



CAC Item C5
Staff Report Item 13

TO: East Bay Community Energy Board of Directors

FROM: JP Ross, Vice President Local Development, Innovation and Electrification

SUBJECT: Local Development Budget Update (Informational Item)

DATE: January 20, 2021

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 and into FY'22. 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 committed.

January '21 Local Development Committed to Date (\$000)		
Program Areas	Spent/Committed	Planned
Demand Response	(\$195)	(\$100)
Energy Efficiency	(\$840)	
Building Electrification	(\$1,482)	(\$190)
Transportation Electrification	(\$5,519)	(\$1,161)
Collaborative Procurement	(\$885)	(\$893)
Community Investment Fund	(\$240)	
Sponsorships/Events	(\$65)	
Capital Set Aside	(\$1,200)	
COVID-19 Relief Fund	(\$1,250)	
Sub-Total LDBP Operating Budget	(\$11,676)	(\$2,344)
Non Operational Revenue		
BAAQMD Grant	\$150	
Grants and LCFS Credits	\$750	
LDBP Operating Budget	(\$13,120)	
Additional Local Development Spending		
Local Development Staffing Costs	(\$860)	

Figure 1: Local development budget FY20 & FY21

Local Program Benefits Evaluation

The Local Development Business Plan (LDBP) outlined a set of Performance Metrics for EBCE. Staff is currently working on a Metrics Initiative with the Community Advisory Committee to evaluate the LDBP metrics and confirm their relevance and EBCE's ability to accurately capture them. Benefits will be measured using both modeled and empirical data.

Category	Performance Metric (Units)
Direct Annual Jobs Created	Full-time Equivalents (FTE's)
Labor Wage Impacts	Direct Job Wages (\$'s/hour)
Fiscal Impacts	Costs (\$'s spent), Cost Savings (\$'s saved), Surplus Revenue (\$'s/year)
Customer Cost Savings	\$'s saved (Total and by Customer Class)
Local Energy Generation	GWh's Generated per Year
GHG Emission Reductions	Metric Tons of CO2e (MTCO2e) reduced, GHG Intensity (MTCO2e/MWh)
Criteria Air Pollution Reductions	Metric Tons (MT) of Criteria Pollutants reduced

Figure 2: Overview of Performance Metrics for estimating and assessing LDBP impacts using the tools and frameworks developed for the LDBP.

Figure 2: LDBP Local Benefits

Benefits will be modeled using the Scenario Analysis Tool that was delivered with the LDBP. This model allows staff to evaluate local benefits of different programs. The

Scenario Analysis tool is an IMPLAN based model that uses local economic and environmental assumptions to estimate benefits including local job creation, local wages, greenhouse gas (GHG) and air quality emissions reductions that are difficult to measure directly through available data sources.

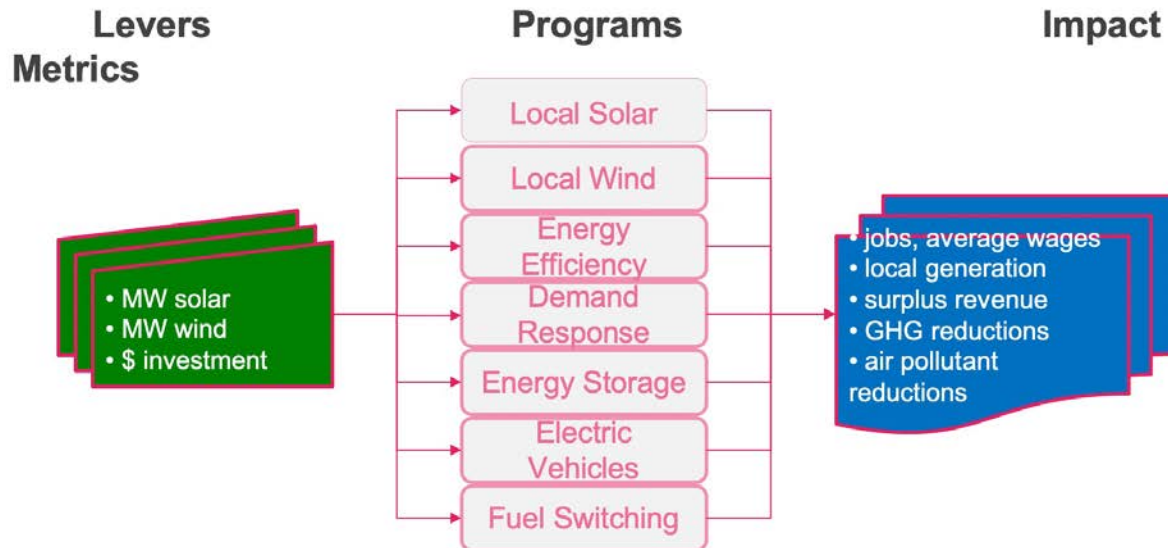


Figure 3: Scenario Analysis tool inputs and outputs

Staff is currently modifying the Scenario Analysis tool to evaluate the current portfolio of approved Programs. Once that is completed staff will report back to the Board on the results.

Additional metrics related to specific customers and customer types will also be captured and measured through EBCE's new customer relationship management (CRM), Salesforce. The CRM will allow EBCE to record program activity and benefits to individual customers and accounts, as well as track the performance of program enrollments. This is particularly important as we work to deliver programs and benefits to CARE customers, low income and disadvantaged communities and while ensuring that renters are also participating in our programs.

INITIAL SALESFORCE METRICS

Programs	Measures	Customer Attributes
Resilient Home	kW Solar	CARE/Medical Baseline
Critical Facility S+S	kW/kWh Storage	DAC/LI Census tract
Heat Pump Water Heaters	#/type of Appliances	Single Family / Multi-Family / Commercial / Municipal
EE: Low-Income P4P	EE measures	Owner/Renter
EE: Commercial P4P	Expected kWh savings	Customer Satisfaction
EE: Residential P4P	Measured savings	
Connected Communities	Customer bill savings	
Solar Program & DAC-GT / CS-GT	Enrollment / Installation date	

Figure 4: Program participation metrics to be tracked in Salesforce

Salesforce CRM has tools available out of the box that will allow staff to track program enrollment and participation rates. We want to make sure that our program adoption targets are being met so that community benefits are achieved.

