps (city level)

2021 ALAMEDA COUNTY CALeVIP PROGRAM

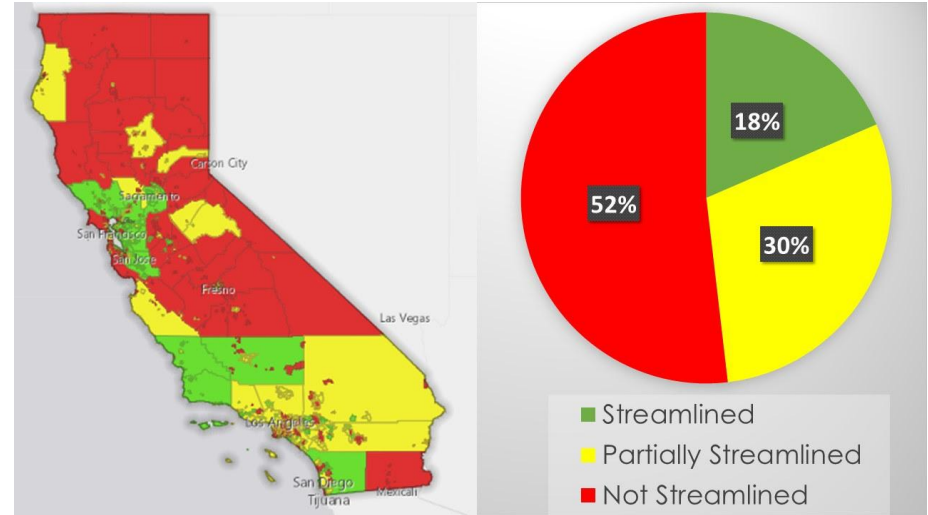
CEC incentive program for publicly accessible EV chargers;
EBCE is co-funding partner

- Eligibility: Level 2 & DC Fast Charge use cases except SFH
- CEC investment confirmation (\$) Aug/Sept.
 - \$15-\$30M requested
 - Incentives available: 2021-2024
- 25% of budget must be spent in DAC/LICs
- Unique EBCE data analysis
 - MUD hotspots/DCFC hubs & affordable MUD adder
- Next steps
 - Ongoing EBCE/CEC/CSE coordination
 - Public workshops (fall 2020)



STREAMLINED EV CHARGING PERMITTING

- AB 1236 (2016) requires cities/counties to adopt Ordinance & create checklist by 2017
 - Most non-compliant in 2019
- 2021 CALeVIP: compliance required
- EBCE technical assistance w/goal of countywide compliance by 3/2020
 - Goal nearly met!
 - COVID-19 delays
 - Two cities outstanding:
Albany & Newark



Governor's Office AB 1236 Tracking Map

MEDIUM & HEAVY-DUTY (M/HD) EVs

- Work w/CALSTART Drive to Zero Initiative
 - GOAL: “1st mover market” for urban delivery & Class 3-6 zero-emission vehicles
 - DMV registration data
 - Develop M/HD technical assistance pilot(s)
 - Relationship building: Port, 3PL, fleet users, fleet operators
 - Prep technical assistance to school districts
 - Prep pipeline for CALeVIP \$
- Support EBCE’s transit agencies: ICT Regulation
- External funding opportunities
 - ex. CEC M/HD Blueprint
 - ex. EPA Brownfields Assessment



CHARGING INFRASTRUCTURE DEPLOYMENT

- EBCE owned assets: leverage 2020 budget, LD Reserve Fund, external \$ to build charging network
 - ex. TFCA, CALeVIP
 - Recover revenue via electricity sales + LCFS credits
- In Process
 - Economic proforma development: DCFC & workplace charging
 - Piedmont Pilot: DCFC + L2 streetlight chargers
 - Ongoing municipal fleet electrification technical assistance
 - Berkeley's plan = complete (Council review July 2020)
 - Adding Alameda County & Hayward to SOW
 - ZE Carshare charging in affordable MUDs with Envoy
 - delayed - COVID-19

REGULATORY ENGAGEMENT

- CPUC DRIVE OIR Proceeding
- Transportation Electrification Framework & Plans
- CARB LCFS
- CCA equal access to the incremental value of residential LCFS credits
- Joint Agencies Vehicle Grid Integration Working Group
- SGIP (HPWH, storage, potential EVs)
- DAC Green Tariff
- CEC Load Modification for Resource Adequacy
- CPUC EE Petition to Modify

THANK YOU