

Coffee Nutz (Parking Lot EV Charging)

Tesoro Sol

Date: 2/18/2024

Program Manager: CIOPROUSA and Affiliates

Address: 119 E Foothill Blvd, Rialto, CA 92376

1.Request: *EV charging*

Suggestion: *Rooftop Solar+ Residential Batteries + EV charging*

We are suggesting **2 EV chargers coupled with a QPOE Residential Battery, and a rooftop solar installation**. The EV chargers can function on their own due to the sufficient load capacity in the area, but the bundled battery and rooftop solar installation allow for

Net Metering: A system where excess electricity generated by customers' renewable sources, like solar panels, is sent back to the grid, offsetting future energy costs.

Peak Shaving: The strategy of reducing energy consumption during periods of highest demand to lower utility costs and decrease strain on the energy grid. Storing energy during off-peak hours and using during off-peak will lower energy billing

SCE Process: The suggested process for Installing EV chargers in SCE territory

1. **Electricians:** Before you assess your customers' electrical panel and wiring needs, please ensure that customers who live in our service territory contact us to learn about our rate plan options and how each rate plan may affect their facility's panel, wiring, and EV charging options.
 - a. Explains charging preparation and infrastructure options to the customer
 - b. Advises customer to call SCE to learn about rate plan options
2. **SCE:** Provides customer with an EV Power PlanSM, including an analysis of customer's past energy usage and estimated costs on EV rate plans.
3. **Electrician:** Confirms customer has contacted SCE and spoken with an SCE Home Fuel Advisor about rate plan options; Assesses charging infrastructure needs; Recommends charging equipment location; Provides bids for charging options.
4. **Customer:** Considers rate plan and charging options; Selects rate and charging infrastructure approach; Contacts SCE and electrician to provide rate selection and installation choice; Approves electrician's bid.
5. **SCE:** Visits site to verify infrastructure can support added load, discuss energize date, gather site information, identify easements/conveyances, as required; Provides final map, contracts, invoices, as required for site to be EV ready.
6. **Customer:** Approves SCE's final map; Provides SCE payment; Requests SCE and city inspections; Obtains, as required, city release, service application, easement, and conveyance.
7. **Electrician:** Completes installation of charging infrastructure; Passes SCE inspection and city inspection.
8. **SCE:** Schedules work when all requirements are met; Completes service line and meter work, as needed; Updates customer billing rate plan.

SCE Programs: SCE has a set of rebate and funding options being provided through its charge ready program.

Direct Current Fast Charging (DCFC) Program: The DCFC Program is available to publicly accessible, short dwell time (less than 2 hours) properties who choose to purchase and install two or more DCFC charging stations. The program covers the utility-side infrastructure upgrades and offers a rebate to help offset a portion of your cost of the customer-side infrastructure upgrades. Charging equipment rebates are also available to offset the purchase and installation of qualifying charging equipment

Small Site Rebate Program: Program offers savings for multi-family and commercial properties. The program provides a rebate of up to \$10,000 per port for qualified sites installing up to four EV charging ports. SCE will perform all the necessary utility-side of the meter infrastructure work. The rebate is intended to help offset the costs associated with the design, procurement, installation, and maintenance of qualifying charging equipment. Any Level 2 (L2) EV charging equipment selected for installation must be listed on SCE's Approved Product List.

2.SGIP Eligibility

The Self-Generation Incentive Program (SGIP) is a California Public Utilities Commission (CPUC) program that offers rebates for installing energy storage technology at your facility. These storage technologies include battery storage systems that can function in the event of a power outage.

Category	Rebate
Base	\$350/kw-hr
Equity	\$850/kw-hr
Equity Resiliency	\$1000/kw-hr

SGIP Equity Eligibility Information

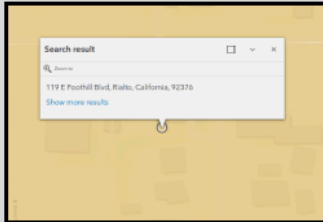
To be eligible you must meet the following criteria: To be eligible you must meet the following criteria: 1. Be a government agency, educational institution, non-profit organization, or small business. AND 2. Be located in a Disadvantaged Community (DAC).* OR Be located in a census tract with Median Household Income below 80 percent of Statewide Median Income.† OR Be located anywhere in California Indian Country.