- Allow single view of program enrollments and tracking to budgets
- Customizable for program specific metrics
 - DAC/LI/CARE enrollment
 - Installations to date
 - Projected/Measured Energy savings

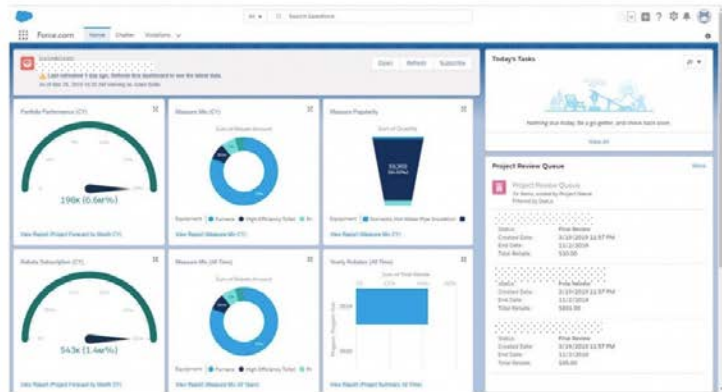


Figure 5: Sample Salesforce reporting dashboard

New Communities

The Programs team looks forward to collaborating with our new City partners to evaluate how best to enroll new community in EBCE Programs. The addition of new communities offers a great opportunity to enroll customers in current programs like Resilient Home, Energy Efficiency pilots and Heat Pump Water heater incentive. There are also great opportunities to pursue medium and heavy duty goods movement throughout existing and new communities.

Staffing

- Budget: \$860k

The Local Development team now includes four (4) full time staff and one Climate Corp fellow. In fall of 2020, EBCE welcomed a fellow via the Climate Corps program, Noah Cordoba, who has been focusing on Building Electrification and Energy Efficiency. Staffing costs do not come from the Local Development budget (with the exception of the Climate Corps fellow, who has been funded from the Building Electrification budget line item); the staffing budget is 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 \$14.5 million in state funded incentives for the development of electric vehicle (EV) charging infrastructure in Alameda County in 2021. This public investment will be complemented by private capital from developers as well. For example, CALeVIP incentives from other programs are currently covering 57% of the total cost of EV charging infrastructure, meaning that private capital is covering the remaining 43%.

EBCE is also the sole co-funding partner to the CEC for the 2021 Alameda County CALeVIP program. The Board approved co-funding budget over the next 4 years for EV charging incentives is currently \$16 million. EBCE will allocate \$3 million in Year 1 for CALeVIP. The remaining budget will be allocated to a standalone EBCE incentive program for EV charging infrastructure that will launch in early 2022. It is anticipated that CALeVIP incentive funding will be over-subscribed quickly when the program launches in 2021, which is on a first-come-first-serve basis. A standalone EBCE incentive program will enable flexibility in program design including setting incentive levels to ensure ongoing and sustained private capital investment in EBCE's service area. This is critical to ensuring publicly accessible charging infrastructure is rapidly deployed to meet the states new mandate established in September 2020 through Executive Order (EO) N-79-20. EO N-79-20 requires that 100% of in-state sales of new passenger cars and trucks are zero-emission by 2035 - a target which would achieve more than a 35% reduction in GHG emissions and an 80% improvement in oxides of nitrogen emissions from cars statewide. This increased demand for charging infrastructure will further enhance the return on EBCE's \$16 million investment in incentive programming.

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 Resilient Home program which is delivering solar and battery energy storage systems to residential customers, has an even larger return. This stems from the fact that most of the investment comes from end customers and federal tax credits. In

addition, the program leverages the procurement value of Load Modification for Resource Adequacy, reducing the spend from the Local Development budget.

Local Development investments across four programs, CALeVIP, Heat Pump Water Heaters, Energy Efficiency and Resilient Home will result in approximately \$140 million in investment in Alameda County and the City of Tracy over the next 4 years from a \$20M investment by EBCE, a 7X return.

The incoming Biden administration has a strong climate policy and had proposed \$2T for climate and clean energy initiatives. EBCE will continue to monitor opportunities to pursue state and federal funding opportunities that will increase local development initiatives.

In addition to Local Development programs, EBCE has also invested in local utility scale renewable projects like the Summit Wind project and the Oakland Clean Energy Initiative (OCEI). The Summit Wind project is 57MW of new electricity generation and OCEI is 47MW of battery energy storage. Each project will result in local investment (over \$180 million) and jobs in Alameda County, 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

The pay-for-performance pilots are now all launched and have been enrolling customers. A brief update on the status of the three pilots is below.

Low-income peak management pilot: EBCE contracted with OhmConnect and the Rising Sun Center for Opportunity in August of this year. Using the Recurve analytics dashboard to facilitate customer targeting, EBCE launched an email campaign to inform CARE customers of the free program. The customer cohort was split into two groups; one was offered the Rising Sun energy efficiency service, and the other was offered the OhmConnect peak management program. Customers who participated in the Rising Sun program were vetted for potential benefit from the OhmConnect platform, and were offered a free smart thermostat for enrolling with OhmConnect. Customers who enrolled directly in OhmConnect were offered free automated control devices (for example, a wifi-enabled plug which goes between the electrical outlet and an appliance and can respond to signals to shed load during times when the electrical grid is overtaxed.) Those customers who connected their utility account with the OhmConnect platform, enabling participation in automated peak management events, were additionally offered a one-time \$10 bill credit on their EBCE bill. Results of the outreach are presented in the table below. EBCE staff are now working on developing the measurement strategy to understand the impacts of

the program, and will be looking at the impact in energy usage between the Rising Sun versus OhmConnect programs as well as the difference from the customers who participated in both the Rising Sun and OhmConnect program versus those who only participated in one; EBCE will be working with Recurve to perform this analysis.

Treatment Group	Customers Contacted	Customers Enrolled in the Program	Customers Connected Accounts	Conversion Rate
Rising Sun	6,678	57	N/A (reported below)	>0.1%
OhmConnect	12,005	244	154	1.3%
Rising Sun + OhmConnect	N/A	22	18	N/A

Figure 6: Low-Income P4P Customer Contacts and Enrollment

Residential Peak Management Pilot: EBCE contracted with CLEAResult in September of 2020 to implement the residential pay for performance program. This program offers customers who are receiving energy efficiency services through the Bay Area Regional Energy Network (BayREN) program the opportunity to receive additional incentives if they can reduce their energy consumption further during the summer peak. The program will also leverage the Recurve dashboard to market the opportunity to a targeted customer group - specifically, the top 50% of summer peak contributors. The program will be enrolling projects between now and April and will measure impacts over the summer peak period.

Commercial Flexible Demand Marketplace: EBCE is jointly implementing this program with MCE. This program allows energy efficiency vendors to serve as aggregators and be paid on a portfolio of projects that deliver measured reductions. EBCE has contracted with Recurve to administer this program by enrolling aggregators and helping shape their customer offerings. Aggregators will be paid on the cost effective, measured energy reductions achieved across a portfolio of projects with high incentives available for those reductions that occur during peak periods. Projects are eligible to be enrolled until June 2021 and incentives will be paid to aggregators 14 months later when a full year of savings can be measured. Currently, five aggregators are enrolled in the program with more being evaluated.

