



Staff Report Item 15

To:	Ava Community Energy Authority
From:	Annie Henderson, Chief Customer Officer
Subject:	Review of the Local Development Business Plan
Date:	December 18, 2024

Summary

This presentation provides a brief history of the Local Development Business Plan (LDBP), efforts made by Ava Community Energy staff relevant to the LDBP, and a summary of local development efforts upcoming in 2024 and 2025.

Attachments

Presentation

Local Development
Business Plan Review
December 2024



Board Summary



Roadmap of Information Sharing

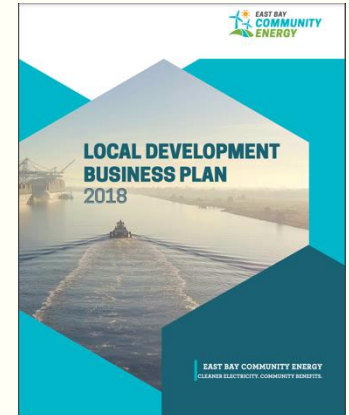
- This presentation
 - Overview of Local Development Business Plan efforts from 2018-2023
 - High level view of efforts in FY24/25
- At request of the board
 - Follow up to extend presentation at future board meeting (s), and/or
 - Special retreat meeting
- Future board meeting presentations
 - Local Development fund overview
 - Review of local development budget and spend reconciliation
 - Review of committed/earmarked funds

Background on the Local Development Business Plan



Local Development Business Plan (LDBP): Brief History

- **Origin story of Ava:** Facilitated by Alameda County and starting with a Steering Committee (local government elected officials and staff, environmental activists, labor representatives, members of the community) in June 2015; Joint Powers Authority formed in 2017 as East Bay Community Energy (EBCE); service started for commercial customers in June 2018 and November 2018 for residential customers; expansion to new communities in 2021; EBCE rebranded as Ava Community Energy is October 2023
- **Origin story and general background of LDBP:** Request from Steering Committee members to create a roadmap of efforts to be implemented in first 5 years of agency – very broad scope while very tactical. Developed by team of consultants prior to staff being hired. Plan approved by board in July 2018.
 - Consultants:
 - ALH|ECON
 - The Offset Project/blue strike environmental
 - Optony
 - Clean Coalition
 - eco-shift consulting
 - Advisors
 - Betony Jones – Labor and Community Benefit Advisor
 - Gary Calderon – Energy Storage and Demand Response Advisor



[Link to document](#)

Goals and Priorities for EBCE

- EBCE's relationship with its **customers** is the highest priority.
- Maintaining stable and competitive **rates** is essential.
- Prioritizing the development and utilization of **local clean energy resources** in ways that maximize local benefits is highly important to the EBCE community.
- Actively supporting the development and maintenance of a highly-skilled **local workforce** is key to EBCE's long-term stability and success as an organization.

Overarching Goals and Objectives of the LDBP

- Create a framework and roadmap for **accelerating local DER deployment and maximizing community benefits** using the CCA mechanism
- Offer **innovative program designs** that can overcome market failures and incentivize meaningful community and organizational benefits.
- Develop **local clean and dispatchable energy resources** to support EBCE's core values and goals
- Support a vibrant local economy and robust workforce through **innovative energy programs** and local clean energy investments.
- **Protect the most vulnerable customers** through targeted, beneficial local energy programming.
- Offer a **diversified portfolio of local programs coupled with retail rate savings**, which can deliver greater community benefits than rate savings along.



High Level Outline of LDBP and Content Architecture



I: Early Action Areas

- Demand Response
- Energy Efficiency
- Building Electrification
- Transportation Electrification
- Collaborative Procurement
- Community Investment Fund

II: Supporting Resources, Policies, & Strategies

- Integrated Data Platform
- Customer Partnerships
- Benefit Adders & Market Responsive Pricing
- Energy Storage Contracting Strategy
- Rate Design as an Incentive
- Customer Financing Options
- Workforce Development
- DER Aggregation: VPP Strategy
- Integrated Resource Plans
- Clear & Transparent Reporting

III. Ongoing Analysis, Implementation, & Refinement

- Quantifying LDBP Benefits
- LDBP Scenario Analysis

An indexing of the document resulted in over **70 recommendations across 18 categories** ranging from demand response programs and net energy metering to risk mitigation strategy and rate design.



Focus Areas

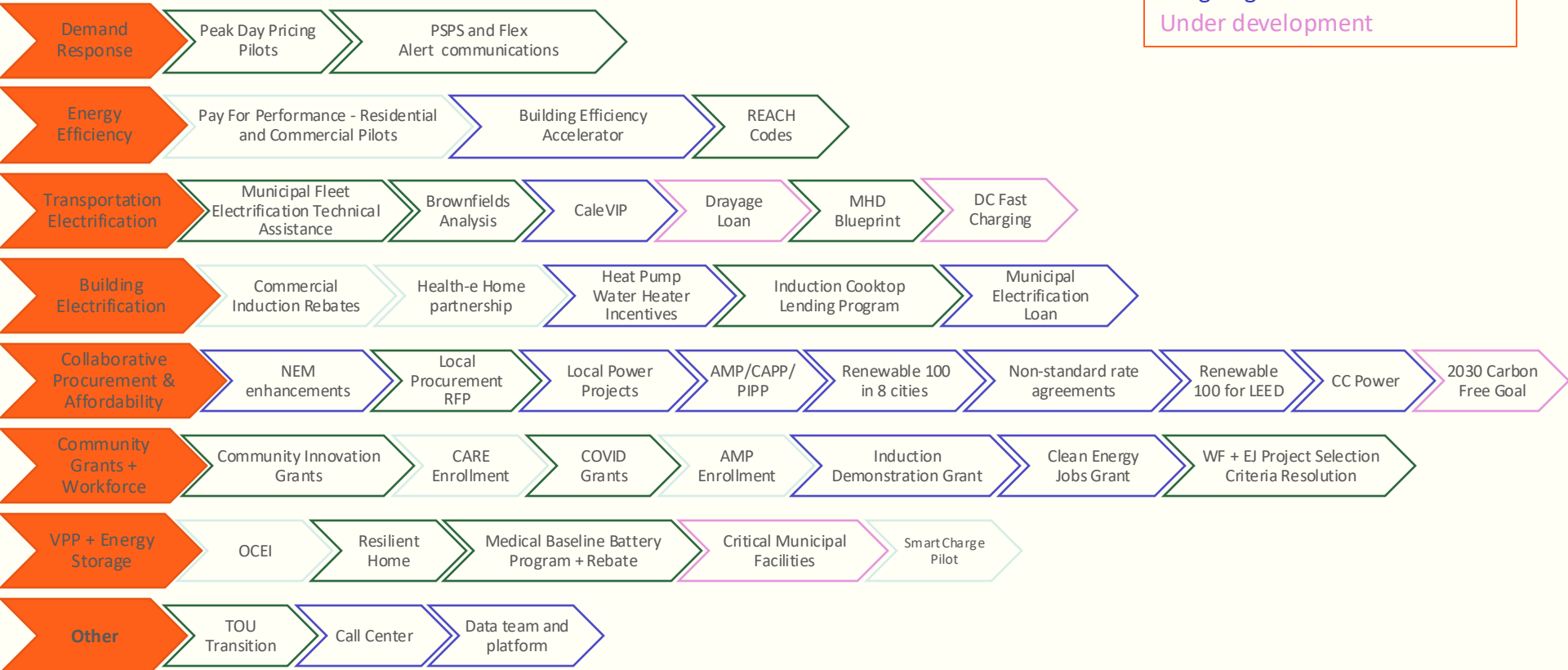
- 1 Demand Response**
- 2 Energy Efficiency**
- 3 Building Electrification**
- 4 Transportation Electrification**
- 5 Collaborative Procurement & Affordability**
- 6 Community Grants & Workforce Development**
- 7 Virtual Power Plants (VPP) & Energy Storage**
- 8 Other**
 - Data Analytics and Technology
 - Time of Use
 - Customer Call Center

