Charging Ahead:

How CCAs are helping electrify your ride

Community Choice Aggregation EV Program Benchmark

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March 2024

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Table of Contents

I. Abstract

Community Choice Aggregations (CCAs) are organized to represent and pool together the resources of their customers to leverage cleaner sources of energy. Also known as multiple choice aggregations, these non-profit elected programs enable communities to source alternative suppliers of energy that differ from what Investor Owned Utilities (IOU) such as Pacific Gas & Electric, San Diego Gas & Electric, and Southern California Edison would normally provide. CCAs provide a variety of benefits, including local control over resources, development of local generation capacity, lower utility bills, and aid communities electrify the transportation sector. As electrification and more renewable sources of power become a pressing priority priority for customers, IOUS and CCAs alike are providing rebates and incentives to invest in electric vehicles and charging networks. The spread of existing incentive programs is extensive and unique to each CCA depending on demographic, time of establishment, and local regulatory frameworks. The purpose of this report was to assess the differences in Electric Vehicle and Electric Vehicle Charging programs among 12 CCAs, aiming to gauge the impact of each CCA on its community, document best practices, and ultimately accelerate the sharing and adoption of effective and innovative programs. In this report, we provide data on 12 CCAs in California. This analysis does not include all California CCAs, but it does include the oldest, the newest, the largest, and the smallest; from San Diego to the Redwood Coast; and with a combined base serving over 5.0 million customers.

Frequently Used Abbreviations

Common acronyms that will be used throughout this report include:

AVA (East Bay Community Energy)
CCA (Community Choice Aggregation)
CEC (California Energy Commission)
CPA (Clean Power Alliance)
CPSF (Clean Power San Francisco)
CPUC (California Public Utilities Commission)
CVRP (Clean Vehicle Rebate Project)
DAC (Disadvantaged Communities)
DCFC (Direct Current Fast Charger)
EV (Electric Vehicle)
EVSE (Electric Vehicle Supply Equipment)
IOU (Investor Owned Utility)
LI (Low Income)
L2 (Level 2 Charger)
MCE (Marin Clean Energy)
PCE (Peninsula Clean Energy)
RCEA (Redwood Coast Energy Authority)
SCP (Sonoma Clean Power)
SDCP (San Diego Community Power)
SJCE (San Jose Clean Energy)
SVCE (Silicon Valley Clean Energy)
VCE (Valley Clean Energy)
V2G (Vehicle to Grid energy transmission)
3CE (Central Coast Community Energy)

II. Methodology

Research was conducted on the programs and incentives for Electric Vehicles and Charging being offered to customers of twelve CCA's which were selected including a broad representation of CCAs including the largest, urban, rural, oldest, and newer CCAs from the Redwood Coast to San Diego. The seven areas of EV programs investigated were Incentives for Electric Vehicles, Home Charging and Chargers Incentives, Incentives for Charging Networks (commercial), Workplace Charging/Multi-Family Charging, Incentives for Low Income and DAC, Programs for Fleets and Buses, and Plans for V2G. These areas of focus were chosen based on the guidance of Barry Rands, a Program lead for the SLO Climate Coalition Green Transportation Program. These focus areas adequately reflect the spread of programs that are currently available, and the categories encompass all of the programs that were found through the research and interview process. The programs of each CCA in each of these areas was compiled, benchmarked and compared. To ensure that the data found was comprehensive of everything being done, CCA representatives were contacted and interviewed to verify the findings and further investigate the work being done. Interviews were held with nine of the twelve CCAs. These include 3CE, CPA, CPSF, MCE, SCP, SDCP, SJCE, SVCE, and VCE. Additionally, we communicated with AVA, PCE, and RCEA via email. This additional information was then benchmarked to come to our final conclusions on the best practices in EV programs of these 12 CCAs.

III. Findings

Incentives for Electric Vehicles

The three CCAs that provide rebates specifically for residential and commercial EV purchase are 3CE, PCE, SCP and MCE.

Chart 1: Rebates for electric vehicle purchase

Rebate Type		**3CE**	**PCE**	**MCE**
New EV	Commercial	$2,000 base	n/a	n/a
	Residential	$2,000 base	n/a	$3,500 instant rebate
Used EV	Commercial	$1,000	n/a	n/a
	Residential	n/a	$1,000 base	$2,000 instant rebate
Plug-in Hybrid		n/a	$700 base	$3,500 instant rebate
E-bike		n/a	Up to $1,000	n/a

Electric Motorcycle	$1,000 base	n/a	n/a

Customers can get a higher rebate than the base if they qualify for the income consideration or some eligibility stipulation. Marin Clean Energy (MCE) is highlighted in yellow because all of the rebates that it offers is only available to a limited group of people who have the eligibility qualifications (income and organization based).

3CE Electrify your Ride–(Commercial and Residential) are the programs through which 3CE distributes rebates to their customers. For their commercial program, 3CE offers their customers rebates for up to 5 vehicles, varying in amount depending on the type of vehicle. For residential customers purchasing EVs, 3CE offers rebates for Electric Battery vehicles, Plug-in Hybrid vehicles, and Electric Motorcycles (Plug-in Hybrid vehicles are only offered to LI/DAC customers). Through their *Used Electric Vehicle* and *E-Bikes for Everyone* rebate programs PCE offers monetary incentives for their customers to purchase used EVs, used Plug-in Hybrids, and new E-bikes. The vehicle eligibility stipulations for this rebate is that the EV/Hybrid is 2016 or newer, has over a 25-mile all-electric range, and whose price is under $35,000 before the rebate. Both 3CE and PCE offer increased rebates for income-qualified residents.