Energy Efficiency Strategy Development

Budget \$110,000

Timeframe: In-Process

In September of 2020, EBCE contracted with Frontier Energy and KW Engineering to support development of a CPUC funded EBCE energy efficiency portfolio. As a first step our Climate Corp Fellow Noah Cordoba has utilized the EBCE data and analytics

platform to understand more about EBCE's energy consumers through the development of a market characterization report. Through looking at energy consumption trends, building vintage, demographic information, and existing energy efficiency programs and services, EBCE will identify areas of opportunity for new energy efficiency programs that EBCE could offer customers. This market characterization report will be posted on EBCE's website and available to the community to assist in further understanding of EBCE's service area. Building on this market characterization report, EBCE plans to move into program ideation and energy efficiency portfolio development over the next several months. Staff plan to bring an update to the Citizens Advisory Committee in February and to the Board of Directors in March or April 2021.

Building Electrification

Reach Code Initiative

Budget \$300k

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.

To date, the Cities of Berkeley, Oakland, Hayward, Albany, and Piedmont have brought reach codes to their council for consideration, and the city councils of Hayward, Berkeley, and Oakland have approved these ordinances. The cities of Piedmont, and Albany are continuing to work on their reach code proposals, while the Cities of Emeryville and Fremont plan to move forward with bringing their reach codes to council in 2021. Moving forward, EBCE will be closing the program to new cities and transitioning to a supportive role to facilitate local planning departments in implementing these reach codes.

Municipal Electrification Support

Budget: \$100k

Timeframe: Q1 2021

EBCE staff have received a number of inquiries from our member agencies as they seek to electrify their municipal building stock. These inquiries primarily include technical assistance to evaluate potential technologies or specific design issues and requests for funding to help get projects over the line. In response to this need, EBCE staff has been developing a program that will allow our member agencies to apply for support on their municipal electrification projects. Staff envisions offering financial assistance up to \$10,000 to complete these projects and technical assistance to support building electrification.

Heat Pump Hot Water Heater Incentive Program

Budget \$550,000

Timeframe: Launched June 1, 2020

EBCE is participating in a regional mid-stream incentive program, offering a \$1,000 incentive for the installation of heat pump water heaters. The program officially launched in June of 2020, with the first incentives processed in August. So far 11 heat pumps have been installed in EBCE service area this year.

Staff has been working with Stopwaste, the administrator of this program, to understand why there has been slow uptake. The issues seem to be two-fold; on the one hand, there are not enough high volume contractors participating in the program; on the other hand, those high volume contractors have expressed that they would be more interested if they received more inquiries from customers looking to install this technology. EBCE will market this program directly to customers in Q1 of this year by leveraging the Recurve dashboard to identify customers who are likely to benefit most (specifically, customers with a high summer natural gas load and those who have solar panels.) As heat pump water heaters are not currently a good fit for emergency replacement, marketing materials will emphasize the need to plan ahead to transition your water heating to electric; this should accommodate the backlog of work for participating contractors and increase inquiries to high volume contractors, expanding the pool of workforce available to install these new technologies. This initial market development work is particularly important to ensure the EBCE service area is prepared to take advantage of the millions of dollars in rebates for high efficiency electric appliances expected to be available towards the end of 2021.

Induction Cooking Campaign

Budget \$360,000

Timeframe: Q1 2021

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 stove tops 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.

EBCE has developed a two-pronged approach targeting both consumer awareness and increasing exposure to the technology among local chefs. For the former, EBCE is working to supply member agencies with induction cooking kits for use in outreach and to lend to customers in their service area for hands on use. This program is launching soon with customer participation expected to be limited in some areas due to concerns for COVID-19 transmission. EBCE is also seeking relationships with local restaurant supply stores to offer discounted prices on induction technology to EBCE customers.

To capture the chef community and support electrification goals of member agencies, EBCE is developing an induction rebate program to promote gas-to-electric

conversions in commercial and municipal kitchens, including commissary kitchens, which typically have high chef throughput. We are exploring ways to leverage financing opportunities to make this offering more accessible to interested applicants lacking capital necessary to participate.

Underpinning all of these efforts are the creation of three videos featuring prominent bay area chefs cooking with, and discussing the benefits of, induction technology. The first video, featuring chef Reem Assil and aimed at a consumer audience, will be released as an exclusive with Sunset magazine in the January / February issue of this year, which will include a feature on all-electric kitchens. The second video features chef Nite Yun and will demonstrate cooking on an induction wok. The third video, planned to be filmed in early 2021, will likely feature chef Hanif Sadr and will address the flexibility of induction cooking for a chef who cooks in many different places, rather than exclusively at a brick and mortar.

Building Electrification Consumer Awareness Campaign: The Switch is On!

Budget: N/A (leveraging existing media contracts)

Timeframe: Q4 2020-Q2 2021

EBCE, along with several CCAs, municipal utilities, and investor-owned utilities, is participating in a consumer awareness campaign related to high efficiency electric appliances. These appliances are much more efficient than the fossil gas alternatives and can be powered on clean, renewable energy. However, many of these appliances currently represent less than 1% of total installed appliances in the state, indicating the need for a significant increase in consumer awareness. To address this, the Building Decarbonization Coalition launched the Switch is On campaign. EBCE co-funded the development of creative assets in Q2 of fiscal year 2019-2020, and is now setting aside a portion of November, December, and January ad placements to participate in this campaign. The campaign features a variety of advertising mediums intended to promote curiosity around electric appliances and drive customers to the Switch is On website for more information. The website includes educational materials around building electrification, including why someone should consider electrifying, appliance options, and searchable databases for locating financial incentives and qualified contractors. EBCE launched this campaign in late November / early December with digital and print ads distributed through the Sound of Hope (chinese language advertising) and the Bay Area News Group. In January, EBCE will be launching a more robust campaign to coincide with similar efforts across the bay area, and will be featuring Switch is On media assets in digital, print, and potentially video and radio formats as well as social media posts and posts to Nextdoor.

Vendor	Content	Results
BANG	Switch is On	6 print ads 160,000 impressions 156 Clicks
Sound of Hope (Chinese)	Switch is On	116,100 impressions 1,069 clicks
Facebook	Resilient Home	132,089 impressions 1,017 clicks

Figure 7: Switch is On campaign impressions

Transportation Electrification:
Municipal Fleet Electrification
Budget \$400k
Timeframe: In-Process

EBCE continues to provide ongoing technical assistance to six (6) member communities (Albany, Alameda County, Berkeley, Dublin, Hayward, 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 their goal.

The City of Berkeley’s plan was completed in 2020 and shared with their City Council. Albany’s project is currently on hold due to COVID-19 delays. Dublin’s scope of work is progressing as is Alameda Counties. The City of Oakland’s project kicked off and will ramp up in 2021 once their fleet operations team has provided new vehicle telematics data which will inform their assessment. The City of Hayward’s project will kick off in 2021 as well.