Summary of Efforts 2018 to 2023 & Looking Forward

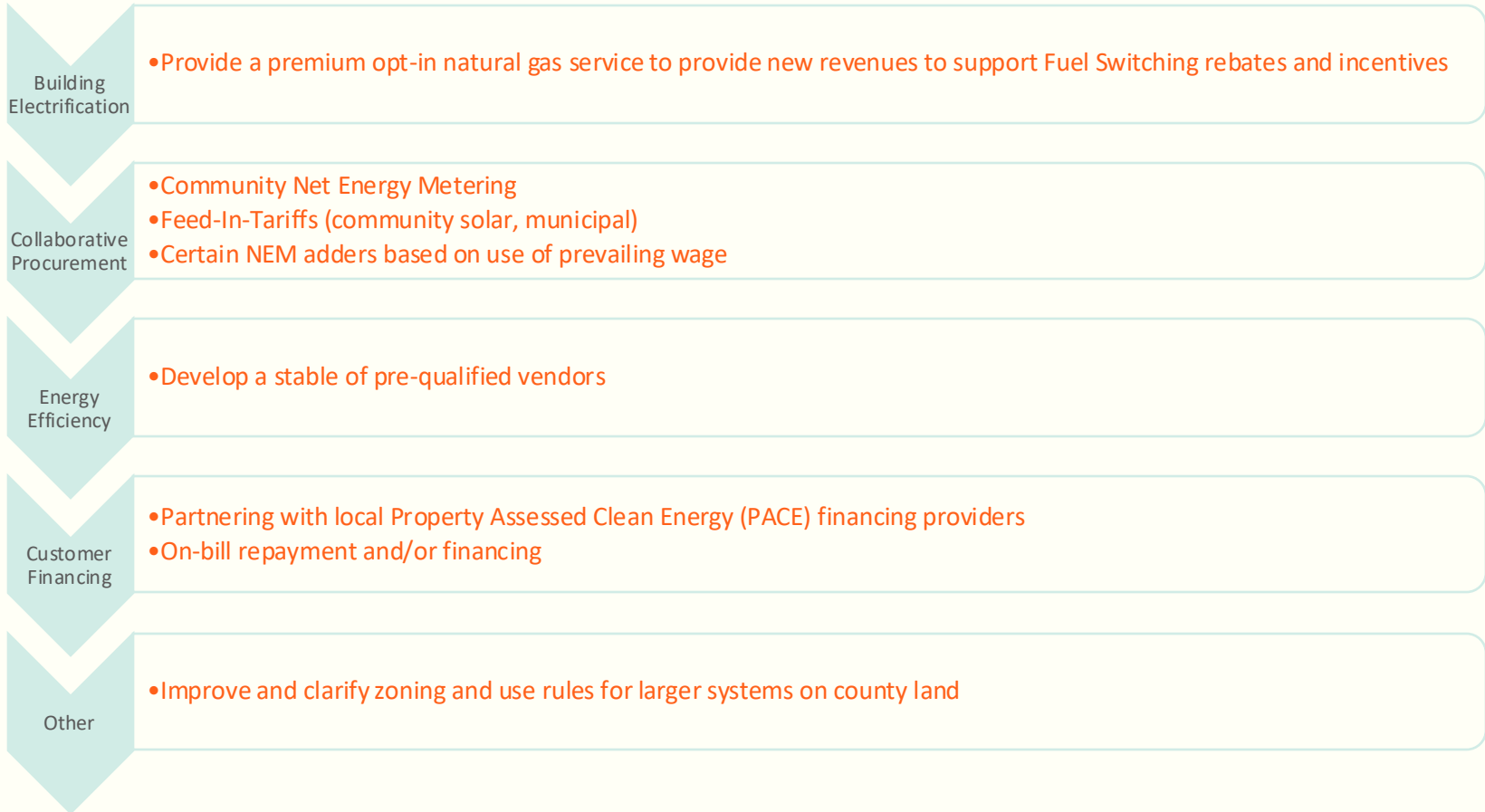


Ava Efforts: 2018 through 2023

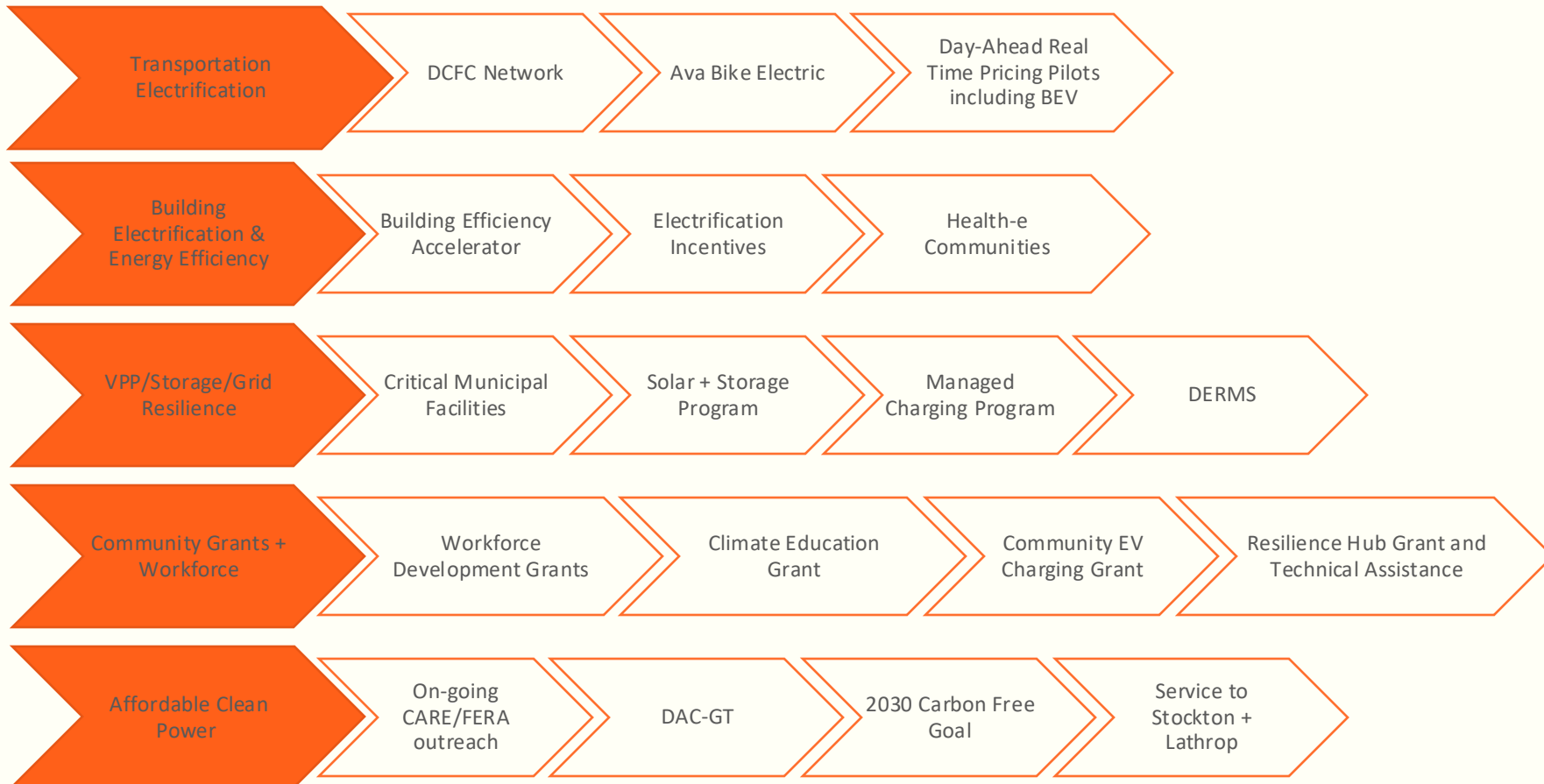
Complete
 Complete with lessons learned
 On-going
 Under development