MCE's *Instant Rebate Program* offers their LI/DAC customers rebates for the purchase or lease of qualifying new EVs or Plug-in Hybrids and used Plug-in Hybrids at the dealership. MCE differs from the two other CCAs because all of their incentives are exclusively offered to LI and DAC. The eligibility requirements for their incentives include either qualifying for a specific income bracket or enrollment in a number of programs listed on their site.

CPA, CPSF, AVA, SJCE, SDCP, SVCE, VCE, SCP do not currently provide incentives or rebates specifically for Electric vehicles. However, some have had very successful programs in the past. SCP's 2016 *Drive EV Program* offered their customers incentive certificates redeemable for discounts on eligible new and used electric vehicles at the time of purchase at participating dealerships. During the program's duration, SCP offered their customers a base rebate of $2,000 for new EV's and a base rebate of $1,000 for used EVs for their residential customers. Between 2016 and 2018 this program received 1,586 applications, with 87% of them being approved. Through Redwood Coast Energy Authority's 2021 *Public Rebate for Electric Vehicle* Program, their customers were eligible for a rebate of 50% of whatever incentive they received from the CVRP, the average being $1128. Initially, this program had $50,000 available but the funds have been exhausted and no further rebates for EV purchase are available. Multiple CCAs including AVA and PCE have launched incentive finders to help their customers navigate the process of finding Federal, State, and local rebates that they qualify for.

Home Charging and Chargers Incentives

Smart Charging Apps

CCAs like SVCE and MCE have launched mobile applications that their customers can sync their vehicle and charging stations with to automatically charge their EVs during the cheapest off-peak hours, based on their specific electricity rates. Not only does this transfer savings to their customers and automate charging, but it promotes charging during times when the grid is supplied with the highest amounts of renewable power. Both apps contain the feature to set a charging 'ready by' time so that a fully charged vehicle is assured by the time you need it. The

apps also track EV energy consumption, cost, savings, points, and environmental saving for all charging for users to view. MCE and SVCE each offer a $50 bonus when their customers enroll for the *MCE Sync EV Smart Charging App* and SVCE *GridShift EV Charging App*. MCE also provides a $25 incentive for referring a friend and up to $10 cash back by charging during low-carbon events. This is offered to all of their customers irrespective of income. SVCE offers a $250 rebate for internet connected models of chargers (ChargePoint chargers) and SmartenIt ev.energy compatible L1/L2 chargers. The EVs and home chargers that are compatible with the smart charging apps are listed on the CCA's websites.

Partnerships

CALeVIP provides incentives for EV charger installations and works with local partners on projects that support regional EV needs for Level 2 and direct current fast charging (DCFC). These statewide efforts provide a streamlined process for cost-effective charger installations that can reduce significant gaps in charging availability.

CALeVIP:

Funded by the CEC, the California Electric Vehicle Infrastructure Project (CALeVIP) provides statewide rebates for EV chargers and charger installation distributed on a first-come, first served basis. The first round of funding, CALeVIP 1.0, ended last year although the funding that was reserved through this program is still being distributed. CALeVIP 1.0 incentivizes Level 2 and DC fast chargers (DCFC). The second round of funding of this program (CALeVIP 2.0) exclusively targets high speed DC fast chargers. The CEC funds these programs but also accepts contributions from utilities, CCAs, and air quality management districts for CALeVIP 1.0. Funding projects under CALeVIP 1.0 did not give CCAs priority over certain rebates and incentives as the program is designed to level the playing field and support the transition towards electric vehicles equitably across California. However by contributing funding to CALeVIP, CCAs were able to broaden the amount of funding that their customers can take advantage of. Further, by doing this, CCAs were able to target their funds. The advantage of contributing to CALeVIP rather than directly distributing funds through their own programs is that the Center for Sustainable Energy oversees the CALeVIP program, managing both its implementation and fund distribution processes.

Rebates

The three CCAs that offer incentive programs for residential chargers and charging are RCEA, 3CE, and CPSF. RCEA's rebate for residential chargers is funded by their *Community Choice Energy* program which offers customers incentives for approved charging stations from a limited fund of $24,000. The max rebate is not to exceed 50% of the total charging station hardware costs. Applications for this rebate are approved on a first-comes first-served basis and is retroactive for up to 3 months (can be taken advantage of in the first 3 months of installation). To date, RCEA has issued 39 rebates for Level 2 home chargers through this program, totaling

$11,966.19 at an average of $306.83 per rebate. Home charger and charging incentives are provided to 3CE's customers through their *Electrify Your Ride– Residential* program which includes increased rebates for income considered customers. 3CE offers an EV readiness rebate which reimburses customers for the majority of electrical work related to Level 2 EV charger installation (materials and labor). It applies to both home and work charger installations. Part of CPSF's *EV Charge SF* program provides their residential customers with a rebate for the electric vehicle supply equipment (EVSE) associated with an EV. This constitutes electrical conductors, related equipment, software, and communications protocols that deliver energy to the vehicle, thus encompassing a scope far beyond a mere charger. CPSF's residential charging incentive is exclusively offered to market-rate single-family dwellings, duplexes, and townhomes with separate garages. Regarding incentives for home charging, MCE's *Residential EV Rate Plan (EV2)* and SJCE's rate plan structure modifies electricity rates based on time of day for charging, reducing the cost for customers who charge during off-peak hours. Utilities such as PG&E provide off-peak rate incentives similar to this, but it's crucial to highlight that CCA sourced energy often consists of a more renewable mix.

Chart 2: Rebate incentives for home charger, installation, and upgrades. Base indicates that increased rebates are offered for customers who qualify for income considerations or some eligibility stipulation.