This work also connects to the charging infrastructure incentive programs noted above. 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).

Fleet electrification assessments and plans for EBCE’s remaining member communities are needed and will require additional budget approval in the next fiscal year.

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: Quarter 4 2021 launch; planning in-process

The CEC has selected Alameda County as one of four statewide 2021 CALeVIP programs. Based on the state's budget availability for 2021 the CEC's investment in the Alameda County CALeVIP project will be \$14.5 million in Year 1. This is less than the previous estimate of \$15M-\$33M, yet is significant given state budget constraints due to the impact of the COVID-19 pandemic.

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) for EV charging infrastructure incentives. 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), 250,000 chargers by 2025 and EO N-79-20 mandate which requires that 100% of in-state sales of new passenger cars and trucks are zero-emission by 2035.

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 disadvantaged communities, AB 1550 low-income census tract designation, and AB 617 communities. 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 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 to achieve the state's new mandates. In turn, this will reduce priority criteria air pollutants, improving human health outcomes for all residents, especially those in our most vulnerable communities located along interstate corridors.

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 approval by the CEC. The Local Development team plans to present this and the multi-unit dwelling hotspot analysis to the Board this spring.

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 2021 calendar year to ensure a streamlined program launch.

Streamlined EV Charging Infrastructure Permitting - AB 1236 Compliance

Budget \$0 - Staff Time

Timeframe: Completed

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 provided technical assistance to its members, and the City of Alameda, to help each jurisdiction become compliant. The Local Development team has worked with City staff to ensure compliance by the end of 2020. This goal will be achieved by the end of the current fiscal year with one member community working to post their required streamlined permitting checklist to their website. This work is reflected on the Governor's office's [EV Charging Station Permit Streamlining Map](#) which shows near full compliance in Alameda County as compared to the rest of the state.

Publicly Accessible Charging Investment

Budget \$1.5M

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 potential project site hosts was delayed but has ramped up in 2021 with a focus on DC Fast Charge hub development at two municipal parking garages located in AB 617

designated communities including West Oakland and East Oakland/San Leandro. The Local Development team is also leveraging its data analysis and mapping tool to identify additional potential sites for future project development in preparation for new stimulus funding coming from the state and federal government.

Local Development staff continue to coordinate with the City of Piedmont to deploy charging infrastructure leveraging Transportation for Clean Air funds (TFCA) through the Alameda County Transportation Commission. The scope of this project had included 3-4 pilot Level 2 chargers on streetlights (e.g., curbside charging), and 1-2 publicly accessible DC Fast Charger located in Piedmont's Community Hall parking lot. The City of Piedmont currently has no publicly available charging infrastructure despite its proximity to 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.

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. Local Development staff had planned to issue a competitive solicitation for services that support implementation of the pilot project Fall 2020. However, the project was delayed by PG&E analysis which determined that although there was interest in piloting this approach in their service area, that streetlight mounted Level 2 charging is infeasible at this time due to technical engineering and approved CPUC tariff constraints.

In turn, EBCE and the City of Piedmont have redesigned the project scope to deploy four curbside DC Fast Chargers. The Alameda County Transportation Commission is aware and supportive of the revised project scope. Local Development staff is in the process of bringing on a technical consultant to assist with project design drawings necessary for EBCE's ongoing coordination with PG&E's Service Planning team which will further refine project layout requirements and enable EBCE to issue an RFP for vendor services to install the infrastructure. EBCE will then seek project approval by Piedmont's City Council and EBCE's Board.

The Local Development team anticipates the revised project scope will not exceed \$350,000. 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 will leverage \$120,000 of TFCA funding awarded for this project.

Finally, EBCE has completed a scope of work that has resulted in development of an economic pro forma that will inform organizational investment in an expanded network of publicly accessible DC Fast Chargers throughout our service area. Varying geographical locations and use cases were considered including but 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 and will deliver the final project report to EBCE by the end of February 2021.

Medium and Heavy-duty Vehicle Electrification

Budget \$300k

Timeframe: In-process

EBCE has kicked off its scope of work with CALSTART, an industry leading nonprofit organization with offices in Berkeley, to analyze the medium and heavy-duty (M/HD) goods movement ecosystem in our service area. This collaborative effort will result in extensive data analysis that will enable EBCE to engage 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 the start of rapid scaling of Class 3-6 vehicle electrification, establishing EBCE's service area as a first mover market in California by 2030. In Quarter 4 of 2020 the Local Development team also pursued grant funding through the CEC (in partnership with CALSTART) to develop a Zero Emission M/HD Goods Movement Blueprint for our service area, and is currently awaiting CEC feedback. EBCE and CALSTART will continue to evaluate additional funding opportunities that will result from pending state and federal stimulus investments.

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). 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.

Vehicle Grid Integration (VGI) 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. 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 in the [Final Report](#), which are now being 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 has continued to engage in all VGI related regulatory initiatives to ensure CCAs are represented in future decision-making processes. This includes convening fellow CCAs statewide in submitting joint comments on VGI regulatory proceedings, and coordinating next step activities in collaboration with fellow CCAs associated with new CPUC VGI reporting requirements starting in 2022. The Local Development team is also working internally to identify actions EBCE may want to develop and implement near term.

CPUC DRIVE OIR Proceeding: Transportation Electrification Framework (TEF)

Budget \$0 - Staff Time

Timeframe: In-process

Local Development staff continue to lead coordination of 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, EBCE and a group of northern California CCAs have continued to work to change the current regulation so that it allows equitable access to the incremental value of these credits without metered data.

EBCE hoped CARB would reevaluate its regulation by fall 2020 and enable CCAs to claim the nonmetered, incremental credits for the residential customers we serve. This evaluation is still ongoing. 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: Complete

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. 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 the 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 four 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 worked 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 better understands the economics of potentially redeveloping these sites for the proposed use cases. U.S. EPA's technical consultant has delivered the draft Final Report which Local Development staff is currently reviewing and editing. Local Development staff were also able to leverage this project in a larger U.S. EPA Brownfields Assessment grant application (submitted Fall 2020), which if awarded would identify brownfield opportunities throughout EBCE's service area. EBCE is awaiting feedback from U.S. EPA on this funding opportunity.

CEC's Advisory Committee for the Clean Transportation Program Investment Plan
Budget \$0 - Staff Time
Timeframe: In-process

Local Development staff was appointed to the CEC's Advisory Committee for the Clean Transportation Program Investment Plan. This Advisory Committee provides advice and guidance to the CEC, and serves 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 is 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 allows 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.

In 2020, the Local Development team assisted in development of a \$150 billion TEP 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 businesses.

The TEP proposal found that with an investment of \$150 billion in stimulus 2.3 million jobs 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 has learned that many of the recommendations in the stimulus proposal are now under consideration by the new administration.