Recommendations Not Pursued



Programmatic Focus Areas for FY24/25+



Equity Metrics Summary

	2018-2023	2024/2025
Affordability and Resilience	\$26.5M	\$29.6M
Customer Engagement Touchpoints	218,000	200,000



Equity Metrics For Completed Efforts

Program	Detail	Impact
Ava Customer bill credits	Credits for CARE/FERA customers	\$12M to ~120k low-income Ava customers over 2 years \$22.4M in credits to customers from FY23/24; \$10.8M to CARE/FERA customers that receive \$100 credit each
California Arrearage Payment Program (CAPP)	COVID debt relief program	\$13.8M in Ava customer energy bill debt relief to 65,000 residential customers
Resilient Home	Incentives for solar + storage	22% of portfolio capacity serves CARE/FERA, DAC, LMI, and/or Medical Baseline customers
Medical Baseline Battery Program	Offered free/discounted portable batteries to CARE/MB customers to power devices during PSPS	50 free batteries to CARE/MB customers \$1,000 incentive to another 150 MB customers
Health-e Home	Program to electrify 40 homes through incentives and low-cost financing	Electrified 18 units with heat pumps, induction and other upgrades

Equity Metrics For On-going Efforts

Program	Detail	Impact
Ava Solar Discount (DAC-GT)	20% discount on local 100% solar projects	3,000 Ava customers , expanding for new service areas
Percentage of Payment Income Plan (PIPP)	Capped fee payment plan	700 Ava customers
Arrearage Management Program	erases debt after 12 months of timely payments	5,900 Ava customers
Medical Baseline	Higher baseline for homes with medical devices	18,600 Ava customers
Ava CARE Outreach	Outreach campaigns to Ava customers who likely qualify for discount program results in greater efficacy and lower costs	Initial Ava direct campaigns resulted in ~450 new enrollments , 2 grants of \$10k each in 2020
Ava CARE/FERA NEM Adder	Additional credit to CARE/FERA solar customers	4,720 Ava customers, each received ~\$39/year, updated for Solar Billing Plan

Equity Metrics For Upcoming Efforts

Program	Detail	Impact
Ava Bike Electric	Incentives to purchase e-bikes	40% of incentive funding dedicated to CARE/FERA customers, \$4M in Increased incentive levels
Health-e Communities	Direct install of induction range	Initial pilot of 200 households
Resilience	Solar + Storage incentives, grant work, and technical assistance	50% of solar + storage incentives for Resilience Hubs + CARE \$300k in grants \$2M in technical assistance Critical Municipal Facilities micro-grid for local resilience
DCFC Network	Network of direct current fast chargers for EVs	Intentionally sited near multi-family housing to drive EV adoption amongst Multi-Family residents and renters

Highlighted Efforts from 2018-2023



Select Highlights from 2018-2023

1. Scott Haggerty Wind Energy Center & Local Projects: 2018-2023+
2. Early Resilience Efforts – Resilient Home, Critical Municipal Facilities, Portable Batteries: 2019-2023
3. OCEI: 2019
4. Municipal Fleet EV Charging: 2019-2023+
5. COVID Grants Response: 2020
6. Building Efficiency Accelerator: 2021-2023
7. Municipal Support Summary: 2018-2023



Scott Haggerty Wind Energy Center & Local Projects: 2018-2023+

LOCAL

A contract signed in 2018 and operational in July 2021, this project replaced 569 old turbines with 23 state of the art turbines to generate 57MW of local power.

LABOR

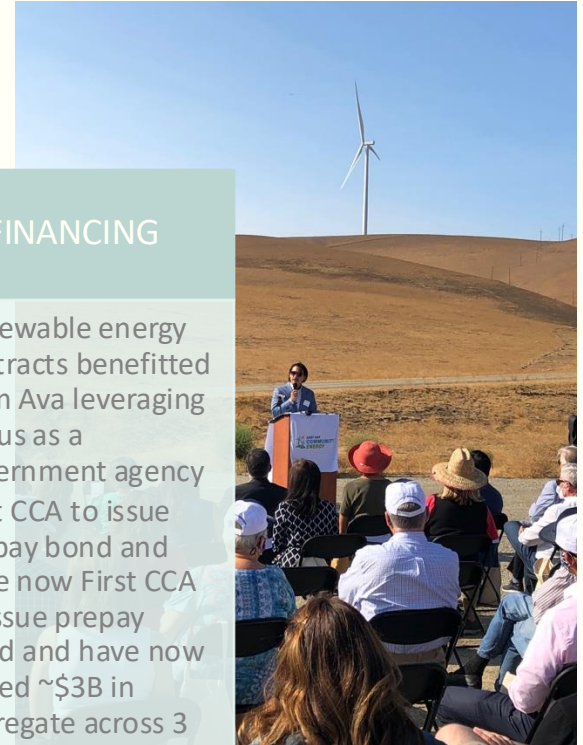
SHWEC represents a \$20 million investment into Alameda County through tax revenue and was build with 115,000 hours of union labor.

ADD'L PROJECTS

- Aramis solar + storage in Livermore (100MW)
- Kola storage outside of Tracy (125MW)
- Disadvantaged Community (DAC) solar projects in San Leandro, Oakland, Hayward, and Tracy (7MW)

FINANCING

- Renewable energy contracts benefitted from Ava leveraging status as a government agency
- First CCA to issue prepay bond and have now First CCA to issue prepay bond and have now issued ~\$3B in aggregate across 3 separate energy prepay transactions



RESILIENT HOME Goals

- Launched in 2019
- Enroll up to 2,500 residential solar and storage customers in Load Modification program
- At least 20% of these projects sited in disadvantaged and low-income communities, medical baseline customer homes and/or the homes of customers on financial assistance program

RESILIENT HOME Outcomes

- **1,154** total customers enrolled
- **7.5 MWh** per event day expected performance
- **1.8 MW** of load modification capacity
- Q2-2024: 2.07 MW daily average capacity; 268 MWh delivered
- **22%** of portfolio capacity w/ DAC, LMI, CARE/FERA, or Med Baseline customers

RESILIENT HOME Lessons Learned

- **Latency:** It's ideal to start program operations at the time of enrollment
- **Incentive payment structure:** Align payments with program duration
- **Customer and LSE goals:** Identify customer drivers + intersection with program goals



Early Resilience Efforts: 2019-2023

CRITICAL MUNICIPAL FACILITIES

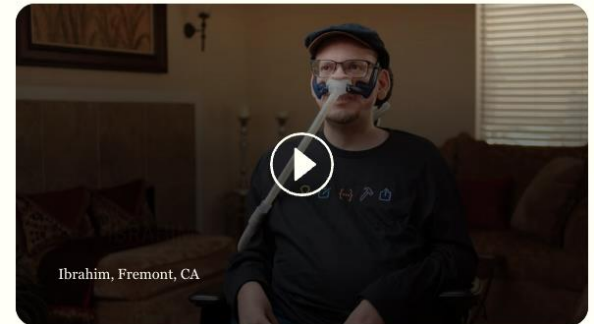
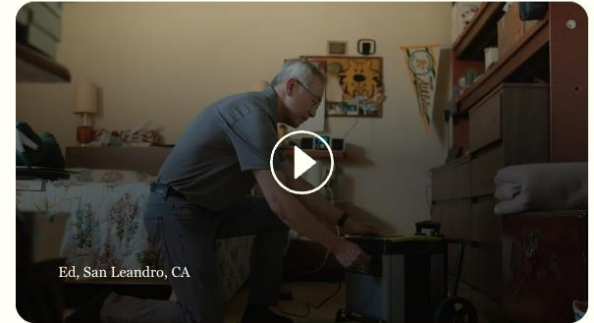
- Starting in 2019, began work with member cities to assemble a list of hundreds of sites, ranging from fire stations and emergency operation centers, to senior and community centers.
- Initial portfolio-level assessment examined natural hazard exposure, service to the community, and solar and battery potential
- Preliminary assessment identified an aggregated capacity of approximately **10 MW of solar and 25 MWh of storage**

PORTABLE BATTERIES

- Program ran from 2021-mid2024
- Gave away **50 free** portable Yeti Goal Zero batteries to Medical Baseline Customer in High Risk fire zones
- Provided ~150 \$1k rebates for portable batteries
- Total budget of **\$300k**

Back-up electrical power is vital for your emergency preparedness plan.

