

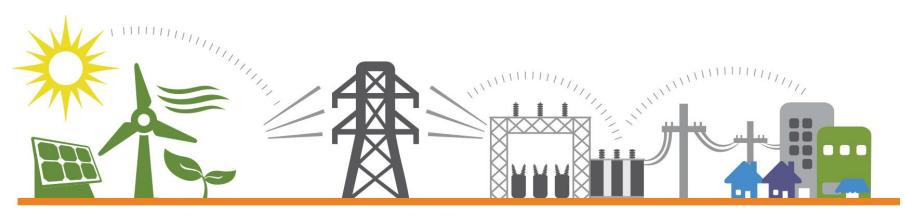


CCAs Created by the Legislature

- 2000 Energy Crisis prompted interest in greater transparency and local control
- AB 117 (2002, Migden): enabled energy choice through local government-based entities
- SB 790 (2011, Leno): established a CCA 'bill of rights' and allowed CCAs to administer efficiency programs



How Community Choice Works



generation

buys cleaner energy sources delivery

delivers energy, maintains the grid customer

cleaner energy, local control and competitive rates

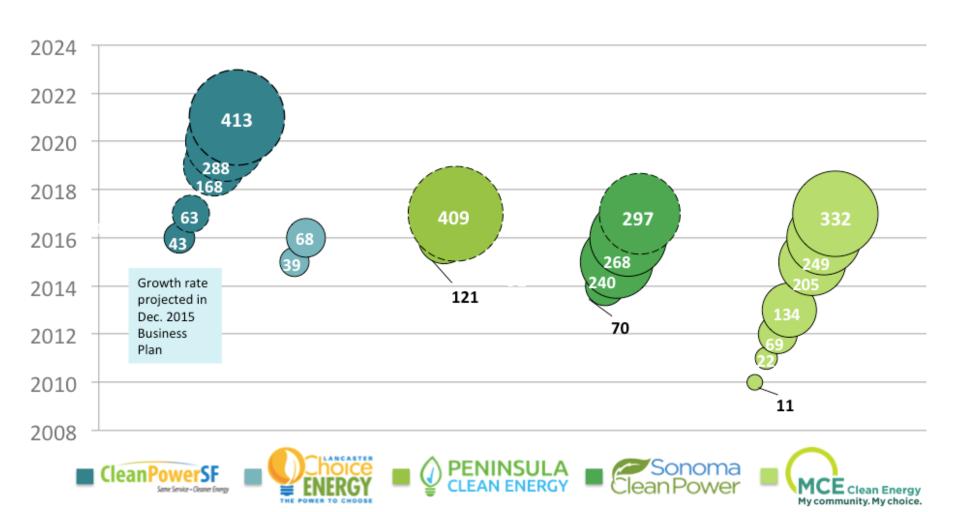


Operating Programs Overview

CalCCA Members	Customer Accounts	Peak Load	Minimum RPS (2017)	Uses Unbundled RECs?	Annual Load 2016 GWh	Annual Load Projected 2017 GWh
MCE	255,000	520 MW	55%	0 - 3%	2,102	2,743
Sonoma Clean Power	235,000	512 MW	43%	None	2,330	2,550
Lancaster Choice Energy	52,000	132 MW	35%	8%	590	595
CleanPowerSF	73,000	93 MW	35%	None	220	520
Peninsula Clean Energy	300,000	660 MW	50%	None	n/a	3,800
CalCCA Member Totals	915,000	1,917 MW	48% (avg)	1% (avg)	5,242	10,208