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 continues 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

The Local Development team continues 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 project's progress throughout the first half of 2021.

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, power grid blackouts 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 State of California's Self-Generation Incentive Program (SGIP) to maximize participation and minimize customer costs. With this funding our outreach efforts are amplified, 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 adoption of solar and/or BES systems.

Critical Public Facilities Resilience
Budget \$300k (BAAQMD Grant Funded)
Timeframe: In-Process

EBCE is working through a Bay Area Air Quality Management District Climate Protection grant and has identified critical municipal facilities designated to serve the community in time of emergency/grid outage. This site identification was conducted in collaboration with EBCE's local government partners, and EBCE has completed a modeling effort that sized these resilience systems.

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 were assessed by the CCAs. Local Development staff is now developing a procurement pathway that will enable EBCE to deploy these projects at scale, reducing the cost and complexity of project development. EBCE is actively meeting with our local government partners regarding procurement next steps and will provide an overview of the project to the Board before the end of the fiscal year.

Resilient Home

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

Timeframe: In-Process

EBCE launched [Resilient Home](#) in August 2020 with Sunrun to deliver enhanced resilience to single family homeowners and multi-family residential customers. The program also reduces EBCE's peak demand and Resource Adequacy obligation through Load Modification. EBCE has been co-marketing with Sunrun to encourage customers to participate. Sunrun is contracted to deliver 5MW of Load Modification, resulting in over 1,000 solar and BES systems over the next 2 years. EBCE is requiring at least 20% of the installations be for low-income residents, medical baseline customers, and residents located in DACs. However, Sunrun and EBCE are striving to engage a much higher level of vulnerable community members in the program. Resilient Home is also delivering jobs and workforce development opportunities for Alameda County residents. EBCE is coordinating with Sunrun and local workforce development organizations like Rising Sun Energy Center to develop local hiring and apprenticeship commitments to ensure jobs are created equitably for our community.

EBCE has been reaching out to customers via email and social media channels, and held a series of online workshops throughout fall 2020. Since its August 2020 launch, over 1,000 EBCE customers have registered for the Resilient Home program to learn if a solar + BES system is a good fit for their home. There are currently 137 solar + BES systems sales and 6 completed installations. This includes 12 low income customers that experienced multiple PSPS events over the last 2 years. EBCE is ramping up engagement of affordable multifamily property owners with Sunrun's team and is planning overall program outreach activities for 2021.

CEC coordination to develop Load Modification

Budget \$10k - Staff time

Timeframe: In-Process

EBCE has been working with the California Energy Commission to develop an approach that maximizes the value of Behind the Meter (BTM) solar + storage systems to meet EBCE's Resource Adequacy (RA) needs. The current options for BTM RA do not appropriately value the flexibility and scalability behind the meter solar and storage resources. EBCE's approach relies on building a portfolio of BTM assets that can be dispatched during our peak demand hours and built into EBCE's annual load forecast. By reducing our peak forecast we reduce EBCE's annual Resource Adequacy requirement.

In April of 2020 EBCE submitted a portfolio of 100kW of residential solar + storage load modification. The CEC has since confirmed that EBCE received the full value of this load reduction in the 2021 peak demand and Resource Adequacy requirement. EBCE has authored a white paper that describes the process and will be releasing the white paper this quarter.

EBCE has written a white paper on why Load Modification is valuable for the development of BTM solar and storage resilience and will be publishing the paper this quarter.

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. More than 1,000 of EBCE's 50,000 accounts affected by PSPS events have been 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.

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 in 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 through an incentive program for mobile and stationary BES systems 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 solutions 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 aspects of this scope of work have been delayed. EBCE and its project consultant have made progress on tasks 2, 4, 5 and 6 in an effort to keep the project on track. The Pilot Project is on hold until further notice.

EBCE will reallocate the Pilot Project budget (\$250,000) to develop a pilot incentive program for mobile BES solutions offered to Medical Baseline customers in 2021. In February, Local Development staff will return to the Board to provide an informational presentation on this item.

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 customers for non-payment (and since COVID has not sent customers back to PG&E for lack of payment), we are developing a program to identify the causes of disconnections and test programs to reduce disconnection rates. EBCE has developed a model to help predict which customers are at risk of disconnection and is partnering with UC Berkeley to develop and test interventions that can help customers pay bills and avoid being disconnected.

EBCE has held a series of focus groups in multiple languages with customers that have a history of late payments and disconnections to talk with them about the challenges they face paying their bills. These insights will help 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). In September 2020, EBCE filed the Advice Letter to the CPUC with the plan and budget for this program. The CPUC will issue a response to the Advice Letter in Q1/'21. In the interim EBCE prepare the solicitation and PPAs necessary to project development which will also need to be reviewed by the CPUC. Once these have been approved EBCE will release the solicitation and call for projects.

EBCE has since increased the amount of solar allocated to the program because a few Northern California CCAs were not interested in running these programs. EBCE's allocation for DAC-GT has increased to 5.72MW and CS-GT has increased to 1.56MW.

Community Investment Fund

Community Innovation Grants

Budget \$240k

Timeframe: Completion

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. Three of the projects have been completed and the remaining 3 are expected to finish in March of 2021. Final reports are being prepared and will be uploaded to the EBCE website.

Fiscal Impact

Budget has been approved, there is no additional fiscal impact

Attachments

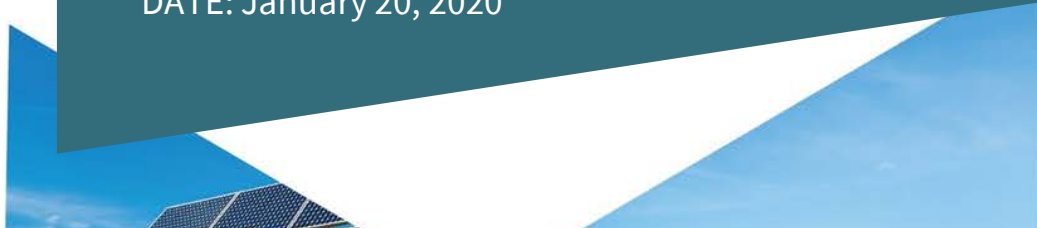
- A. LDBP Mid-Year update presentation



LOCAL DEVELOPMENT UPDATE

PRESENTED BY: The Local Programs Team

DATE: January 20, 2020



Local Development Spend (FY'20 + '21)

- Budget total is cumulative from \$6.84M FY'20 and \$6.34M FY'21 budgets
- Programs have commenced across all LDBP areas
- Local development provided \$1.4M for COVID response funding in 2020
- Additional investments in local utility scale projects like OCEI, Summit wind