Ava customers Ed and Ibrahim share their personal stories of how Ava's Medical Baseline portable battery program helped them to increase their resilience in the event of a power outage.



BACKGROUND

In 2019, this was a cornerstone effort to replace two jet-fueled peaker plants in Jack London Square with battery technology

SUCCESS

EBCE/Ava successfully negotiated a deal with owners of plant that would improve air quality within this disadvantaged community

SET BACK

PG&E did not reach a final agreement, halting the project. This resulted in a termination of Ava's contract which was contingent.

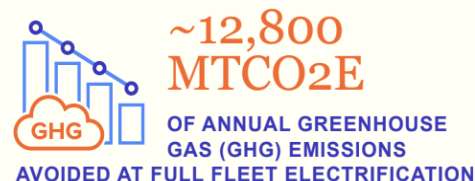
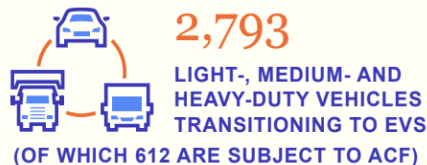


Oakland Clean Energy Initiative

Technical Assistance

- No-cost technical assistance to member jurisdictions to develop fleet electrification plans
- Developed 10-year plans for 13 jurisdictions (+3 private sector medium/heavy-duty fleets)
- Developed plans for complying with state regulations re: medium/heavy-duty vehicles
- Ava budget: \$1.45M for 16 fleets over 5 years w/Frontier Energy

Key metrics:



COVID Grants: 2020

Total Over \$2.2M

- \$1.1M directly to 13 jurisdictions
- ~\$650,000 to local CBOs
- \$245,000 to local medical and healthcare orgs
- \$175,000 to local food banks and food aid



Building Efficiency Accelerator: 2021 - 2023

- Advice letter to elect to administer 2021, awarded in Sept. 2022, launched in 2023
- **\$13.5M grant** from CPUC to support C&I customers from 2023-2026 to implement energy efficiency and electrification
- Goal of **30 GWh reduction**
- Currently enrolled: 30 high usage buildings across 7 cities, representing ~10 GWh of kWh reduction potential
- Two electrification projects identified, and several lessons learned re: commercial-scale electrification
- Early efforts identified customers with greatest potential program benefit, and laid the groundwork for long-term relationships with key accounts for future Ava initiatives

Building Efficiency Accelerator Highlight:

One commercial facility with 2.3M kWh of annual electricity use saved 15% on their yearly energy bill by implementing our recommended energy-saving projects. In addition, they earned **\$17,000** in incentives through measures including HVAC optimization and scheduling, pump setbacks, and VFDs on heating ventilation and **\$115,600** in electrification incentives through electrifying their pool boiler.



Municipal Support Highlights: 2018-2023

TECHNICAL ASSISTANCE

- 7 cities received grants and/or technical support for REACH codes
- 13 jurisdictions received support for AB1236 EV permitting compliance
- 4 jurisdictions received medium and heavy-duty fleet electrification support; 11 jurisdictions received light duty fleet electrification support
- 5 jurisdictions received Affordable Multifamily Housing EV Charging Technical Assistance for 35 sites

GRANTS

- \$1.1M directly to 13 jurisdictions during COVID as part of the total \$2.2M
- over 140 community grants of up to \$2,500 each provided to local CBOs across 13 jurisdictions, totaling nearly \$289k
- \$17.3M secured through CaleVIP for 80 level 2 charges and 24 DC fast charges across 12 jurisdictions
- 5 jurisdictions received support for CEC grant applications
- 2 jurisdictions received a total of \$2M in federal grant funding to support resilience efforts with Ava support

POWER

- Over \$72M in savings to Bright Choice customers across Ava service territory
- 8 cities transition all customers to Renewable 100 with minimal opt out



A lot is possible

With the build out of staff and increased operational maturity, Ava is set up to do great things.

Aspirations not always feasible and lessons learned

We consciously did not pursue aspects of the LDBP due to operational concern, market conditions, and/or financial feasibility. But we take a lot of lessons learned from where we did implement on the plan.

Need for prioritization

The LDBP was comprehensive and audacious. While we executed on a lot, it is now time to focus and prioritize on core programmatic initiatives.



Deeper Dive into Early Action Focus Areas



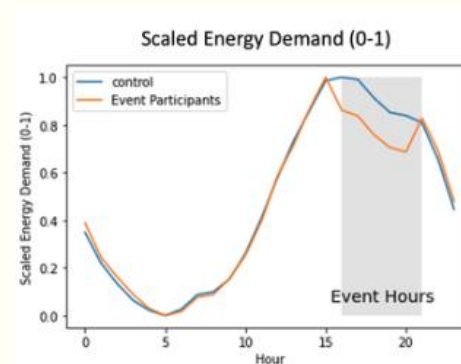
Peak Day Pricing

- Pilots in PDP seasons of 2018 & 2019
- Impact: Approximately 33 MWh reduction
- Discontinued as all customers moved to new commercial TOU rates

PSPS Communications and Flex Alerts

- Customer support and communications around Power Safety Power Shut Offs in October 2019 (1x) and October 2020 (4x)
- Customer and municipal member support and communications on Flex Alerts including information on cooling center locations
- September 2022 Heat Storm
 - outreach to 160,000 target customers (based on machine learning models that predict use of air conditioning) with request to reduce and incentives for participation
 - Outreach to 150 commercial customers to reduce load and incentivize enrollment in the Emergency Load Reduction Program
 - Outreach to all medical baseline customers
 - Outreach to large customers with generators

Heat Storm Outreach Results



Pay for Performance Residential and Commercial Pilots

- Low Income EE and Peak Management (OhmConnect and RisingSun)
 - 388 customers participated; received smart plugs and support in enrolling with demand response program
 - 2% savings across the portfolio
- Single Family Peak Management (BayREN)
 - 122 projects enrolled
 - No measurable impact on peak - likely due to short time frame of pilot
 - Attempted to stack incentives on top of the existing BayREN program, limited uptake on interested contractors despite the additional incentive.
- Commercial Pay-for-Performance (P4P)
 - Three enrolled projects, fully subscribed
 - 53 MWh projected savings, \$356,000 reserved incentives
 - Achieved 300,000 kWh savings and delivered \$185,000 in incentives through meter-based P4P program design

Building Efficiency Accelerator

- Work on grant application started in 2021
- \$13.5M grant from CPUC to support C&I customers from 2023-2026 to implement energy efficiency and electrification
- Goal of 30 GWh reduction
- Currently enrolled: 30 high usage buildings across 7 cities, representing ~10 GWh of kWh reduction potential
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Fleet Electrification/Charging as a Service

- evFleet Consulting developed to promote market transformation and transition from diesel trucks to electric trucks by providing analysis and advisory services to navigate technology and regulatory concerns and timelines. Report provided to each member city and 5 private fleet managers
- Charging as a Service offered to all jurisdictions, one project currently under development

Brownfields Analysis

- First-of-its-kind approach with the EPA to evaluate brownfield reuse as potential sites for zero-emission EV fast charging, identifying potential sites along Interstate 880 corridor in the East Bay.