CCA	Program	Incentive Type	Amount
RCEA	Community Choice Energy Program	Level 2 Charger	$500 max
3CE	Electrify Your Ride– Residential	Charger	$400 base
		EV Readiness	$2,000 base
CPSF	"EV Charge SF"– New Construction Projects	EVSE	$1,000

GridSavvy Rewards

Through their reward based energy saving program, *GridSavvy Rewards,* SCP offers their customers a $250 enrollment incentive, 50% reimbursement off a smart Level 2 EV home charger once installed and activated, and a $5 monthly bill credit. To receive the 50% charger cost compensation, customers must have initially bought the charger through GridSavvy Rewards. The way the reward service works is by sending enrolled members email or text alerts when there is a need to save energy. By reducing electricity usage– such as turning off appliances or delaying their activity– during designated energy-saving hours, customers are able to earn $2 for every kilowatt-hour (kWh) saved.

No incentives were identified for home charging and charger purchase/installation for AVA or SDCP customers. SJCE's sole charging incentive is a modified off-peak electricity rate that matches PG&E's, but with more renewable energy. When interviewed, SDCP suggested plans for management with time-of-use rates, similar to MCE and SJCE's charging incentives.

Incentives for Charging Networks (commercial)

Several CCAs, including 3CE, CPA, CPSF, PCE, MCE, SCP, SVCE, and SJCE have implemented incentives for commercial charging networks. Rebates to encourage the establishment of commercial charging sites were provided by 3CE and CPSF. MCE offered two variations of Commercial EV Rate Plans. The remaining CCA's had programs in partnership with CALeVIP to promote commercial charging networks.

3CE–

3CE offers two programs for commercial charging networks. Their Electrify your Ride - Commercial program offers incentives for level 2 chargers which can be combined with their EV Readiness Rebate for a maximum combined value of $8,000.

Chart 3: Rebate incentives for commercial charger, installation, and upgrades from 3CE.

Program	Incentive Type	Amount
Electrify you Ride– Commercial	Level 2 Charger	**$3,000** or 75% of equipment cost max
Electrify you Ride– Commercial in combination with EV Readiness Rebate	Level 2 Charger	**$8,000** or 75% of equipment cost max

CPSF–

CPSF incentivized commercial charging networks through their EV Charge SF program. This offered a maximum of $120,000 in funding to commercial, workspace, retail, and other nonresidential sites. This covered a variety of rebates for Level 2 EVSE installs, associated chargers, EV infrastructure upgrades, and conduits for future EV branch circuits. EVSE, referring to Electric Vehicle Supply Equipment encompasses the charging stations, connectors, and associated electrical systems required to supply power from the grid to electric vehicles. The conduit for future EV branch circuits refers to the installation of an electrical conduit that accommodates potential future electric vehicle charging needs, allowing for the easy addition of EV charging infrastructure without extensive modifications to electrical infrastructure.

Chart 4: Rebate incentives for commercial charger, installation, and upgrades directly from CPSF.

Program	Incentive Type		Amount	
EV Charge SF	Level 2 EVSE	Associated Charger*	**$2,000** for first 10% of vehicle stalls; **$3,000** beyond first 10%	Additional **$500** (per port)
	EV Infrastructure Upgrade		**$1,000** per outlet beyond first 10%	

	Conduit for Future EV Branch Circuits	**$250** per vehicle stall

* Associated charger indicates the charger installed in association with the EVSE that is implemented.

MCE–

MCE took a different approach to commercial charging incentives by offering two variations of Commercial EV Rate Plans which adjust the energy rates of commercial sites offering EV charging. The Business Low Use EV (BEV1) Rate is offered to EV charging stations that use 100kW or less per month and the Business High Use EV (BEV2) Rate is offered to EV charging stations that use 100kW or more monthly.

CALeVIP–

Seven of the twelve CCA's have partnerships with CALeVIP across six projects which promote commercial charging networks.

Chart 5: Rebate incentives for commercial charger, installation, and upgrades through CALeVIP partnerships.

CALeVIP 1.0 - Alameda County Incentive Project

AVA

Rebates	Amount per Connector
Level 2 Chargers	**$3,500** base or 75% of project max
DCFC 50kW– 99.99 kW	**$30,000** base or 75% of the project max
DCFC 100kW+	**$60,000** base or 75% of the project max

CALeVIP 1.0 - Central Coast Incentive Project

3CE

Rebates	Amount per Connector
Level 2 Chargers	**$5,000** base or 75% of project max
DCFC	**$70,000** base or 75% of the project max

CALeVIP 1.0 - Peninsula-Silicon Valley Incentive Project

PCE

SJCE

Rebates	Amount per Connector
Level 2 Chargers	**$4,500** base or 75% of project max

SVCE	DCFC 50kW– 99.99 kW: **$50,000** base or 75% of the project max DCFC 100kW+: **$70,000** base or 75% of the project max
CALeVIP 1.0 - Sonoma Coast Incentive Project	
SCP	Level 2 Chargers: **$5,000** base or 100% of project max DCFC 50kW– 99.99 kW: **$50,000** base or 75% of the project max DCFC 100kW+: **$70,000** base or 75% of the project max
CALeVIP 1.0 - South Central Coast Incentive Project	
3CE **CPA**	Level 2 Chargers: **$3,500** base or 75% of project max DCFC 50kW– 99.99 kW: **$30,000** base or 75% of the project max DCFC 100kW+: **$60,000** base or 75% of the project max
CALeVIP 1.0 - Southern California Level 2 Incentive Project	
CPA	Level 2 Chargers: **$3,500** base or 75% of the project max

Multi-Family Charging

Among the twelve CCAs examined, eight had initiatives for multifamily charging. The programs varied between programs specifically designed for Multi-family housing and additional funding to incentives offered in more general programs. Distinct programs specifically targeting multifamily housing are offered by 3CE, CPSF, MCE, SVCE, and PCE.