Census Tract	6071003700
Poverty:	98
Unemployment:	99
Housing Burden:	70
Designation Cal. Climate Investments Map 4.0	Disadvantaged community: CES, Low-income community

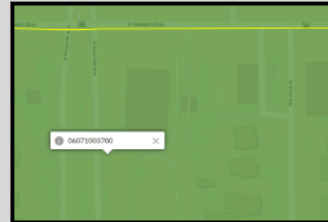
Coffee shop is eligible for the Equity \$850/kw-hr for energy storage.

3. Tax Credit Eligibility

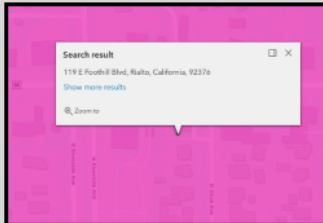
The site of the system has renewable and EV incentives, qualifying for a variety of tax credit programs. These are the tax credit programs the coffee shop is eligible for due to its location. Their is potential for the usage of all of the tax credits together, wit the simplest scenario providing 50-60% Investment tax credits on the installation. Meaning if the the investment is 45,000 dollars you would claim back 22,500 to 27,000 plus the production tax credits and bill offsetting from the solar generation if included.



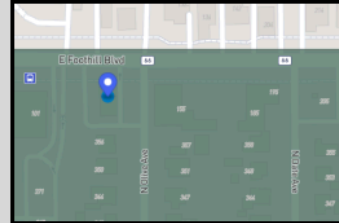
Eligible for 30C Tax Credit until 2029



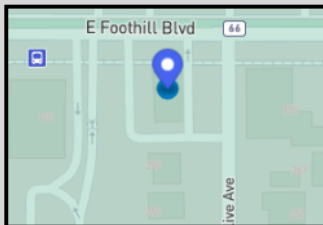
Eligible for New Market Tax Credits



In an Eligible Energy Community



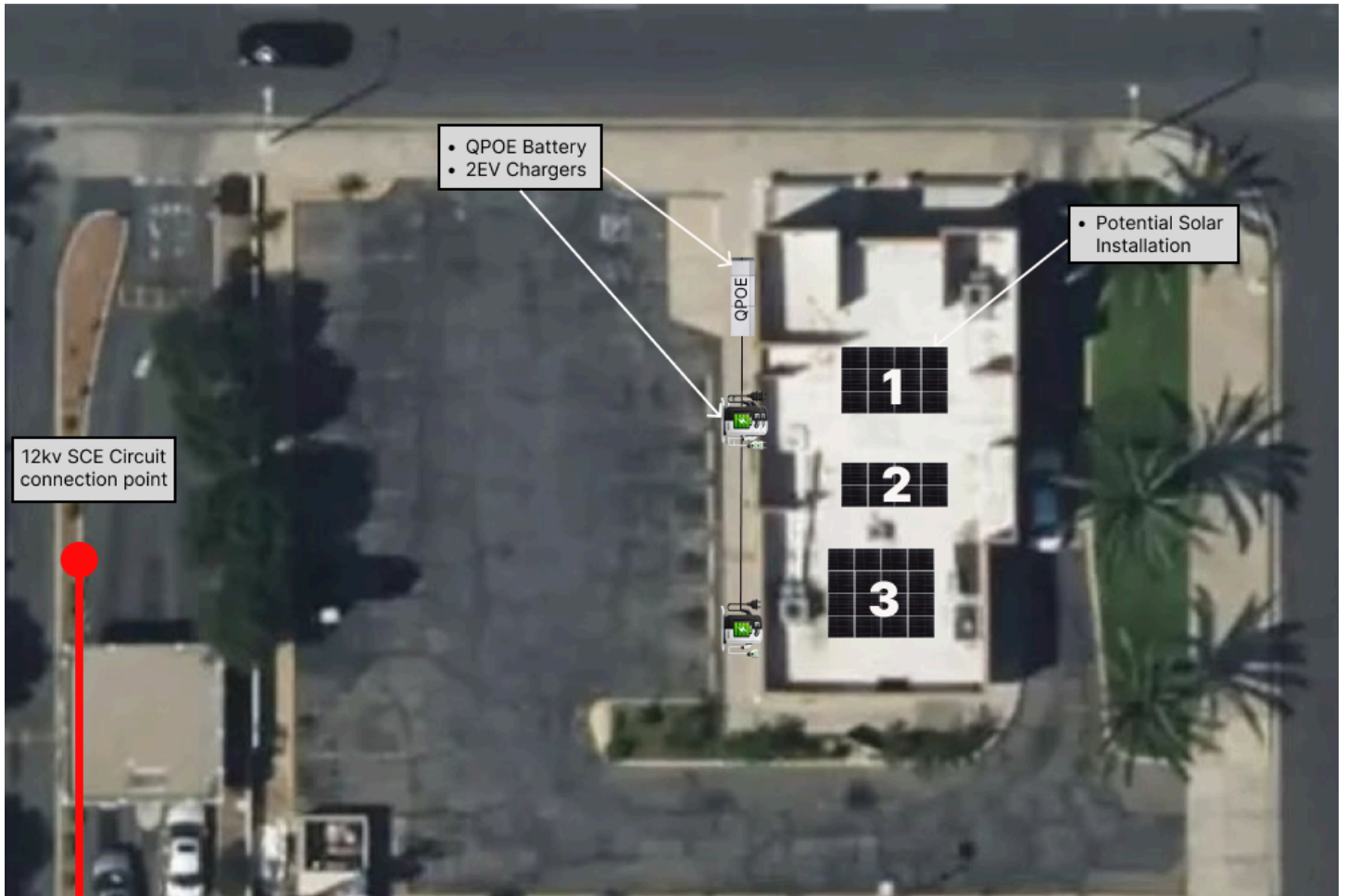
In a Eligible Opportunity Zone



Low Income Community Eligibility: Blue implies eligible

	Investment Tax Credit	Production Tax Credit(cents per kwh)
(30C)Base Credit:	30%	2.75
Domestic Content Bonus:	10%	0.3
Energy Community Bonus:	10%	0.3
Low-Income Community:	10%	
New Market Tax Credit:	39%	

Potential Installation



This illustration showcases an integrated energy solution, featuring rooftop solar panels, E.V. chargers, and a residential battery system efficiently connected to the SCE distribution point. Together, these components exemplify a sustainable, cost-effective energy approach that maximizes renewable energy utilization and grid connectivity. With more knowledge of the site we can further narrow down where exactly it will be most practical and cost effective to install.