CaleVIP

- Administrator of the Alameda County Incentive Project
- Support of municipal members application to grants, as well as direct grant contribution
- Total of \$17.3M in incentive funding for level 2 and DC fast charging equipment for electric vehicles; sites in disadvantaged communities or at multi-unit dwelling receive higher incentive
- 132 sites funded
- Ava direct funding contribution of \$3.5M

Drayage Loan

- Awarded \$4.5M loan to developer of medium/heavy duty charging depot in Livermore to serve freight vehicle routes from the Port of Oakland to inland distribution centers

MHD Blueprint

- \$200k grant from CEC (2021) to develop a report on vehicles, infrastructure, financing, workforce development, and community benefit.
- Detailed actions to be taken by Ava and others to make our service area a first-mover market for zero-emission Class 2b-6 trucks and vans by 2030, and Class 7-8 trucks by 2040
- Worked with Stakeholder Guidance Committee of 35 entities
- Completed in Oct 2023

Managed Charging Pilot

- The pilot objective was to learn more about customer marketing of managed charging.
- 108 customers participated; Average incentive payment of \$64.29 per customer
- Extensive message testing to different customers based on current electric rate.
- Lessons learned incorporated into full program development, which is anticipated to launch in early 2025

Initial Work on DCFC Network

- Brownfields analysis and direct work with city partners lead to development of multi-phase DCFC network, which focuses on siting charging stations in underserved areas near multi-family housing and on municipally owned property.
- 5 sites currently under development, with the first one anticipated to be operational by the end of 2024



Building Electrification

Reach Codes

- Cities applied to receive technical assistance to support the development of a new Reach Code ordinance or requested assistance to facilitate implementation of an existing Reach Code. Approx. \$330k in direct assistance.
- Estimated savings from updated REACH codes in 11 cities is approximately 17,787 MT CO₂e cumulatively from 2020-2025

Commercial Kitchen Induction Rebates

- Up to \$17,000 for commercial kitchens to convert to induction equipment from natural gas
- 3 projects funded totaling ~\$20,000

Health-e Home Partnership

- Program designed to address the cost barrier of home energy efficiency upgrades through partnership with BlocPower and Revalue.io
- 40 projects completed; low participation shows financing aimed at low-income customers for electrification remains a barrier



Induction Cooktop Lending Program

- Supported 15 public sites for lending of induction cooktop stoves
- 475 lending sessions complete

Piedmont Pool Electrification Loan

- After surveying all JPA members, identified immediate need for financial support for the beneficial electrification of the public pool in Piedmont
- \$750,000 no-interest loan

Heat Pump Water Heater Incentives

- Through StopWaste.org, provided \$545,000 in incentives
- \$1,000 incentives provided to install HPWH for 545 residential customers

Initial NEM enhancements

- Initially provided new NEM installations cash-out at retail rate, updated to match PG&E following surveys showing that the enhanced cash-out did not change customer behavior
- Provide higher cash-out and credit values to low-income and municipal customers
- Offer customers a choice of a monthly or annual true-up

CA Renewable Energy RFP

- Launched in June 2018, was Ava's first solicitation seeking long-term contracted resources
- Sought several hundred MWs of renewable energy contracts and a minimum of 20MW located in Alameda County
- Scott Haggerty Wind Energy Center (SHWEC) contracted as a result

Scott Haggerty Wind Energy Center

- Operational in July 2021, this project replaced 569 old turbines with 23 state of the art turbines to generate 57MW of local power.
- SHWEC represents a \$20 million investment into Alameda County through tax revenue and was built with 115,000 hours of union labor.

Financial Assistance

- Statewide programs help customers lower their monthly bill payments or arrearages.
- Implemented the Arrearage Management Program (AMP) and Percentage Income Payment Plan (PIPP) to help customers with bill affordability
- Facilitated the application of \$13.8M in state funds towards customer past-due payments via the California Arrearage Payment Program (CAPP)

DAC-GT/CSGT

- Ava contracted for 5 solar projects to be built in Ava's service territory. Projects are expected to come online in 2026 and will supply 5.8 MWh of energy, enough electricity to power ~3,700 CARE/FERA households.

Non-standard Rate Agreements

- Ava has several non-standard rate agreements with commercial customers who received a Direct Access ticket but choose to stay with us on a special customized rate.

Renewable 100 for LEED

- A Green-e certified version of Ava's R100 product is offered to commercial customers seeking LEED building certification points. Several businesses currently contract with Ava for this product which encourages environmentally friendly and healthy buildings in our service area.

2030 Carbon Free Goal

- In December 2020 Ava's Board adopted a goal that Ava pursue a net 0 MMT emission portfolio of resources by 2030, as calculated consistent with the CPUC's Integrated Resource Plan methodology

1 GW of Contracted new Renewable Energy Projects

- With 21 contracts signed in the last 5 years, Ava is supported by over 1 GW of new renewable power – an incremental growth in clean power that wouldn't exist without the agency.

Community-wide Opt Up to Renewable 100

- Support community-wide post-enrollment product change to Renewable 100 for 7 cities, resulting in 28% of Ava customers on 100% solar & wind

Example: California Community Choice Financing Authority, founded 2021

BACKGROUND

- 1 of 5 founding members of JPA of 10 CCAs
- Aim to reduce the cost of power purchases for members through pre-payment structures

SUCCESSSES

- 2021 – Issues CA's first municipal clean energy project revenue worth over \$2B
- \$5.48 billion of bonds in 2023, making it the third largest issuer of tax-exempt debt in the US that year
- nearly \$9 billion of prepayment bonds in total, saving participating CCA ratepayers over \$45 million yearly.



Tulare Solar Center

Transition to Renewable 100

2018	1 city launched with residential customers defaulted to Renewable 100; 3 cities launch with default to Brilliant 100
By October 2022	8 cities had Renewable 100 as the default service options for their local customers
Currently	10 cities have their municipal accounts served by Renewable 100
Coming in August 2025	Fremont residential customers will switch to Renewable 100
Coming in August 2026	Fremont commercial customers will switch to Renewable 100

Aramis Solar + Storage Resource Adequacy Project: 2020+

LOCAL

- Initially part of the 2018 RFO, contract signed in 2020 for portion of 100 MW solar plus 100 MW/4-hour duration storage project in Livermore.
- 10-year agreement for 20 MW of resource adequacy
- CleanPowerSF is main power off-taker

LABOR + INVESTMENT

- Construction expected to begin in 2025 and create 400 living-wage, all union jobs through a Party Labor Agreement with 5 local construction crafts
- Local sales tax revenue expected to be \$1.5M, local procurement of \$7.5M, indirect benefits of \$22.5M