Rebates

3CE–

3CE's Electrify your Ride rebate and EV Readiness Rebate, are valued at $10,000 each, offering a combined total of $20,000 per project for charger installation at multifamily sites.

Chart 6: Rebate incentives for charging infrastructure at multi-family housing properties from 3CE.

Program	Incentive Type	Amount	
Electrify your Ride– Commercial	Level 2 EVSE	**$10,000** max per project	**$20,000** max per project combined
EV Readiness Rebate	Level 2 EVSE	**$10,000** max per project	

CPSF–

CPSF's EV Charge SF program targets new construction of market rate housing, excluding Single-family, Duplexes, Townhomes with Separate Garages, and vehicle stalls required by code to provide rebates for charger installation and upgrades. The rebate applies to the EVSE for level 2 chargers and the level 2 charger associated with it, as well as EV infrastructure upgrades, and conduits for future EV branch circuits.

Chart 7: EV Charge SF for multi-family housing properties from CPSF.

Incentive Type		Amount	
Level 2 EVSE	Associated Charger	**$2,000** for first 10% of vehicle stalls; **$3,000** beyond first 10%	Additional **$500** (per port)
EV Infrastructure Upgrade		**$1,000** per outlet beyond first 10%	
Conduit for Future EV Branch Circuits		**$250** per vehicle stall	

PCE–

PCE's EV charging program primarily targets multifamily sites with two thirds of the 724 ports installed through the program being at multifamily sites. They offer incentives capped at 75% of project costs for L2 EVSE ports and without any limit for L1 and L2 charger outlets, in addition to technical assistance. Their strategy has led to an average port cost of $4,000, allowing apartment owners to boost the planned number of ports by 50%.

Chart 8: Multi-family housing program from PCE.

Incentive Type	Amount
L1 or L2 outlet	**$2,000** per outlet
L2 EVSE port	**$5,500** per port
Main panel upgrade*	**$5,000** per port

*Site must install 4 or more ports to be eligible for the main panel upgrade incentive.

SVCE–

SVCE offers multifamily housing customers rebates of up to $60,000 per site, along with technical assistance through their FutureFit Assist program. They have 52 sites who have installed chargers through the program or are currently engaged in varying stages of it.

Chart 9: SVCE rebate for multi-family housing properties.

Property Type and Category	Incentive Type	Amount	Max Incentive
Existing Multifamily	Level 1/2 outlet	**$2,500** max per outlet	Up to **$50,000** per site or 75% of project costs
	Level 2 EVSE port	**$5,500**	
	Panel Upgrade	Up to **$5,000** per site	
	Pre-wiring	**$1,500** per pre-wired port/outlet (up to 10 per site)	
Existing 100% Affordable Multifamily	Level 1/2 outlet	**$2,500** max per outlet	Up to **$60,000** per site or 100% of project costs
	Level 2 EVSE port	**$5,500**	
	Panel Upgrade	Up to **$5,000** per site	
	Pre-wiring	**$1,500** per pre-wired port/outlet (up to 10 per site)	
New Construction Affordable Multifamily	Level 1/2 outlet	**$1,000**	100% of project costs
	Level 2 EVSE port	**$2,000**	

MCE–

MCE's program is dependent on the customer's energy service, offering slightly higher incentives to multifamily sites who utilize 100% renewable (Deep Green) energy services over those who use 60% renewables (Light Green). This rebate is capped at 40 ports per site for Light Green Energy Service and 20 ports per site for Deep Green Service. Additionally, MCE's program provides a range of technical support including Initial consultation, Site visit, EV Charging Planning Report, Implementation support, and Rebate assistance.

Chart 10: Rebates based on energy service levels from MCE.

Charger	Light Green Energy Service (60% renewable)	Deep Green Energy Service (100% Renewable)
Level 1	**$750** max	**$875** max
Level 2	**$3,000** max	**$3,500** max

CALeVIP

Seven of the twelve CCA's have partnerships with CALeVIP that promote commercial charging networks and have additional funding available to Multifamily Housing Sites.

Chart 11: Rebate incentives for Multifamily Housing sites through CALeVIP programs.

CALeVIP 1.0 - Alameda County Incentive Project

AVA

Rebates	Amount per Connector
Level 2 Chargers	Additional **$2,000** to the Base Rebate **($3,500)**

CALeVIP 1.0 - Central Coast Incentive Project

3CE

Rebates	Amount per Connector
Level 2 Chargers	Additional **$1,000** to the Base Rebate **($5,000)**

CALeVIP 1.0 - Peninsula-Silicon Valley Incentive Project

PCE

SJCE

SVCE

Rebates	Amount per Connector
Level 2 Chargers	Additional **$1,000** to the Base Rebate **($4,500)**

CALeVIP 1.0 - Sonoma Coast Incentive Project

SCP

Rebates	Amount per Connector
Level 2 Chargers	Additional **$1,000** to the Base Rebate **($5,000)**

CALeVIP 1.0 - South Central Coast Incentive Project	
3CE	
CPA	

Rebates	Amount per Connector
Level 2 Chargers	Additional **$2,000** to the Base Rebate **($3,500)**

CALeVIP 1.0 - Southern California Level 2 Incentive Project	
CPA	

Rebates	Amount per Connector
Level 2 Chargers	Additional **$2,000** to the Base Rebate **($3,500)**

Incentives for Low Income and DAC

In an effort to promote an equitable transition towards widespread EV and charging infrastructure adoption, CCAs will offer extra incentives or increased rebates to their customers who qualify as low income or a part of a disadvantaged community. Some CCAs directly fund programs for these rebates while others extend CALeVIP's income qualified rebate to their customers. Some CCAs directly fund programs for these rebates while others partner with CALeVIP, extending the increased income qualified rebate amount offered by CALeVIP programs to their customers. Four out of the twelve CCAs evaluated by this report directly fund programs that give their customer base higher rebates or additional incentives for LI/DAC.