January '21 Local Development Committed to Date (\$000)		
Program Areas	Spent/Committed	Planned
Demand Response	(\$195)	(\$100)
Energy Efficiency	(\$840)	
Building Electrification	(\$1,482)	(\$190)
Transportation Electrification	(\$5,519)	(\$1,161)
Collaborative Procurement	(\$885)	(\$768)
Community Investment Fund	(\$240)	
Sponsorships/Events	(\$65)	
Capital Set Aside	(\$1,200)	
COVID-19 Relief Fund	(\$1,375)	
Sub-Total LDBP Operating Budget	(\$11,801)	(\$2,219)
Non Operational Revenue		
BAAQMD Grant	\$150	
Grants and LCFS Credits	\$750	
LDBP Operating Budget	(\$13,120)	
Additional Local Development Spending		
Local Development Staffing Costs	(\$860)	
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

New Communities

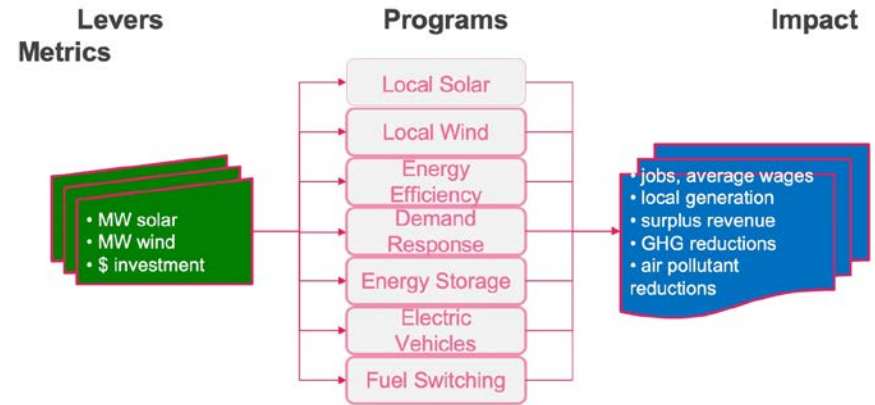
- Local programs offer good opportunity for messaging new community enrollments
- Coordination with City staff and EBCE Marketing team is critical to ensure clear messaging and avoid customer confusion
- New community customer data will soon be updated in EBCE systems
- Existing programs like Resilient Home, EE pilots, and Heat Pump Water Heater incentives will be made available
- Great opportunity for new programs like DAC-GT/CS-GT and transportation electrification - especially goods movement

Measuring Local Benefits

- The LDBP outlined a set of benefits across environment, economic and social categories + a model to evaluate impacts
- The model allows EBCE to model benefits that are difficult to measure empirically
- Currently modifying the model to evaluate current approved programs
- Staff is coordinating with CAC on a Metrics Initiative

Category	Performance Metric (Units)
Direct Annual Jobs Created	Full-time Equivalents (FTE's)
Labor Wage Impacts	Direct Job Wages (\$'s/hour)
Fiscal Impacts	Costs (\$'s spent), Cost Savings (\$'s saved), Surplus Revenue (\$'s/year)
Customer Cost Savings	\$'s saved (Total and by Customer Class)
Local Energy Generation	GWh's Generated per Year
GHG Emission Reductions	Metric Tons of CO2e (MTCO2e) reduced, GHG Intensity (MTCO2e/MWh)
Criteria Air Pollution Reductions	Metric Tons (MT) of Criteria Pollutants reduced

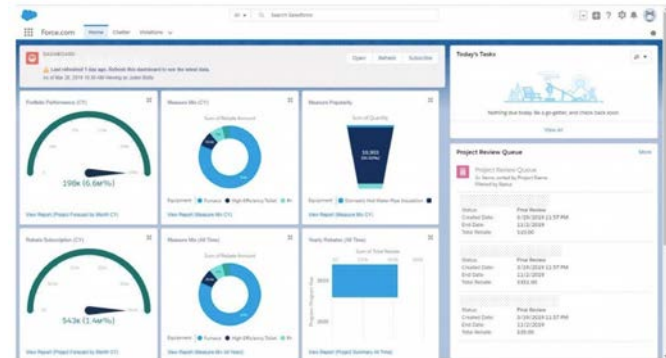
Figure 2: Overview of Performance Metrics for estimating and assessing LDBP impacts using the tools and frameworks developed for the LDBP.



Salesforce Reporting

- New CRM will provide customer level tracking for program enrollments
- Will allow granular tracking of low income/DAC participation that are difficult to model
- Dashboards and reports will provide insights into enrollment rates

Programs	Measures	Customer Attributes
Resilient Home	kW Solar	CARE/Medical Baseline
Critical Facility S+S	kW/kWh Storage	DAC/LI Census tract
Heat Pump Water Heaters	#/type of Appliances	Single Family / Multi-Family / Commercial / Municipal
EE: Low-Income P4P	EE measures	Owner/Renter
EE: Commercial P4P	Expected kWh savings	Customer Satisfaction
EE: Residential P4P	Measured savings	
Connected Communities	Customer bill savings	
Solar Program & DAC-GT / CS-GT	Enrollment / Installation date	



Connected Communities

Connected communities pilot will explore how to minimize arrears and the threat of disconnection in our most vulnerable customers

- EBCE has several zip codes with disconnection rates between 10%-15%, where customers are without power or under threat of losing power
- Have completed initial multi-language 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, solar installation, discounted electricity through DAC, arrearage forgiveness through Arrearage Management Plan and payment education as mechanisms to aid in bill payment
- Partnering with UCB to study arrears and use randomized studies to identify impacts of interventions and solutions

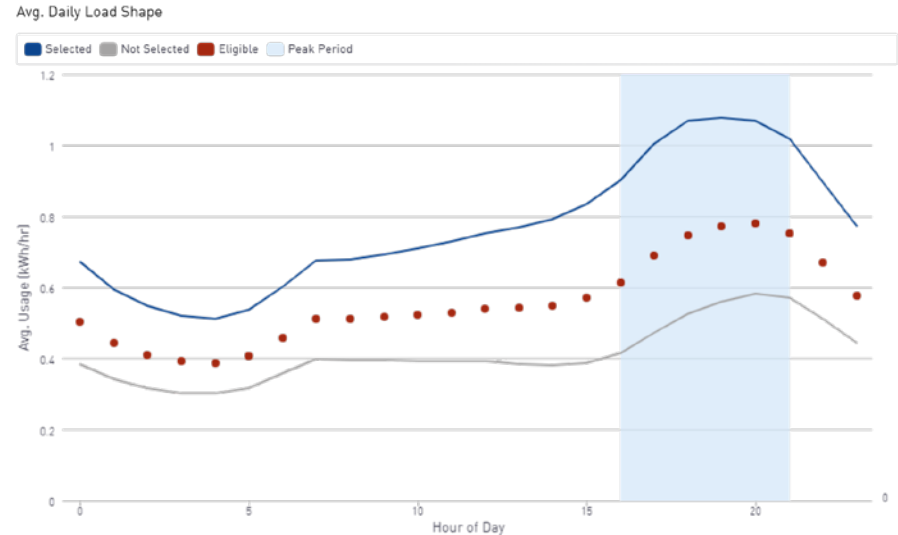
DAC/GT and CS/GT Program

EBCE has been allocated 7.28MW 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