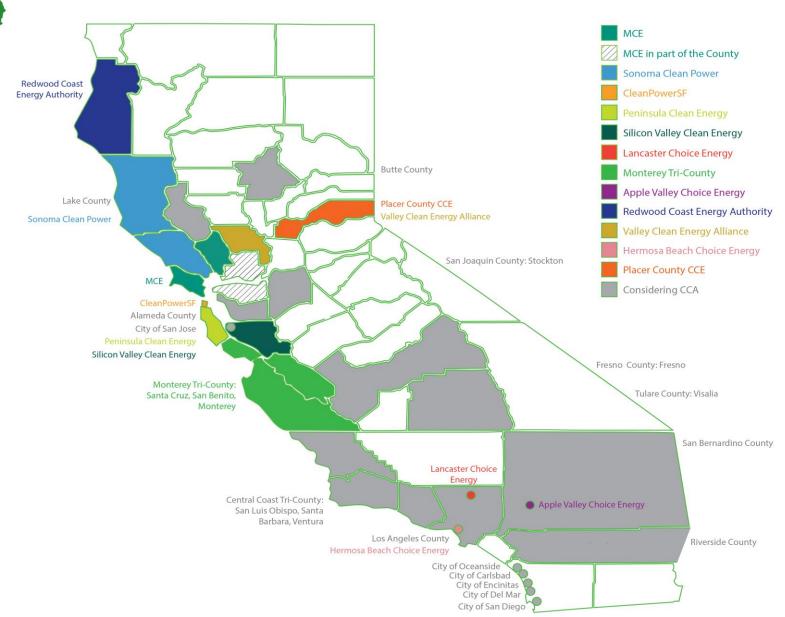


CCA Program Growth and Development (Average Annual MW Served)





Statewide CCA Developments





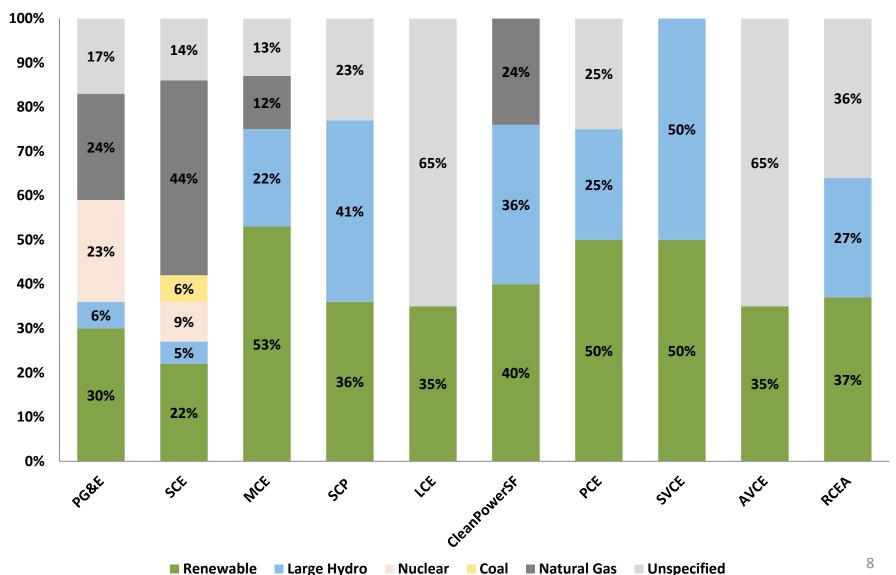
Programs Launching in 2017

CalCCA Members	Customer Accounts	Annual Load (GWh)	Minimum RPS	Uses Unbundled RECs?
Apple Valley Choice Energy	29,000	235*	35%	8%
Silicon Valley Clean Energy	243,000	2,600*	50%	None
Redwood Coast Energy Authority	60,000	730*	37%	None
Totals	332,000	3,565	46% (avg)	<1% (avg)

^{*}Represents a partial year due to enrollment process



Snapshot of CCA Portfolios in 2016 (or forecast for 2017 for new programs)





Building California Renewables

- Over \$1 billion in construction to date
- Majority of spending on projects with project labor agreements
- Constructing renewables quickly
- Takes 3-4 years of operations to create a diverse long-term portfolio