Executed Renewable Energy and Storage Contracts

Project Name	Technology	Location	Est Comp Date	Term	Developer	Capacity
Scott Haggerty Wind Energy Center	Wind	Alameda County	Jul 2020	20-year term	Greenbacker Capital	Nameplate MW: 54.8 Storage MW/MWh: 0
Golden Fields Solar	Solar	Kern County	Dec 2020	15-year term	Clearway Energy Group	Nameplate MW: 112 Storage MW/MWh: 0
Tecolote Wind	Wind	Torrance and Guadalupe (NM)	Dec 2021	10-year term	Pattern Energy	Nameplate MW: 100 Storage MW/MWh: 0
Henrietta D Energy Storage	Storage	Kings County	Dec 2021	15-year term	Convergent Energy and Power	Storage MW/MWh: 10/40
Tulare Solar Center	Solar	Tulare County	Apr 2022	18-year term	Idemitsu Renewables	Nameplate MW: 56 Storage MW/MWh: 0
Daggett 3	Solar + Storage	San Bernadino County	Sep 2023	15-year term	Clearway Energy Group	Nameplate MW: 50 Storage MW/MWh: 12.5/50
Oberon	Solar + Storage	Riverside County	Jan 2024	10+-year term	Intersect Power	Nameplate MW: 125 Storage MW/MWh: 125/500
Scarlet I	Solar + Storage	Fresno County	May 2024	20-year term	EDP Renewables	Nameplate MW: 100 Storage MW/MWh: 30/120
Tumbleweed Energy Storage	Storage	Kern County	Jul 2024	15-year term	REV Renewables	Storage MW/MWh: 50/200
Kola Energy Storage II	Storage	San Joaquin County	Jun 2025	20-year term	NextEra	Storage MW/MWh: 125/500
Oakland 1	Solar	Alameda County	Dec 2025	20-year term	Prologis	Nameplate MW: 0.72 Storage MW/MWh: 0



Project Name	Technology	Location	Est Comp Date	Term	Developer	Capacity
San Leandro 10	Solar	Alameda County	Apr 2026	15-year term	Prologis	Nameplate MW: 1 Storage MW/MWh: 0
Hayward Commerce	Solar	Alameda County	Apr 2026	15-year term	Prologis	Nameplate MW: 0.56 Storage MW/MWh: 0
Tracy 12	Solar	San Joaquin County	Jun 2026	20-year term	Prologis	Nameplate MW: 3 Storage MW/MWh: 0
Tracy 2 West	Solar	San Joaquin County	Jun 2026	20-year term	Prologis	Nameplate MW: 2 Storage MW/MWh: 0
Sun Pond	Solar + Storage	Maricopa County (AZ)	Jun 2026	20-year term	Longroad Energy	Nameplate MW: 42.5 Storage MW/MWh: 42.5/170
Corsac Station	Geothermal	Churchill County (NV)	Dec 2026	15-year term	Fervo Energy	Nameplate MW: 40 Storage MW/MWh: 0
SunZia	Wind	Lincoln County (NM)	Dec 2026	15-year term	Pattern Energy	Nameplate MW: 250 Storage MW/MWh: 0
Imperial Sun	Solar + Storage	Imperial County	Mar 2027	15-year term	Atlantica	Nameplate MW: 100 Storage MW/MWh: 100/400
IP Easley II	Solar	Riverside County	Jun 2027	10-year term	Intersect Power	Nameplate MW: 75 Storage MW/MWh: 0
IP Easley	Solar	Riverside County	Jun 2027	10-year term	Intersect Power	Nameplate MW: 75 Storage MW/MWh: 0
Zeta Solar	Solar + Storage	Merced County	Sep 2027	20-year term	Longroad Energy	Nameplate MW: 37.5 Storage MW/MWh: 37.5/150
Gabriel Storage	Storage	Los Angeles County	Sep 2027	20-year term	Aypa Power	Storage MW/MWh: 100/400
Rosemary Solar	Solar	Fresno County	Sep 2028	20-year term	Longroad Energy	Nameplate MW: 70 Storage MW/MWh: 70/280



Community Innovation Grants

- 6 grants of \$40,000 each = \$240,000
 - Ecology Action
 - RE-volv
 - People Power Solar
 - Community Impact Hub
 - Rising Sun Center for Opportunity
 - West Oakland Environmental Indicators Group

CARE Enrollment Grants

- 2 grants of \$10,000 each to local CBOs in late 2019
 - Spectrum Community Services & Interfaith Light and Power
- Goal to get 500 new CARE enrollments
- Grants in place just as pandemic hit, severely impacting CBOs ability to conduct outreach

COVID Grants

- A total of \$2.2M to city partners and community-based organizations providing a variety of services

AMP Enrollment Grants

- \$150k to 4 orgs for AMP enrollment

Induction Demonstration Grant

- \$300,000 over 2 years for education and awareness of induction cooktop technology
- Experiential opportunity to engage with customers
- Award to Channing Street Copper

Clean Energy Jobs and Training for Youth Awareness, Community Innovation Grant

- \$300,000 over 2 years aimed at empowering young individuals through education and exposure to employment opportunities and hands-on training in clean energy technologies
- Awarded to Rising Sun Center for Opportunity and AGAPE (Advancing Green Apprenticeship Pathways for Efficiency)

Workforce and Environmental Justice Project Selection Criteria

- At the end of 2023, staff worked with a large stakeholder group made up of over 40 organizations that represent the interests of labor, climate, and environmental justice to develop these criteria, which were approved in Jan-24
- The Criteria identifies important priorities related to: 1) Workforce and Local Workforce Development 2) Innovation 3) Location 4) Environmental Stewardship 5) Benefits Accruing to Equity Priority Communities

WF+EJ Criteria Objective: “Ava evaluates proposed Energy Offtake Agreements by conducting thorough analysis of economic value, viability of projects to meet their stated online dates, project fit into Ava’s Integrated Resource Plan and role of the project in supporting Ava’s 100% clean energy by 2030 goal. Ava is committed to enhancing its workforce and economic priorities by incorporating Energy Workforce and Environmental Justice Project Selection Criteria into the overall evaluation of Energy Offtake Agreements.”

VPP + Energy Storage

Resilient Home

- ~1200 residential solar + storage customers are compensated for dispatching their battery energy to reduce Ava's peak demand, support grid resilience, and provide emergency backup for customers.
- Program provided 55 megawatt-hours back to the grid during the 2022 heat storm.

Critical Municipal Facilities

- Initially, a portfolio of up to 61 sites across 8 cities
- Solar and storage microgrids, will supplement or fully replace the use of existing diesel generators to back-up power
- Interconnection applications all submitted
- Total initial capacity:
 - Solar - 10.2 MWdc
 - Battery Storage - 20.13MWh

Oakland Clean Energy Initiative

- In 2019, this was a cornerstone effort to replace two jet-fueled peaker plants in Jack London Square with battery technology
- EBCE/Ava successfully negotiated a deal with owners of plant that would improve air quality within this disadvantaged community

Medical Baseline Battery Program + Rebates

- Total budget of \$300,000
- \$150,000 for 50 free portable batteries to Medical Baseline customers in high-risk fire zones
- 150 \$1,000 rebates to Medical Baseline customers
- Successful marketing campaign with use of business reply cards lead to full subscription

Traditional Procurement

- In 2023, Ava contracted for the Kola BESS project outside Tracy, on a site within Alameda County's East County Area Plan (ECAP).1
 - The battery is scheduled to come online in 2025.



