

COMMUNITY CHOICE AGGREGATION

How did we get here?



Questions You May Ask Yourself

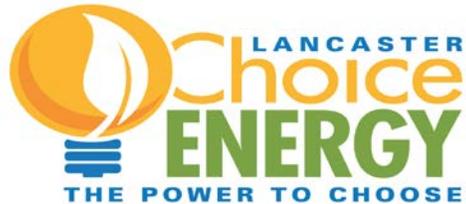
1. Well, how did I get here?
2. How do I work this?
3. Where is that large automobile?
4. What is that beautiful house?
5. Where does that highway go to?
6. Am I right, am I wrong?

Things You May Say To Yourself

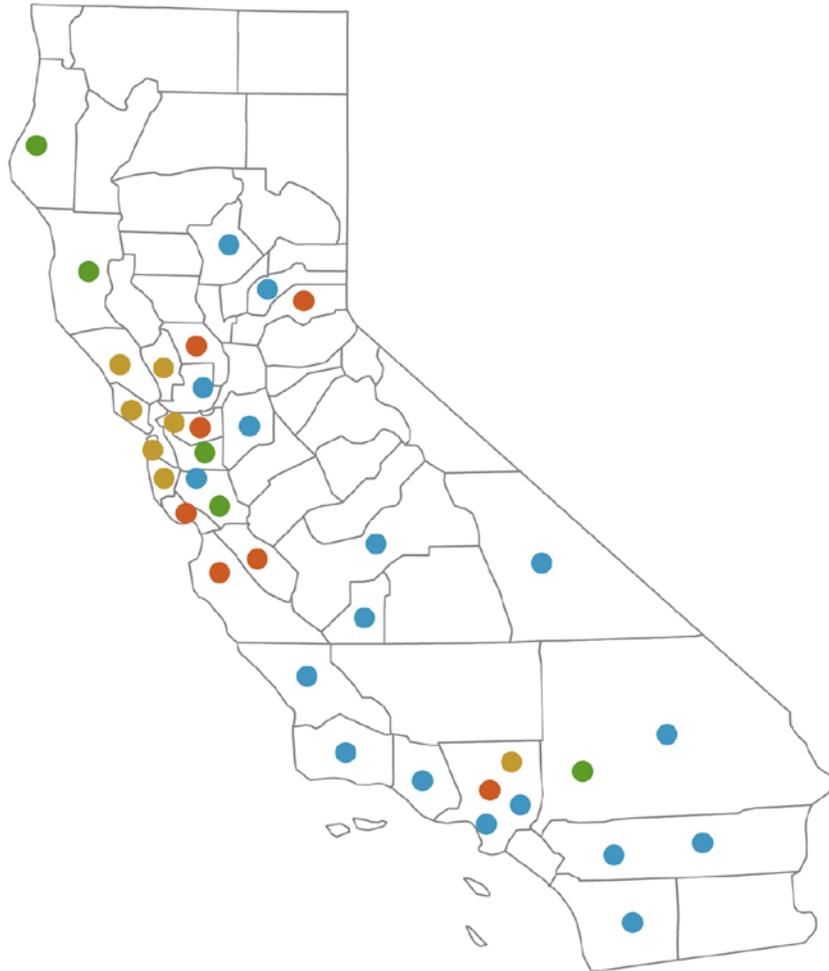
1. This is not my beautiful house.
2. This is not my beautiful wife.

Mid-Late 1990's	2000-2001	2002	2006	2010	2011	2014	2015-2016
National trend toward deregulation Massachusetts passes 1st CCA law in U.S.	California Energy Crisis PG&E Bankruptcy (2001)	AB 117 / CCA enabled in California	AB 32 / Global Warming Solutions Act	Direct Access re-opens MCE is 1st CCA in California	SB 790 / Utility Code of Conduct California RPS — 33% by 2020	SCP is 2nd CCA in California	SB 350 / California RPS 50% by 2030 AB 1110 / GHG reporting standards