3CE–

3CE has set up a tier system based on income level to delineate the magnitude of increased rebates that their LI/DAC customers can receive. There are two levels of income qualified incentives, Tier 1 and Tier 2. Eligibility requirements for either tier are dependent on gross annual income and the Federal Poverty Level for the 48 Contiguous States.

Chart 12: Increased rebates that 3CE offers LI/DAC customers

Rebate Type	Base	Tier 1	Tier 2
Battery EV	$2,000	$3,000	$4,000
Plug-in Hybrid EV	n/a	$2,000	$3,000
Electric Motorcycle	$1,000	$2,000	$2,000

Level 2 Charger	$400	Up to $700	Up to $700
EV Readiness	Up to $2,000	Up to $3,000	Up to $4,000

CPSF–

Due to its focus on new construction, CPSF has a rebate system distinct from that of other CCAs. Affordable housing construction projects that exceed the requirements of the San Francisco EV Readiness Code qualify for increased rebates on EVSE, upgrades, and conduit pathways provided by CPSF. The incentive for installation of an upgradeable Level 1 outlet is offered to all vehicle stalls other than those required by San Francisco code to be EV-ready. The maximum financial incentives available to building owners and tenants for a given project are elevated from a $100,000 cap to a $120,000 cap for affordable housing. Furthermore, CPSF's rebate structure distinguishes itself by providing different rebate amounts for the initial 10% of stalls compared to those beyond the initial 10%.

Chart 13: Increased rebates offered to LI/DAC customers by CPSF

Rebate Type			**Base**	**Affordable Housing**
EVSE	First 10%	Installation	$2,000	$2,400
		Charger	$500 per port	$600 per port
	Beyond the first 10%	Installation	$3,000	$3,600
		Charger	$500 per port	$600 per port
Upgradable Level 1 Outlets (for each additional stall beyond the first 10%)			$1,000	$1,200
Empty Conduits for Future EV Branch Circuits			$250 per stall	$300 per stall

MCE–

MCE is distinguished from the other CCAs in the report by only providing incentives to customers that qualify as LI/DAC. Due to this, the rebates that they offer are in the various incentive sections of this report.

PCE–

PCE takes a distinctive approach to incentivizing EV ownership, recognizing the purchasing patterns of their LI/DAC customers who typically opt for used rather than new EVs. PCE's *Used EV Rebate* program offers flexibility to their LI/DAC customers in San Mateo County and the City of Los Banos by providing rebates through both dealership and mail-in incentive models. The program provides a $2,000 rebate toward the purchase of a used plug-in

hybrid or fully-electric vehicle. Income eligible customers can either buy a used EV from a participating dealership and receive an instant rebate, or they can mail-in an application for a reimbursement after purchasing an EV from any dealer or retailer (does not apply to private purchases). Additionally, this program provides an EV advisor that their customers can consult to receive guidance in the application and qualification process.

CALeVIP 1.0 Rebates for LI/DAC (partnerships)

Chart 14: Increased rebates offered to LI/DAC through partnership programs between CCAs and the CEC; Incentive information gathered directly from the CALeVIP website

Central Coast Incentive Project

3CE

DCFC Rebates for LI/DAC

Charger Type	Amount per Charger
New, stub-out, replacement, or make-ready site	Up to $80,000 or 80% of total project costs (lesser of the two)

Level 2 Rebates for LI/DAC

Charger Type	Amount per Connector
New, stub-out, replacement, or make-ready site	Up to $5,500
Multi-unit Dwelling Site	Additional $1,000

Peninsula-Silicon Valley Incentive Project

SJCE

Rebates for Level 2 Chargers

Rebates	Amount per Connector
Base Rebate	Up to $4,500, or 75% of project costs (lesser of the two)

PCE

DAC/LI	Additional $500
Multi-unit Dwelling Site	Additional $1,000

Rebates for DCFC

DCFC Power Level	General Market Rebate	DAC/LI Rebate

SVCE

50 kW - 99.99 kW	Up to $50,000 or 75% of total project costs (lesser of the two)	Up to $60,000 or 75% of total project costs (lesser of the two)
100 kW+	Up to $70,000 or 75% of total project costs (lesser of the two)	Up to $80,000 or 75% of total project costs (lesser of the two)

Sonoma Coast Incentive Project

SCP

Rebates for Level 2 Chargers

Rebates	Amount per Connector
Base Rebate	Up to $5,000, or 100% of project costs (lesser of the two)
DAC/LI	Additional $500
Multi-unit dwelling site	Additional $1,000
Unincorporated community	Additional $1,000

Rebates for DCFC

DCFC Power Level	General Market Rebate	DAC/LI Rebate
50 kW - 99.99 kW	Up to $50,000 or 75% of total project costs (lesser of the two)	Up to $60,000 or 75% of total project costs (lesser of the two)
100 kW+	Up to $70,000 or 75% of total project costs (lesser of the two)	Up to $80,000 or 75% of total project costs (lesser of the two)

Southern California Incentive Project (SCIP)

CPA

Maximum Rebate Amount per Charger

Charger Installation Type	General Market Rebate	DAC/LI Rebate
New	$70,000	$80,000
Stub Out	$70,000	$70,000
Replacement/Make-ready	$70,000	$80,000

Number of Chargers Eligible for Rebates per Site

County	New Site	Existing Site
LA and Orange	1-4	1-3
Riverside and San Bernardino	1-3	1-2