Account Services and Time of Use Transition: 2021-2022

BACKGROUND

- Time of Use (TOU) structure intended to incentivize customers to avoid energy use during times when there is the most brown power on the grid.
- Transition from tiered to TOU structure mandated for IOUs, EBCE/Ava opted into effort in support of reducing overall GHG emissions.
- Timing:
 - Alameda County – May 2021
 - Tracy – April 2022
- Bill Protection for 1 year

METRICS

- Alameda County
 - 350,000 eligible customers
 - 72,000 declined (19%)
 - 17,000 received \$205k in bill protection payments (\$12 average)
- Tracy (part of larger population in transition wave)
 - 25% of customers declined
 - 1,400 received \$30k in bill protection payments (\$21 average)

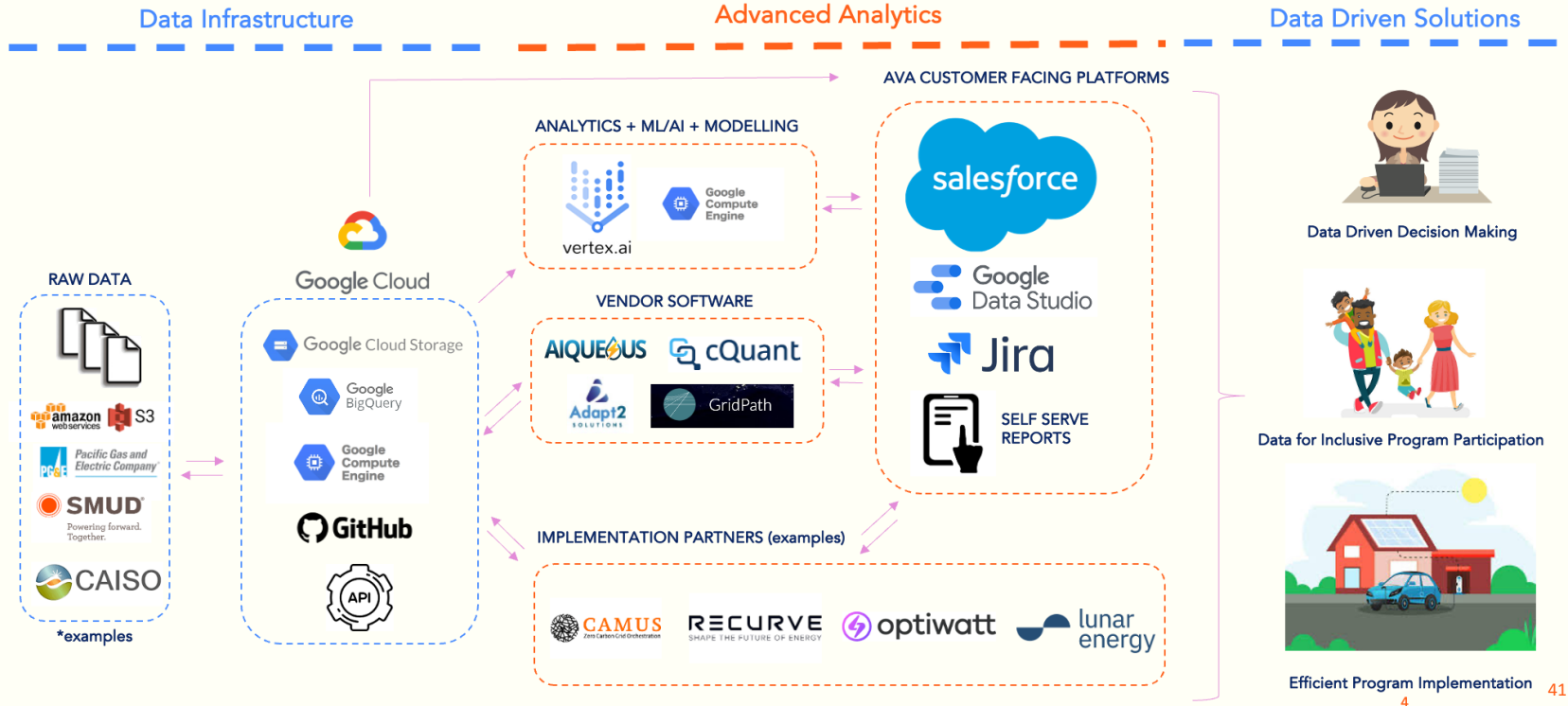


E-TOU-C

Peak hours from 4:00 PM to 9:00 PM every day, the default rate.

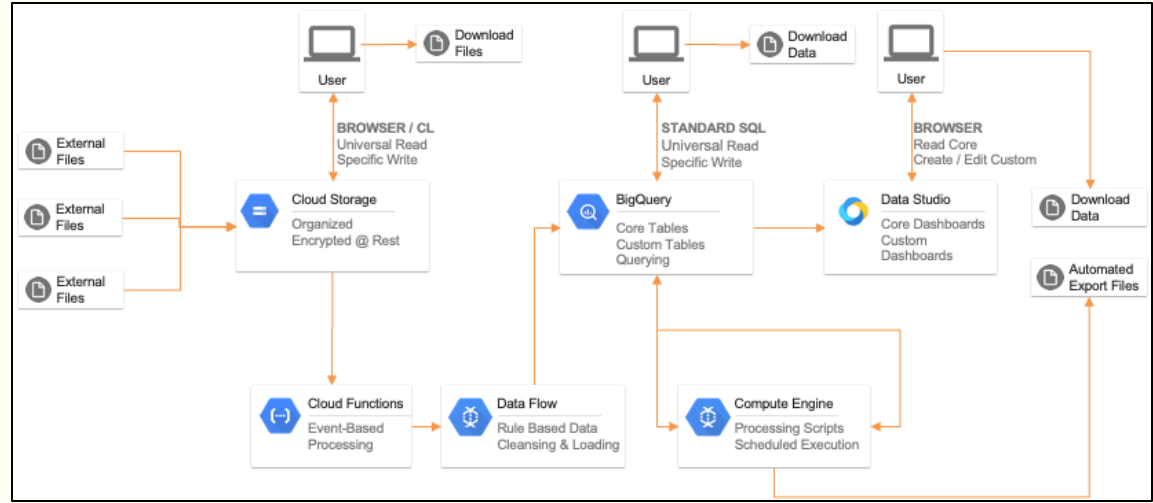
Technology & Analytics

Ava's data and technology stack includes unique data sources and advanced analytics that allow for smart segmentation, efficient data sharing with implementation partners, and intentional and pro-active customer engagement. Centered around the Google Cloud and Salesforce Platforms Ava's inhouse ETL, API, advanced analytics processes (machine learning, AI, modeling), and dashboards enable the organization at large in achieving their objectives.



Overview of Ava Technology and Analytics

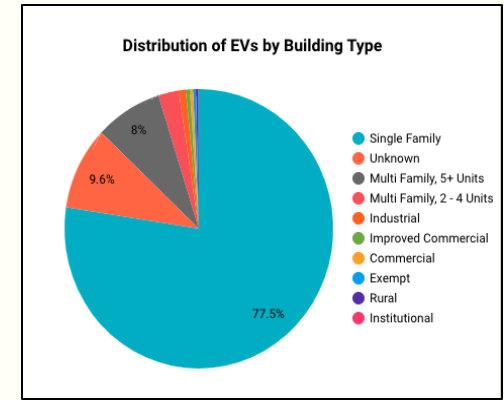
- The Ava Analytics Platform is built on the Google Cloud Platform. It consists of a variety of resources and applications that ingest, store, process, analyze, summarize and export relevant business data. Below is a diagram of the various components of the solution and how they work together.
- The platform allows us to create dashboards of useful information that inform how we implement programs.
- For example, knowing that distribution of EV ownership is weighted heavily towards single-family homes, we chose to site DCFC stations near multi-family housing to address a known barrier to adoption.



Provides an annual summary for EDCs that can be filtered by jurisdiction, product, sector, and rate class. Information includes customer counts, usage levels, customer charges, Bright Choice saving and Renewable 100 surcharges. You can click on any of the table rows to further filter the data. Use the "Reset" button at the top of the dashboard to return the report to starting conditions. Use the optional metrics in the sidebar below to access additional metrics to view.