Existing Operational CCAs



CCAs Are Rapidly Expanding



● Operational CCA/CCEs

MCE Clean Energy (*includes Marin and Napa Counties, parts of Contra Costa and Solano Counties*)
Sonoma Clean Power
Lancaster Choice Energy
Clean Power San Francisco
Peninsula Clean Energy (*San Mateo County*)

● 2017 Launch

East Bay Community Energy (*Alameda County*)
Mendocino County (*as member of Sonoma Clean Power*)
Redwood Coast Energy Authority (*Humboldt County*)
Silicon Valley Clean Energy (*Santa Clara County*)
Town of Apple Valley

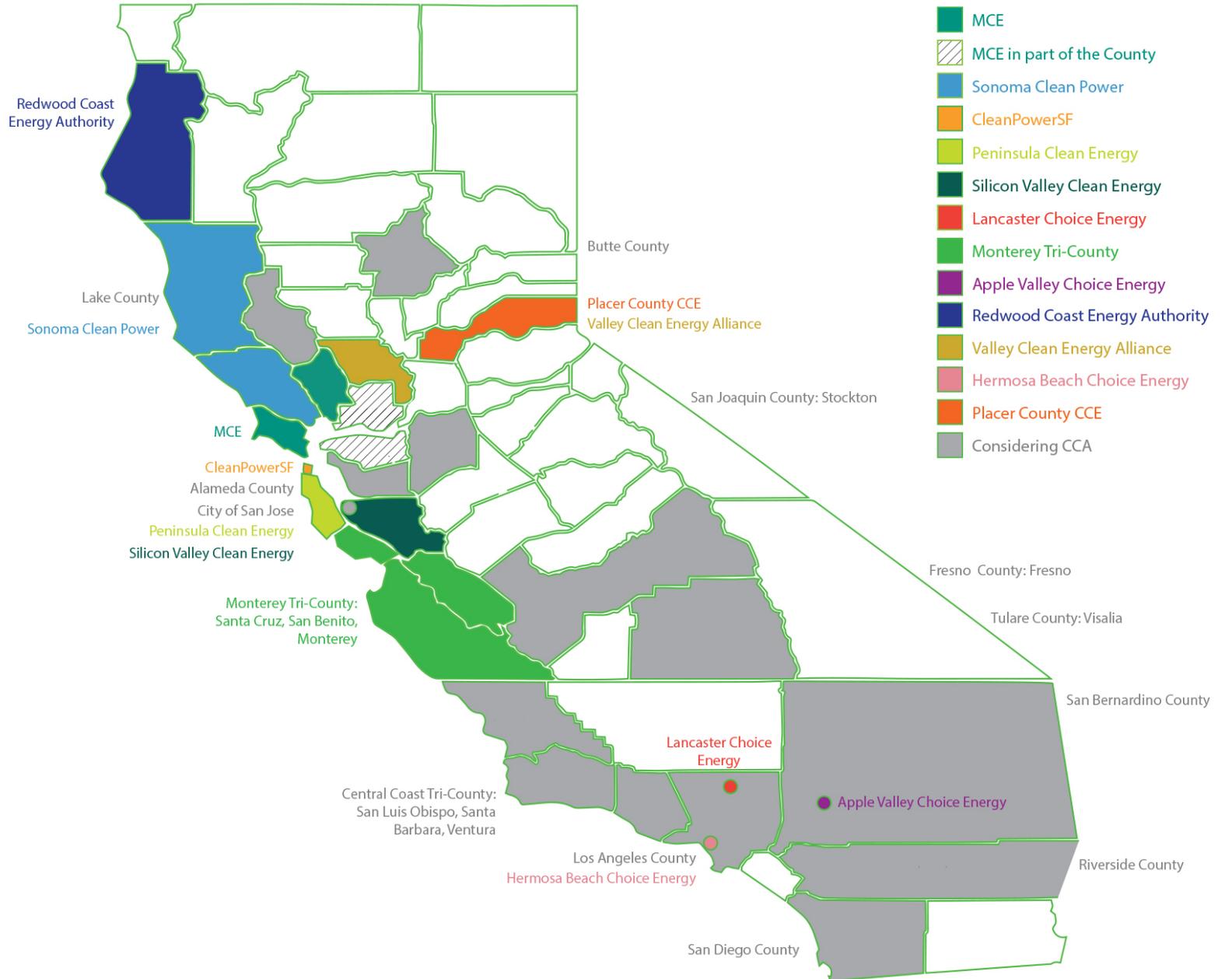
● 2018 Launch (anticipated)