CCA Construction of New California Renewables as of January 2017

	Project Size (MW)	Resource	Resource Provider/Project Name	Location	Service Start Date	Contract Length (Years)
MCE	1	Solar	San Rafael Airport	San Rafael, Marin Co.	2012	20
	1.6	Biogas	G2 Energy / Hay Road Landfill	Vacaville, Solano Co.	2013	18
	4.8	Biogas	Genpower / Lincoln Landfill	Lincoln, Placer Co.	2013	20
	1.9	Biogas	G2 Energy / Ostrom Road Landfill	Wheatland, Yuba Co.	2013	18
	1	Solar	Dominion / Buck Institute of Research on Aging	Novato, Marin Co.	2016	25
	0.3	Solar	Rawson, Blum & Leon / Cost Plus Plaza	Larkspur, Marin Co.	2016	20
	1	Solar	North Solar Solar Partners / Freethy Industrial Pk. #1	Richmond, Contra Costa Co.	2016	20
	1	Solar	North Solar Solar Partners / Freethy Industrial Pk. #2	Richmond, Contra Costa Co.	2016	20
	0.5	Solar	REP Energy / Cooley Quarry	Novato, Marin Co.	2017	20
	1	Solar	REP Energy / Cooley Quarry	Novato, Marin Co.	2017	20
	3.6	Biogas	Waste Management / Redwood Landfill	Novato, Marin Co.	2017	20
	10.5	Solar	MCE / Solar One	Richmond, Contra Costa Co.	2017	25
	20	Solar	Dominion / RE Kansas Solar	Stratford, Kings Co.	2015	3
	23	Solar	Dominion / Cottonwood Solar	Stratford, Kings Co.	2015	25
	99	Wind	EDP Renewables / Rising Tree III	Mojave, Kern Co.	2015	3
	30	Solar	Recurrent Energy / Mustang Solar Power Project	Leemore, Kings Co.	2018	15
	100	Solar	Recurrent Energy / Tranquility 8	Tranquility, Fresno Co.	2018	15
	105	Solar	sPower / Antelope Expansion 2	Lancaster, Los Angeles Co.	2018	20
	42	Wind	Terra-Gen / Voyager Wind III	Mojave, Kern Co.	2018	12
	125	Wind	Terra-Gen / Los Banos Wind	Los Banos, Merced Co.	2018	12
	40	Solar	First Solar / Little Bear Solar	Mendota, Fresno Co.	2020	20
	80	Solar	EDF Renewables / Desert Harvest	Desert Center, Riverside Co.	2020	20
SCP	1	Solar	Cloverdale Soventix	Cloverdale, Sonoma Co.	2017	20
SCP	± 1	Solar	VacaSolar Millenium	Petaluma. Sonoma Co.	2017	20
	<u>+</u>	Solar	Petaluma Solar Millenium	Petaluma, Sonoma Co.	2017	20
	12.5	Solar	Pristine Sun LLC	Multiple sites, Sonoma Co.	2017	20
	70	Solar			2017	20
		Wind	Recurrent Energy / Mustang Solar Power Project NextEra / Golden Hills	Leemore, Kings Co.	2018	20
	46	wiiiu	Nextera / Golden milis	Livermore, Alameda Co.	2010	20
LCE	10	Solar	sPower / Western Antelope Dry Ranch	Lancaster, Los Angeles Co.	2016	20
PCE	200	Solar	Frontier Renewables / Wright Solar Park	Santa Nella, Merced Co.	2018	20
	200	Joidi		Santa Helia, Microca Co.	2010	20



CCA Job Creation & Union Labor Support

- 2,800+ California jobs supported by MCE since
 2010
- 80 jobs created by Lancaster Choice Energy since 2015
- 1.2 million union labor hours created through MCE renewable projects in 2016



CCA Constructed Renewables Supporting Union Labor or Local Workforce Development

Project Name	Location	Load (MW)	CCA	Labor
Wright Solar Park	Merced County	200	Peninsula Clean Energy	Union
Tranquility Solar	Fresno County	100	MCE	Union
Recurrent Tranquility 8 Solar	Fresno County	100	MCE	Union
Rising Tree Solar	Kern County	99	MCE	Union
Recurrent Mustang Solar	Kings County	70	Sonoma Clean Power	Union
Recurrent Mustang Solar	Kings County	30	MCE	Union
Cottonwood Solar	Kern and Kings County	23	MCE	Union
RE Kansas Solar	Kings County	20	MCE	Union
Solar One	Richmond	10.5	MCE	RichmondBUILD
Western Antelope Dry Ranch Solar	LA County	10	Lancaster Choice Energy	Union
Lincoln Landfill	Placer County	4.8	MCE	Union
Ostrom Landfill	Yuba County	1.9	MCE	Union
Hay Road Landfill	Solano County	1.6	MCE	Union
Buck Institute Solar	Novato	1	MCE	Union
San Rafael Airport Solar	San Rafael	1	MCE	Marin City Community Development Corp