3.System

EV Chargers Count	Charger	Power(kw)
2	Flux AC Chargers (11.52KW) orApex DC Fast Chargers 30-60KW	21-120
Battery Count	Battery System	kwh
1	QPOE Residential Batteries	28.6
	Inverter	max PV Input(w)
1	hybrid Inverter	15
Solar Sections	Panels	Power(kw)
1	6	3.3
2	4	2.2
3	8	4.4
Total	18	9.9

Components

Charger System: ChargeTronix Chargers		
Amount of Chargers:	2	Flux AC Chargers (11.52KW) orApex DC Fast Chargers 30-60KW
Charger kw:	11.5-60	
Input Voltage:	480VAC	
Does it have Parallel Mode:	Yes	Dual Port usage
Charger Dimensions:	(LxDxH): 39.94"x 26.07"x 73.44"	
Internet Connection:	Yes	Arts Center Connection

Solar and Energy Storage

We recommend solar and energy storage due to variable energy prices. Variable pricing changes the price at which the EV charger would be charged throughout the day, solar allows for self generation, while storage allows for usage of self produced and lower cost energy, increasing the ROI of the batteries and decreasing energy bills for the business.

Solar Module		
Solar (kw):	9.9	Potential rooftop solar generation
Number of Panels:	18	TBD
Panel Size(w):	550	TBD

Battery Energy Storage System		
System Duration(Wh):	1.43-2.86	
Battery Size Min(kWh):	14.3	1 qpoe Residential battery 1.43 Wh
Battery Size Max(kWh):	28.6	1 qpoe residential battery 2.86 Wh

Interconnection

There is more than enough load to interconnect EV chargers here.

Power Lines		
Power Line Voltage	SCE 12kV	
Circuit	Elder	Part of "Center 220/66" System
Circuit Available Load Capacity(MW)	5.05MW	Plenty of Available Power
Power Line Distance	On Site	in between building next door and parking lot

Substation		
Name:	Rialto	
Regulator:	SoCal Edison	
Available Load Capacity(Substation):	16.89	