Contra Costa County
Monterey Bay Community Power (*Monterey, Santa Cruz and San Benito Counties*)
Los Angeles County (*Phase 1*)
Placer County
Valley Clean Energy Alliance (*Yolo County and City of Davis*)

● Exploring / In Process

Butte County
City of Hemosa Beach
City of Pico Rivera
City of San Jacinto
City of San Jose
Fresno County
Inyo County
Kings County
Nevada County
Riverside County
San Bernardino County
San Diego County
San Joaquin County
San Luis Obispo County*
Santa Barbara County*
Solano County
Ventura County*

*Central Coast Tri-County



Why Should I do Business with a CCA?

- With market prices so low, there is a great appetite for CCAs to enter the market, hence the rapid expansion.
- CCAs contract for multiple types of products that may be a good fit for your portfolio, including RPS, RA, shaped energy, and carbon free/specified source.
- CCAs are entering into long-term contracts, contracting with renewable development projects.
- CCAs are diversifying their sources of suppliers

How To Do Business with a CCA

- Consider shorter-term deals transacting under WSPP to gain management comfort
- Consider deals with little to no Mark-to-Market risk
- Consider deals with lower notional value such as carbon free or Resource Adequacy
- For larger transactions with Mark-to-Market risk, many CCAs have used a “Lock Box” arrangement
- Discuss credit terms/expectations before you finalize the terms of the deal
- Should collateral be required, consider collateral returns throughout the term of the deal
- Cash is king! CCAs may be interested in posting cash over an L/C

Enabling Agreements

- Consider establishing an EEI with the CCA
- Get to know the CCAs financials, meet with their financial, procurement staff and CEO. Transparency is key!
- Consider \$5,000,000 to \$10,000,000 Collateral Thresholds
- Replace credit rating language with CCA performance, such as Net Position, for Collateral Threshold
- Consider capping collateral posting
- Ask for collateral upfront, and return over the period of the contract

Trends and Challenges

Trends

- CCAs in California are committed to reducing GHG
- Costs and consumer benefits do matter
- CCAs offer lower or competitive rates to the existing IOUs
- CCAs are innovation incubators: local EV programs; local power development; battery storage; demand response programs

Challenges

- Credit and financing capacity
- Regulatory uncertainty
- Smaller staff, we wear a lot of hats
- Lack of CAISO resources, due to the CCA not being the Scheduling Coordinator
- Opt outs: PCIA; cost shifting/cost allocation; lack of transparency

PCIA ON A TYPICAL SCP RESIDENTIAL BILL

	PG&E	CleanStart	EverGreen	PG&E Solar Choice
Example Monthly Electric Charges*	30% Renewable	36% Renewable	100% Renewable	100% Renewable
Electric Generation	\$50.17	\$33.90	\$46.65	\$48.60
Electric Delivery	\$54.28	\$54.28	\$54.28	\$54.28
Added PG&E Fees	\$0.00	\$15.34	\$15.34	\$14.89
Average Total Cost	\$104.46	\$103.53	\$116.28	\$117.77

*Based on a typical usage of 510 kWh at current PG&E rates and SCP rates under the E-1 rate schedule. Actual differences may vary depending on usage, rate schedule, and other factors. Estimate provided is an average of seasonal rates and are based on PG&E's January 1, 2017 generation and delivery rates and Sonoma Clean Power's Board Approved March 1, 2017 generation rates. More rate comparison examples can be found at sonomacleanpower.org. Added PG&E Fees include the Power Charge Indifference Adjustment (PCIA) and Franchise Fee.

Questions?

Resources:

www.cal-cca.org

www.LEANenergyus.org

www.cleanpowerexchange.org

Business for Clean Energy
Annual CCA Symposium
May 5, 2017
Long Beach, CA