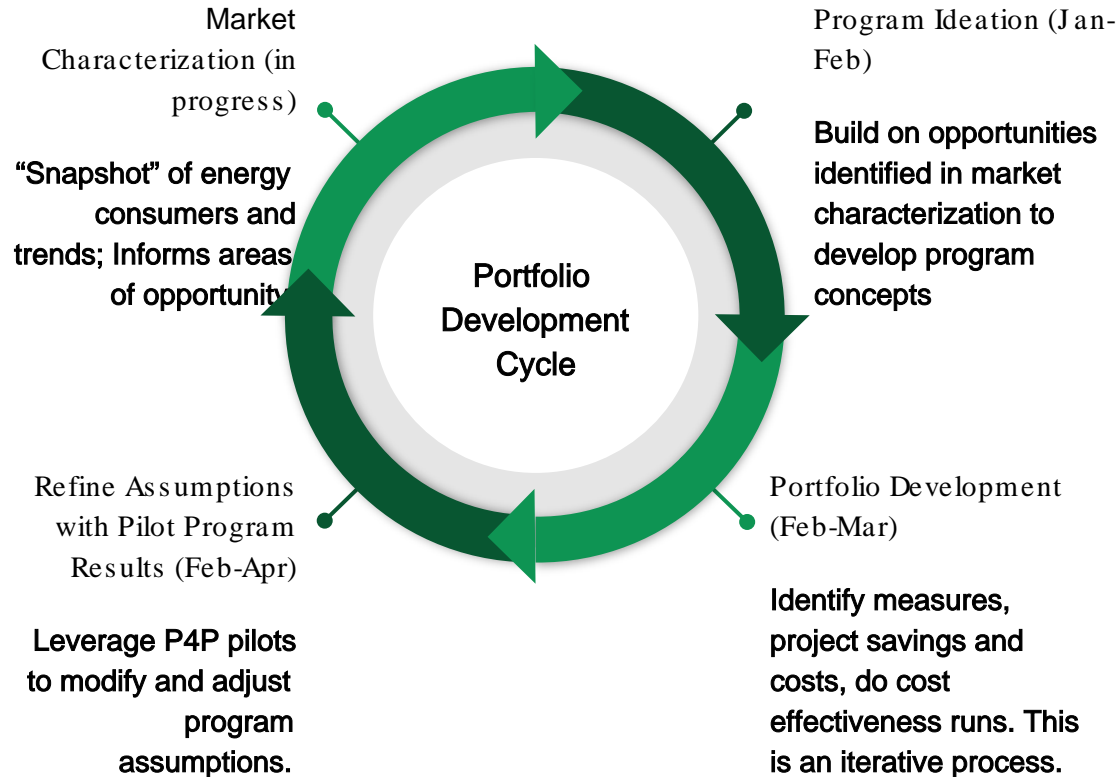
- Advice letter filed in September 2020
- Allow EBCE to provide a 20% discount to CARE rates to ~2,750 CARE customers living in Disadvantaged Communities
- Will issue a solicitation to develop local solar after CPUC approval of advice letter, planned for end of March '21
- Tracy and Newark CARE customers in DACs will be eligible to participate (no DACs in Pleasanton)

Energy Efficiency Pilots

- Low Income Peak Management
 - Served around 200 customers
- Residential Energy Efficiency and Peak Management
 - Enrollment open now; targeted marketing planned for January-February
- Commercial Flexible Demand Marketplace
 - 5 vendors currently enrolled
 - Open for projects



Energy Efficiency Program Strategy



Reach Codes

- Three cities have passed reach codes (Berkeley, Hayward, Oakland)
- Two more have brought these ordinances to their Council's and have been requested to come back with revisions (Piedmont, Albany)
- Two more jurisdictions are planning to bring ordinances to council soon (Fremont, Dublin)
- **In all, EBCE has supported seven jurisdictions as they pursue reach codes**
- Moving forward, EBCE plans to transition work in this space to implementation support

Induction Cooking Campaign

- Kitchen Electrification Rebate
 - Resistance to induction from chef community
 - Create incentives for gas-to-electric conversions in commercial kitchens
- Purchasing cooktops for member agencies and working on discounted pricing for EBCE customers
- Induction video update



TA for Municipal Electrification



SWITCH IS ON: Consumer Awareness Campaign

Super efficient heaters that also cool?
Teach an old home a new trick.

Electric heat pumps heat and cool, using a fraction of the energy.



THE SWITCH IS ON



EAST BAY
COMMUNITY
ENERGY



FIND A REBATE ►

Working from home
just got more
comfortable.

New electric heat pumps.
Heat, cool and save.



THE SWITCH IS ON



EAST BAY
COMMUNITY
ENERGY



LEARN MORE ►

We know. You didn't
expect a water heater
to make headlines.

New electric water heaters.
75% less energy.
No unhealthy emissions.



THE SWITCH IS ON



EAST BAY
COMMUNITY
ENERGY



LEARN MORE ►

Resilient Home

- Partnership with Sunrun to deliver 5MW of Load Reduction and ~2000 residential systems for single and multi-family residents
- All systems will provide backup power to provide resilience
- Prioritizing frontline communities and requiring local workforce
- Program launched July, 2020
- ~1000 customers have expressed interest with 137 sales and 6 installations, including 12 equity resilience customers



EBCE EAST BAY COMMUNITY ENERGY

No power. No problem.

New home battery backup incentive available in Alameda County.

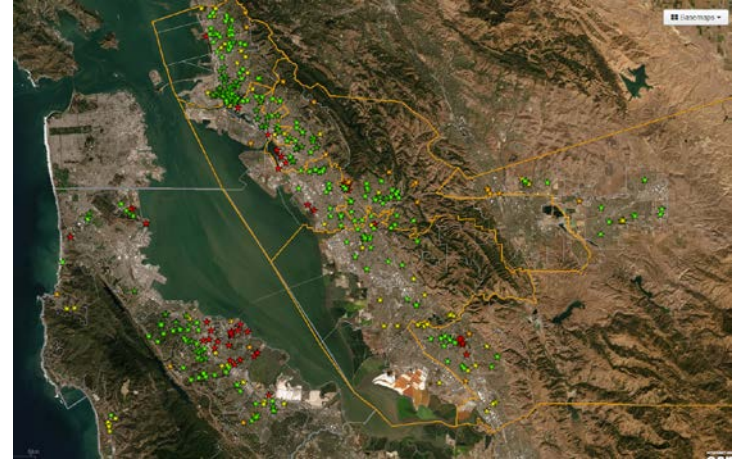
ebce Resilient Home

Put solar + storage on your holiday wish list!