Alameda County Incentive Project

AVA

Rebates for Level 2 Chargers

Rebates	Amount per Connector
Base Rebate	Up to $3,500, or 75% of project costs (lesser of the two)
DAC/LI	Additional $500
Multi-unit dwelling site	Additional $2,000

Rebates for DCFC

DCFC Power Level	General Market Rebate	DAC/LI Rebate
50 kW - 99.99 kW	Up to $30,000 or 75% of total project costs (lesser of the two)	Up to $40,000 or 75% of total project costs (lesser of the two)
100 kW+	Up to $60,000 or 75% of total project costs (lesser of the two)	Up to $80,000 or 75% of total project costs (lesser of the two)

CALeVIP 1.0 Rebates for LI/DAC (solely CEC funded)

Five out of the twelve CCAs that we evaluated did not partner with CALeVIP. However some of their service areas are located in areas covered by CALeVIP meaning that their customers are inherently eligible for the rebates listed below. These CCAs are not directly associated with the rebates listed below as the CEC is solely responsible for funding them.

Chart 15: Increased rebates provided through CALeVIP servicing the jurisdictions of the remaining CCAs evaluated in this report

Northern California Incentive Project

Humboldt County (RCEA)

DCFC Rebates for LI/DAC

Charger Type	Amount per Charger
New, stub-out, replacement, or make-ready site	Up to $80,000 or 80% of total project costs (lesser of the two)

Level 2 Rebates for LI/DAC

Charger Type	Amount per Connector
New, stub-out, replacement, or make-ready site	Up to $6,500
Multi-unit Dwelling Site	Additional $1,000

San Diego County Incentive Project

San Diego County SDCP

Rebates for Level 2 Chargers

Rebates	Amount per Connector
Base Rebate	Up to $3,500, or 75% of project costs (lesser of the two)
DAC/LI	Additional $500
Multi-unit dwelling site	Additional $2,000

Rebates for DCFC

DCFC Power Level	General Market Rebate	DAC/LI Rebate
50 kW - 99.99 kW	Up to $30,000 or 75% of total project costs (lesser of the two)	Up to $40,000 or 75% of total project costs (lesser of the two)
100 kW+	Up to $60,000 or 75% of total project costs (lesser of the two)	Up to $80,000 or 75% of total project costs (lesser of the two)

Inland Counties Incentive Project

Yolo County VCE

Rebates for Level 2 Chargers

Rebates	Amount per Connector
Base Rebate	Up to $4,500, or 75% of project costs (lesser of the two)
DAC/LI	Additional $500
Multi-unit dwelling site	Additional $1,000

Rebates for DCFC

DCFC Power Level	General Market Rebate	DAC/LI Rebate
50 kW - 99.99 kW	Up to $30,000 or 75% of total project costs (lesser of the two)	Up to $40,000 or 75% of total project costs (lesser of the two)
100 kW+	Up to $60,000 or 75% of total project costs (lesser of the two)	Up to $80,000 or 75% of total project costs (lesser of the two)

Efficacy of These Programs

In the interviews conducted, CCA representatives provided valuable insights on customer participation, fund distribution, and the resulting impact. AVA did not respond to our interview invitation; therefore this section lacks efficacy data directly from them.

3CE–

In the 2022-2023 fiscal year, 3CE had roughly 540 equity projects, which totaled to $3.5 million of funding distributed to their LI/DAC customers. This constitutes 45% of all the money that they gave out in that year. In 2023, they received 508 income qualified applications, constituting 30% of the total applications received. Over the last four years, 27% of the applications that 3CE has received have been income qualified, accounting for 34% of the overall distributed funds. In terms of participation in their programs for LI/DAC, they have seen growth and plan to continually look for ways to improve in this area.

CPSF–

The rebates that CPSF offers are unique in that they exclusively target new construction projects. New construction in San Francisco is currently at a historically low point which is resulting in a lack of participation in CPSF's rebate programs. Only 23% of the projects enrolled in their rebate program are affordable housing, and based on the interviews conducted with CPSF representatives, it is anticipated that the majority of these projects

will withdraw due to restrictive fire codes.

MCE–
Prior to May of 2023, MCE oversaw the distribution of 338 mail-in rebates under their EV Rebate Program, spanning three years with an average of 150 rebates annually. Within six months of their transition to the dealership model of rebate distribution, MCE administered 258 rebates and anticipates reaching 444 rebates by April 2024. This model will be further explained in the Highlighted Practices section of this report. MCE has funded 1,043 new EV Charging ports in their service area since 2018. Furthermore, the efficacy of the MCE Sync app is evident from its remarkable participation and impact metrics. Currently, more than 2,200 vehicles are enrolled in MCE Sync, and during the pilot phase alone, the app reduced EV charging consumption by an average of 93% by shifting charging to lower-demand hours .

PCE–
Through the support of PCE's *Used EV Rebate* program, approximately 500 used EV's have been purchased.

SCP–
Although not listed above due to no longer being active, it is still valuable to mention the efficacy of SCP's rebate programs for LI/DAC. Their 2021 Bike Electric Program that provided a $1,000 e-bike voucher to income-qualified customers was successful, distributing a total of 428 vouchers. 94% of participants reported satisfaction with the program and 67% of riders reported replacing car trips. Efficacy data on their *Drive EV* program illustrated that while 15% of the overall certificates issued for the program were reserved for LI/DAC, 22% of those certificates were redeemed by the end of the program.