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Customer Serving Programs



- Responsive to local needs
 - Low-income retrofits
 - Electric vehicle focus (incl. CARE customers)

DIY TOOLKIT IN THE PARTY OF THE

- Fuel switching
- Rapid development (3-12 months to deploy)
- Low cost to implement programs





CCA Customer Program Elements

	CleanPowerSF	Lancaster Choice Energy	Peninsula Clean Energy	MCE	Sonoma Clean Power
Balanced Payment Plan	In development	✓			In development
Battery Storage Rate				✓	
Customer Load Shifting				✓	✓
Demand Response			In development	In development	✓
Electric Vehicle (EV) Rate	✓	✓	✓	\checkmark	✓
EV Bus Program		✓			
EV Incentives				✓	✓
EV Load Shifting				✓	✓
Energy Efficiency (EE)		In development		\checkmark	✓
Low-Income & Multifamily EE				\checkmark	
Feed-In Tariff	In development		In development	✓	✓
Fuel Switching Gas to Electric				✓	✓
Low Income Solar Incentives	✓			✓	
Net Energy Metering	✓	✓	✓	✓	✓
On Bill Repayment	In development			✓	In development



Customer Serving Rates

- All low-income ratepayers continue to receive discounts
- Preferred net metering rates
- Rates set to minimize impact of IOU fees and guard against rate shock
- Local boards made up of elected officials who are ratepayers



Serving Low-Income (CARE) Customers

	Lancaster Choice Energy	CleanPowerSF	Peninsula Clean Energy	MCE	Sonoma Clean Power
% CARE customers by account	46%	14.1% ¹	18.6% ¹	16.1%	18%
% CARE customers by MWh	25%	NA	NA	6.4%	16%

¹ Eligible CARE accounts, CCA enrollment not yet completed in service area



Value for Underserved Communities

MCE

- \$1.7 M/year for Low-Income Tenants & Families (LIFT) energy efficiency
- \$75,000 allocated for 150 low-income solar rebates
- \$100,000 contracted with RichmondBUILD solar and energy efficiency job training academy
- \$85,000 allocated to Rising Sun Energy Center to train San Pablo and El Cerrito youth for green collar jobs
- MCE Community Power Coalition partners with Communities for a Better Environment, the Greenlining Institute, Grid Alternatives, and local community environmental justice organizations to ensure inclusive programs and policies

Sonoma Clean Power

- Electric vehicle purchase and lease discounts for CARE customers
- 30% of electric vehicle rebates allocated for low-income customers.
- Property Assessed Clean Energy (PACE) financing for home retrofits and solar
- Free Do it Yourself Toolkit for home efficiency retrofits in all public libraries



Value for Underserved Communities

CleanPowerSF

- \$2M allocated for solar rebates for underserved residential customers
- Larger rebates for low-income customers
- 20-40% more for environmental justice neighborhoods
- 500% more for CARE customers
- GRID Alternatives local job training, focusing on underserved communities

Lancaster Choice Energy

- Focus on low-income customers with California HERO and California first to offer Property Assessed Clean Energy (PACE) financing
- Partnering with Antelope Valley Transit Authority to convert to all-electric bus fleet in three years
- AVTA provides free local transit to seniors



Regulatory and Legislative Issues

- CCAs must procure all energy and resource adequacy for customers.
- CCA paradigm means there is a need for more vigilance to protect against IOU shifting cost recovery from generation to delivery

Thank you.

cal-cca.org