Select Year: 2023 (FY) | 643,477 | 6,514 | 6,937 | 1,233 | 1,332 | Aug 23, 2023, 6:00:00 PM

Jurisdiction	Product	Sector	Summary Rate										
Yr End Count	642,511	6,482,399,744	6,511,936,421	\$912,210,838	Yr End Count	1,233	1,332	Revenue	\$912,754,007	Bright Choice	\$-25,620,705	Renewable 100 Surcharges	\$10,537,371
Jurisdiction	Billed kWh	Billed \$	Bright Credit	Renew Surch.	Yr End Count								
OAKLAND ICD	1,514,098,683	\$21,577,301	\$-6,090,339	\$98,776	191,883								
FREMONT ICD	17,268,724,691	\$72,679,207	\$-4,182,301	\$26,889	86,679								
FAYWOOD ICD	648,352,502	\$8,426,679	\$-798,702	\$2,614,793	24,791								
TRACY ICD	388,908,601	\$26,826,279	\$-2,239,676	\$2,237	36,689								
UNION ALAMEDA	375,963,875	\$51,351,372	\$-1,193,213	\$25,800	50,889								
Grand Total	6,482,399,744	\$92,221,638	\$-10,480,768	\$16,937,371	443,911								
					1:16:76								
Product	Billed kWh	Billed \$	Bright Credit	Renew Surch.	Yr End Count								
Bright Choice	6,426,764,029	\$91,645,461	\$-10,630,709	\$2,530	466,699								
Renewable 100	2,048,495,631	\$30,637,399	\$0	\$10,538,841	182,574								
Billed 100	6	\$0	\$0	\$0	1								
Grand Total	6,482,399,744	\$92,221,638	\$-10,480,768	\$16,937,371	443,911								
Sector	Billed kWh	Billed \$	Bright Credit	Renew Surch.	Yr End Count								
Residential	2,226,266,643	\$31,976,790	\$-1,110,008	\$2,626,386	191,883								
Commercial	2,748,234,765	\$29,746,500	\$-5,957,175	\$5,267,719	49,878								
Industrial	1,083,174,781	\$14,688,832	\$-4,143,824	\$1,414,944	5,899								
Municipal	163,757,263	\$22,611,516	\$-414,679	\$29,122	5,075								
Unincorporated	148,170,292	\$19,529,995	\$-2,239,676	\$2,237	36,689								



Overview of Customer Call Center: Service & Quality

- Excellent customer feedback on quality of service
- Consistently high performing call center
 - Speed to answer: 17 seconds
 - Average monthly call volume: 1,165 calls
 - Average length of call: 11:51 minutes
- Local Hire Outreach for Call Center
 - Proven success with key partner, SMUD
 - In 2023 Customer Service Representative recruitment, focused on Ava service territory to receive 41 applications from in-territory residents

Customer Testimonials

I just got off the phone with Gary who did a great job explaining why my PG&E bill had charges coming from PG&E as well as Ava Energy for electricity. Gary... was pleasant, concise and explained complicated billing details in plain language. I so rarely have a productive and pleasant interaction with companies, so I wanted to make sure that I highlighted this as a real positive experience with Gary. Thanks, J & C

He understood exactly what I was asking about and went above and beyond to make sure that I got answers to my questions...super patient and clear when it came to showing me...the website. He said that he would call me back the next day, and he did! The voicemail he left was extremely clear and provided me the answer I needed...Ava Energy is lucky to have a person like Eric on the team. I have high standards, and he definitely exceeded them. Thanks, C

Appendix



Early Actions Outline - Expanded

Demand Response

- Demand Response Pilot
- Enhance existing Demand Response Programs
- Evaluate Demand Response Incentive Structure

Energy Efficiency

- Leverage Data and Customer Relationships
- Support existing Energy Efficiency Programs

Building Electrification

- Develop initial Building Electrification pilot project
- Develop workforce training initiatives
- Evaluate Building Electrification strategies

Transportation Electrification

- Facilitate Regional forum for development of reach codes
- Implement Time of Use rate structure for commercial Electric Vehicle (EV) fleets and residential EV owners
- Medium-Heavy Duty Vehicle Fleet Electrification Project
- Offer incentives for managed charging
- Offer ongoing education and outreach for personal EV market

Collaborative Procurement

- Community Net Energy Metering (NEM)
- Community Shared Solar Pilot
- Enhanced NEM Program
- Municipal Feed-in Tariff
- Utility-Scale Renewables and Energy Storage

Community Investment Fund

- Community Innovation Grant
- Energy Innovation Grant
- Government Innovation Grant

Municipal Participation Detail

Activity	Albany	Berkeley	Dublin	Emeryville	Fremont	Hayward	Livermore	Newark	Oakland	Piedmont	Pleasanton	San Leandro	Tracy	Union City	Alameda County
Induction Cooking Lending Program (ICLP) Location		x	1 former location			x			x	x					
Commercial Kitchens		\$60k grant													
Municipal Electrification loans										\$750,000					
Federal Earmark Support					\$1M for CMF	\$1M for CMF									
Reach Codes	Tech Assist	Tech Assist / \$10k grant		Tech Assist	Tech Assist / \$10k grant	Tech Assist / \$10k grant			Code Adoption / \$10k grant	Code Adoption / \$20k grant					
Building Efficiency Accelerator, Commercial		x			x				4 sites + AC Transit						7 sites + AC Transit
Emergency Load Reduction Program (ELRP) payments												\$5k	\$5k		
COVID Grants to jurisdiction directly	\$22k	\$79k	\$50k		\$193k	\$126.5k	\$79k	\$5k	\$278.5k	\$22k	\$5k	\$79k		\$50.5k	\$88.5k
Local/Community Sponsorships	5 \$5k	20 \$40k	6 \$12k		20 \$41k	4 \$5k	17 \$36k	2 \$5k	50 \$102k	2 \$3.5k	7 \$15k	6 \$11.5k	4 \$10k	1 \$2.5k	
Co-branded Ava awareness postcard (Summer 2024)		x	x			x	x			x	x	x			
Local Power Projects						Prologis Solar (DACGT)	SHWEC, Forum Depot		OCEI :(, Prologis Solar (DACGT)			Prologis Solar (DACGT)	Prologis Solar (DACGT) (2)		SHWEC, RA project?
Community wide opt up to R100	x	x	x	x		x				x	x	x			
Critical Municipal Facilities (CMF) locations		x		x	x	x	x		x		x	x			
CALeVIP	1 L2	2 DCFC; 7 L2	1 DCFC; 18 L2	4 L2	2 DCFC; 11 L2	2 DCFC; 3 L2	4 DCFC; 4 L2	1 DCFC; 1 L2	3 DCFC; 23 L2	0	4 DCFC; 3 L2	3 DCFC; 3 L2	N/A	2 DCFC; 2 L2	0
AB1236 Compliance for EV Permitting	TA - Compliant	TA - Compliant	TA - Compliant	TA - Compliant	TA - Compliant	TA - Compliant	TA - Compliant	TA - Compliant	TA - Compliant	TA - Compliant	TA - Compliant	TA - Compliant	Compliant	TA - Compliant	TA - Compliant
Affordable Multifamily Housing EV Charging Technical Assistance		15 sites			1 site		1 site	1 site	17 sites						
evFleet Consulting support (M/H Duty Fleets)		x				x	x		x						
DCFC locations		Phase 1c			Phase 1c	Phase 1b	Phase 1a + 1b (2)		Phase 1 + 1a + 1b	Phase 1a	Phase 1b	Phase 1b + 1c			
Municipal Fleet Electrification Technical Assistance (Light Duty)	x	x	x	x		x	x		x	x	x	x			x
CEC Grant support		x				x	x		x						x
E-Bike Incentive Participating Shops	up to 1	up to 11	up to 3	n/a - no known shops currently selling ebikes	up to 5	n/a - no known shops currently selling ebikes	up to 3	n/a - no known shops currently selling ebikes	up to 7	n/a - no known shops currently selling ebikes	up to 3	up to 2	n/a - no known shops currently selling ebikes	n/a - no known shops currently selling ebikes	up to 4