Some common difficulties reported by CCA representatives through the interviews conducted were that LI/DAC customers are harder to effectively reach and impact through incentive programs due to a number of factors. CCA's low-income customer base is busy, making them harder to reach, and are also apprehensive of investing in an EV because they don't believe they have a disposable income. LI/DAC often do not have available funds to purchase an EV up front which necessitates time-of-purchase incentives for programs to be optimally successful. SVCE reported that direct install approaches to potentially be a more effective approach for LI/DAC incentive program models since many property managers do not have the time or ability to execute a project even if they receive funding. Grassroot engagement with local stakeholders and community based organization has been cited as a preliminary necessity before initiating any incentive program so that the needs of the specific community can be considered and incorporated into a more tailored program.

CALeVIP Program Efficacy Data

CCAs enrolled in a CALeVIP program allocate varying proportions of funds to their LI/DAC qualifying customers. This is not a reflection of the CCAs themselves but of the decisions made by the Center for Sustainable Energy which is the sole responsible entity for CEC fund distribution for CALeVIP. CCAs that have partnered with CALeVIP on account of their customers include AVA, CPA, 3CE, PCE, SCP, SJCE, and SVCE.

Central Coast Incentive Project

3CE– 16% of funds designated for Santa Cruz County have been issued or reserved for LI/DAC, 20% of funds for San Benito County, and 38% of funds for Monterey County. CALeVIP listed 3CE as a partner to this project, but their financial contribution was not found.

South Central Coast Incentive Project

3CE– Invested partner funding for San Luis Obispo, Santa Barbara, and Ventura Counties over the course of 2 years (2021-2023). In total, 3CE contributed $983,645 for DCFC and $424,575 for L2 to the funding for San Luis Obispo County; $1,489,925 for DCFC and $1,450,00 for L2 to the funding for Santa Barbara County; and $904,000 for DCFC and $2,543,050 for L2 to the funding for Ventura County. 27% of the funds for San Luis Obispo County, 44% of the funds for Santa Barbara County, and 44% of the funds for Ventura County were reserved or issued to LI/DAC.

Peninsula-Silicon Valley Incentive Project

SJCE– Invested $4mil in addition to the $10mil that the CEC allocated for their customers. SJCE received the most funding from the CEC due to their goal to install chargers in LI/DAC areas. SJCE surpassed the initial goal for 25% of funds to be distributed to LI/DAC customers (set by the Center for Sustainable Energy), having issued 41% of the funds for this project to LI/DAC customers. SJCE attributes this accomplishment to their proactive outreach efforts to multifamily and LI property managers and owners before the program's launch.

PCE– Invested $7,440,000 specifically for L2 chargers for San Mateo County over the course of 3 years (2020-2023). Their customers received a total of $19,440,000 with the additional funding that the CEC allocated to San Mateo County. 37% of funds have been reserved or issued to LI/DAC.

SVCE– Invested $6,000,000 over the course of 3 years (2020-2023) for Level 2 Chargers in Santa Clara County. Their customers received a total of $12,000,000 in rebates with the additional funding that the CEC allocated to the SVCE service area. 37% of SVCE's funds were reserved for LI/DAC.

Sonoma Coast Incentive Project

SCP– Invested an additional $800,000 of partner funding, stipulating that SCP retains the authority to choose which projects are eligible for increased rebates from this allocation. This grants SCP the exclusive ability to prioritize charging infrastructure projects that are adjacent to rural areas and multifamily housing to increase LI/DAC access to charging.

Southern California Incentive Project (SCIP)

CPA– Partnered with CALeVIP extending support to two regions, Ventura and Los Angeles Counties. Their contribution amounted to $1,000,000 for LA and $533,000 to Ventura. With this contribution, CPA specified that all of their funds only be distributed to their customers for Level 2 Chargers. Overall, 56% of funds reserved for CPA customers under SCIP are designated for LI/DAC, constituting a total of $5.2 million (based on an assessment made by the Center for Sustainable Energy in December 2023).

Alameda County Incentive Project

AVA– invested $2,790,000 of partner funding for Level 2 Chargers in addition to the $6,000,000 for L2 and $8,500,00 for DCFC of CEC funding allocated to their customers. This project dedicates 50% of funding for each equipment type to LI/DAC and an additional 50% of the available DCFC funding to multi-dwelling hotspots.

Programs for Fleets and Buses

While several CCAs discussed potential plans for the electrification of fleets and buses, the only implemented programs found were through 3CE, PCE, and AVA.

AVA–

Through the evFleet Consulting program, AVA offers its customers a technical assistance program to facilitate the transition to electric fleets. The program is currently offering free, comprehensive service to 50 fleets through June of 2024. This service includes a wide range of assistance including an EV Transition Plan which covers a fleet assessment, evaluation of charging infrastructure, and setting goals for both procurement and funding. The program also assists with regulation compliance, rebate applications, and securing contractors and installers. For Class 2b-8 vehicles, there is additional assistance provided to help determine vehicle and power needs to optimize conversion to electric fleets.

PCE–

PCE offers a similar technical assistance program for the electrification of fleets called their Public EV Fleets program. The EV fleet replacement plan assistance in the form of an assessment of fleet charging needs and plans for charger installation, permitting, funding, and energy optimization. Additionally, fleets may choose to subscribe to optional energy management

services to ensure clean energy is optimized for their fleets and they are able to avoid charging during peak hours.

3CE–

3CE takes a more rebate-centric approach, providing several incentives for fleet and bus electrification. The 3CE Electrify your Fleet rebate provides up to a $150,000 rebate to member agencies based on the class of EV they purchase. Paired with this, their Charge Your Fleet Program provides up to $150,000 in rebates for Level 2, ESVE, and Level 3 chargers. These rebates are capped at 75% of the project cost or $100,000 per Level 3 charger installation, and $5,000 per Level 2 and EVSE port.

Chart 16: Charge your Fleet Rebate by 3CE.