EBCE knows you've been good this year, so we'll kick in a \$1,250 incentive. Details [here](#).

Critical Facilities Resilience

- Solar + Storage systems at municipal facilities sized for critical loads
- In process
 - EBCE / local government coordination on procurement pathway (e.g., counterparty to PPA, not municipality)
 - Independent engineer evaluation of facilities (structural, roof, electrical capacity)
 - Site prioritization to develop cost effective portfolio
 - RFP: Phase one sites mid-2021



Medical Baseline Program

Pilot:

- Previous scope: Solar + Storage on homes of electricity dependent pediatric patients of UCSF Benioff Children's Hospital
- Due to COVID-19 delays, will be infeasible this FY
- Note: redirecting funds to develop Medical Baseline battery backup incentive program (see below)

Medical Baseline Comprehensive Plan & Battery Backup incentive program (in-process):

- Pre COVID-19 County Public Health Dept. coordination
- EBCE now understands common durable medical devices, their load, duration of use, and where they are located (by zip)
- Have paired with appropriate battery backup solutions
- Developing budget for Phase I incentive program, and scoping need for Phase II
- Planning presentation to the Board on this item in February

2021 Alameda County CALeVIP Program

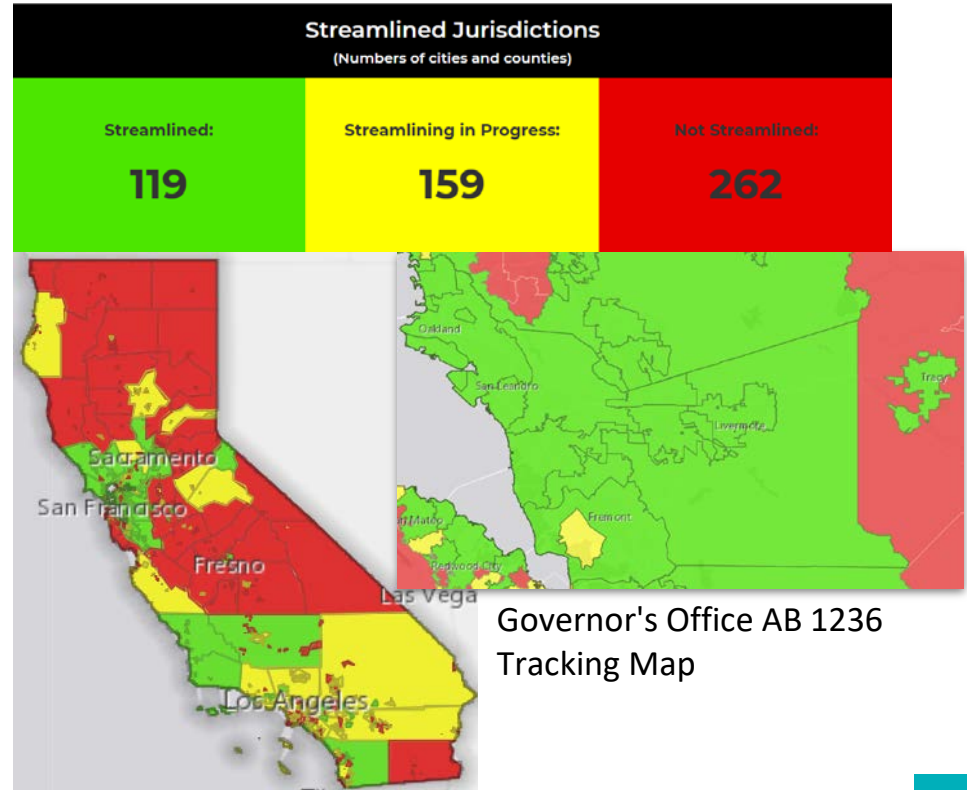
CEC incentives for publicly accessible Level 2 & DC Fast EV chargers

- CEC investment: \$14.5 million (Q4 2021)
 - Incentives available first-come, first-served
- EBCE is sole co-funding partner
 - EBCE EV Charging incentive investment:
 - \$14.5 million (over next 4 years)
 - \$3M Year 1 CALeVIP (2021)
 - Remainder allocated to standalone EBCE incentive program
- 25% of CALeVIP budget must be spent in DAC/LICs
- Unique EBCE data analysis
 - DCFC hubs in MUD hotspots & affordable MUD adder
- San Joaquin EViP Project has been available for Tracy
- Next steps:
 - Ongoing EBCE/CEC/CSE coordination in preparation of program launch
 - Technical assistance to affordable MUD owners
 - Board presentation on EBCE data analysis in 2021



Streamlined EV Permitting

- AB 1236 (2016) requires cities/counties to adopt ordinance & create checklists by 2017
 - Most non-compliant in 2019
 - Compliance required for 2021 CALeVIP incentives
- EBCE technical assistance goal: county-wide compliance by 3/2020
 - Goal nearly met!
 - One outstanding City is “streamlined in process”



Medium & Heavy-Duty (M/HD) EVs

- Work w/CALSTART
- GOAL: “1st mover market” for urban delivery & Class 3-6 zero-emission vehicles by 2030
 - DMV registration data analysis
 - Develop M/HD technical assistance pilot(s)
 - Relationship building: Port, logistics providers, fleet users and operators
 - Prep technical assistance to school districts
 - Prep pipeline for new M/HD incentive program
- External funding opportunities:
 - ex: CEC M/HD Blueprint - EBCE applied
 - ex: EPA Brownfields Assessment - EBCE applied



EV Charging Infrastructure Deployment

- EBCE owned assets: leverage 2020 budget, LD Reserve Fund, external \$ to build charging network
 - ex: TFCA (awarded \$120,000); pending CALeVIP, VW Mitigation, Charge!
 - Recover revenue via electricity sales + LCFS credits
- Ongoing:
 - Economic proforma: DCFC & workplace Level 2 charging (completed)
 - Piedmont pilot project: Curbside DCFC (awarded TFCA funds)
 - Municipal fleet electrification technical assistance
 - Berkeley's plan is complete, Dublin plan being finalized
 - Alameda County in progress; Oakland kicking off
 - Albany and Hayward in the pipeline
 - EV car share charging at 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
- Self Generation Incentive Program: HPWH, energy storage, EV/VGI added: Under consideration by CPUC
- Vehicle Grid Integration (VGI): New CCA reporting mandates starting 2022
- DAC Green Tariff
- CEC Load Modification for Resource Adequacy
- General Rate Case - input on PG&E's proposed E-ELEC rate
- Building Decarbonization Proceeding

THANK YOU