Incentive Type	Rebate
Level 2 Charger and EVSE	**$5,000** or 75% of project cost max
Level 3 charger	**$100,000** or 75% of project cost max

RCEA–

RCEA does not offer incentives for fleets or buses but they have conducted fleet surveys and held an informational workshop for fleet operators through a CEC planning grant.

Plans for V2G

Through the initial research process, limited information was found about CCA's moving forward with Vehicle-to-Grid (V2G) infrastructure. However, in interviews most CCA's expressed a shared view on V2G as a substantial undertaking that is unrealistic for immediate investment given their current size and resource constraints.While recognizing its significant potential as a resource for both load management and resource adequacy, they currently perceive it as prohibitively expensive and the technology as not yet thoroughly tested. The consensus among CCAs is to closely monitor the development and availability of V2G infrastructure before considering implementing it themselves. As discussed in the context of charging above, several CCAs are already offering managed charging services which is considered the first step in V2G technology. Managed charging allows EVs to charge during off-peak hours when low-carbon electricity is most available, reducing the stress on the grid during peak hours.

MCE–

As mentioned under Smart Charging Apps, one example of this is MCE's smart charging app, MCE Sync, which ensures the vehicle is fully charged by the user-specified time through off-peak charging.

VCE–

Another CCA taking a step forward with V2G is VCE with their Redwood Program. This provisionally approved program will help to fund the implementation of semi autonomous

tractors with bidirectional charging capability that can provide power to the grid or a farm in the case of a power outage.

RCEA–

Additionally, RCEA is working with Eureka city schools to advance with V2G. Their project will allow an electrified bus to provide a backup power source for their commercial kitchen and grid outages.

Highlighted Practices (Unique and Innovative Programs)

Some unique initiatives currently being implemented by CCAs that stood out in our research and are worth highlighting encompass innovative strategies to increase LI/DAC participation in taking advantage of rebates, increasing community involvement in the development of new programs, and smart charging apps.

MCE– In May of 2023, Marin Clean Energy shifted their rebate program for LI/DAC from a mail-in based service to a dealership model. Initially, their customers were able to receive a rebate off the purchase on an electric vehicle in the form of a reimbursement which they mailed in an application for post purchase. Recognizing the limitations of this approach, MCE decided to transition to a point-of-sale or dealership model to simplify the EV purchasing process and alleviate the financial uncertainty associated with buying an EV for LI/DAC customers facing financial constraints. Under the revamped version of this program, eligible MCE customers are automatically enrolled in a dealership registry. When they visit a participating dealership to buy a vehicle, the MCE rebate is deducted from the purchase price at the time of sale. As outlined in the efficacy section of this report, this transition resulted in a significant increase in participation as it eliminated the need for customers to wait for a rebate reimbursement.

The MCE sync app is a highly beneficial tool, allowing customers to efficiently and easily integrate cost savings, reduced energy consumption, and minimized environmental impact into their daily lives. Other CCAs like SVCE have initiated implementation of similar synchronized charging apps. We anticipate and hope this trend will continue to gain momentum as a smart charging method to effectively reduce environmental impact.

3CE– Central Coast Community Power is doing an exceptionally good job in terms of how widespread their incentive programs are. This CCA is the only one that offers rebates for every impact category that we chose to research for this report. A notable practice is that their definition of ‘commercial’ is deliberately broader to include people who technically do not qualify for business rates but would benefit from a higher rebate such as non-profits, agricultural property owners, and multifamily properties. They have successfully made their programs extremely accessible and streamlined through an organized website and readily available assistance for their customers. Moving forward, representatives shared that they will be measuring their impact through community outreach and aim to integrate public participation in decision making processes.

SCP – Sonoma Clean Power approached workplace charging in a unique way in order to decrease the barriers to charging access for individuals from multi-family housing and who don’t own their own

homes. Many CCAs participated in CALeVIP programs and contributed funding, but SCP took an extra step to ensure that underserved communities were accounted for. In their Sonoma Coast Incentive Project with CalEVIP, SCP added an extra $800k to fill charging desserts in rural areas and pick projects next to multi-family housing instead of the funding being first come first serve for applicants. They hand selected workplace sites that were close to multifamily residencies that did not have EV charging in order to increase access for these communities and break barriers they faced in driving electric. They currently have 8 sites and are providing them with technical assistance and $5,000 per connector.

IV. Conclusion

The analysis of the 12 CCAs featured in this report shed light on a variety of different approaches to promoting EV adoption for their customers. With an aim to comprehensively evaluate and contrast these approaches, this report sought to distill insights and highlight the most innovative and effective models. It identified gaps where certain CCAs could improve based on the performance of others and meticulously documented funding for various current programs. Limitations of this report encompassed obstacles to gathering up to date information as CCAs like AVA lacked developed websites at the time of our research and were unresponsive to invitations for informational interviews. Furthermore, benchmarking the performance of CCAs which excel in different dimensions posed difficulties for a fair comparison. By documenting inventive practices aimed at overcoming barriers to EV adoption, this report serves as a valuable tool to foster informed decision-making and collaboration in advancing sustainable transportation initiatives among CCAs in California.

V. Acknowledgments

The completion of this report would not have been possible without the invaluable contributions, time, and support of various organizations and individuals. We would like to thank the 12 CCAs that helped conduct the research for this report through the provision of informational interviews, emails, and additional resources. This includes 3CE, AVA, CPA, CPSF, MCE, PCE, RCEA, SCP, SDCP, SJCE, SVCE, and VCE. We deeply appreciate the effort each CCA representative made to meet with us and share their insights. Additionally, we want to thank the College Corps program for funding this project as well as SLO Climate Coalition for their guidance. Special thanks go out to Erin Pearse, Barry Rands, and John Smigelski for their work in editing the report.

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