

The Power of Power: Democratizing California’s Energy Economy to Align with Environmental Justice Principles through Community Choice Aggregation

Alexandra McGee and Shalini Swaroop*

Community choice aggregation energy programs have proliferated throughout California as a tool for public municipalities to aggregate their communities’ electricity demand and procure electricity for themselves. Through their community choice aggregation programs, communities have reduced their electricity-related greenhouse gas emissions in order to combat climate change. In this Article, we will attempt to demonstrate that community choice aggregators in California have been used as an effective tool to further the Principles of Environmental Justice through community engagement, renewable energy development, and programs for low-income, marginalized, or vulnerable communities that are informed by local input.

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INTRODUCTION

In January 2019, Pacific Gas and Electric (PG&E) filed for Chapter 11 bankruptcy.¹ Faced with the potential of being held responsible for approximately \$30 billion in liability from the largest wildfires in California history, the company sought to limit these liabilities using the same method it had turned to after the 2001 energy crisis.

During the 2001 energy crisis, the California electricity industry was largely deregulated and allowed for private companies, such as Enron, to competitively provide electricity for Californians.² Due to dwindling supply and market manipulation, electricity prices spiked and Californians suffered rampant brown outs and black outs.³ As a result, Governor Gray Davis was recalled, PG&E declared bankruptcy, and the electricity market was regulated once again.⁴ But there was a pressure valve built into the new regulations—community choice aggregators (CCAs). In order to avoid a complete recommitment to electricity from investor-owned utilities (IOUs) and private for-profit Direct Access companies, the legislature passed Assembly Bill (AB) 117 in 2002.⁵ This bill allowed public municipalities to aggregate their community's electricity demand and procure electricity for themselves. Although they did not know it at the time, the legislature had just created one of its most powerful weapons in the state's fight to decarbonize the electricity sector.

1. In re Pac. Gas & Elec. Corp., No. 19-30088-DM (Bankr. N.D. Cal. filed Jan. 29, 2019).

2. CONG. BUDGET OFF., CAUSES AND LESSONS OF THE CALIFORNIA ENERGY CRISIS (2001).

3. *Id.*

4. Thom Patterson, *Genesis of Recall Rooted in Electricity Crisis*, CNN (Oct. 7, 2003), <https://www.cnn.com/2003/ALLPOLITICS/10/06/energy.crisis/index.html>.

5. 2002 Cal. Legis. Serv. 92 (West) (starting at Ch. 838, A.B. 117).

In this paper, we will attempt to demonstrate three themes. First, community engagement is a foundation to both environmental justice (EJ) and the community choice energy model. Second, CCAs' renewable energy development closely aligns with the Principles of Environmental Justice. And last, in close alignment with EJ values, CCAs can develop programs for low-income or marginalized communities that are informed by local input. In these ways, CCAs can not only be a tool for climate change mitigation but also be a natural ally in the EJ movement.

I. ENVIRONMENTAL JUSTICE AND COMMUNITY ENGAGEMENT

Thankfully, the history of the EJ movement has been well documented elsewhere.⁶ While we cannot provide a comprehensive overview of this history, a brief introduction is required to better understand the role of CCAs in this movement.

The United States Environmental Protection Agency (EPA) defines “environmental justice” as the “fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”⁷ This definition attempts to address polluting industries' historically unfair and exclusionary practices of ignoring the communities most impacted by their activities—typically nearby low-income communities and communities of color. These business models essentially outsource environmental impacts and externalities onto nearby frontline and fenceline communities while evading the financial consequences of the damage that ensues.

To begin, the exploitation of land and people are correlated. To quote Dr. Robert Bullard, “It’s no accident that the modern civil rights and EJ movements were both born in the South.”⁸ Exclusionary practices and policies will breed intersectional social vulnerabilities. This environmental racism becomes a central factor in determining which communities receive pollution and which receive protection.

6. Many thanks to Dr. Robert D. Bullard, Distinguished Professor of Urban Planning and Environmental Policy at the Barbara Jordan-Mikey Leland School of Public Affairs at Texas Southern University. Dr. Bullard provided a powerful and concise timeline and evolution of the movement in a presentation in the American Public Health Association's 2019 webinar “Achieving Environmental Justice in the 21st Century: The Way Forward.” Robert D. Bullard, *Achieving Environmental Justice in the 21st Century The Way Forward*, AM. PUB. HEALTH ASS'N (2019), https://apha.org/-/media/files/pdf/webinars/2019/bullard_part1.ashx?la=en&hash=3EBA11E8F2D2906649AC33860843E CDC9FAB2FFE.

7. *Environmental Justice*, EPA (last updated Aug. 19, 2019), <https://www.epa.gov/environmentaljustice>.

8. Robert D. Bullard, *The Quest for Environmental and Racial Justice in the U.S.*, AM. PUB. HEALTH ASS'N (2019), https://apha.org/-/media/files/pdf/webinars/2019/bullard_part1.ashx?la=en&hash=3EBA11E8F2D2906649AC33860843E CDC9FAB2FFE.

Prior to the contemporary EJ movement, there were isolated struggles against environmental degradation. The first lawsuit to challenge environmental discrimination using civil rights law was *Bean v. Southwestern Waste Management Corp.* in 1979, where African Americans in Houston unsuccessfully challenged the siting of a landfill in their neighborhood.⁹ Bullard would later substantiate the correlation of race and hazardous waste siting, finding that 100 percent of Houston-owned landfills, 75 percent of privately owned landfills, and 75 percent of city-owned incinerators were located in black neighborhoods.¹⁰ This meant that over 82 percent of waste disposed in Houston went to mostly black neighborhoods, even though African Americans made up only 25 percent of the city's population.

While *Bean v. Southwestern* was undeniably important, a single case does not constitute an entire movement. Instead, scholars commonly trace the birth of the EJ movement to the 1982 protests in Warren County, North Carolina, where residents organized a nonviolent protest against the siting of a hazardous polychlorinated biphenyl (PCB) landfill.¹¹ While over 500 activists were arrested, their efforts were ultimately unsuccessful and the landfill was completed.¹²

In response to these actions, the Congressional Black Caucus urged the General Accounting Office to research the intersection of race and environmental problems in eight Southern states. These efforts would lead to the 1983 publication of *Siting of Hazardous Waste Landfills and their Correlation with Racial and Economic Status of Surrounding Communities*.¹³ The landmark report revealed a phenomenon similar to Houston's, finding that 75 percent of the waste disposal facilities in these eight states were in black communities—even though African Americans comprised just 26 percent of the population.¹⁴ A few years later, the United Church of Christ's Commission for Racial Justice would again report on the link between race and location of hazardous waste sites, concluding that race played a more important role than socioeconomic

9. *Bean v. Sw. Waste Mgmt. Corp.*, 482 F. Supp. 673, 681 (S.D. Tex. 1979); see Alison E. Hickey, *Shifting the Burden: Potential Applicability of Bush v. Gore to Hazardous Waste Facility Siting*, 33 B.C. ENVTL. AFF. L. REV. 661, 678 (2006) (stating that *Bean* was the first lawsuit to challenge a hazardous waste site under the Equal Protection Clause).

10. See, e.g., ROBERT D. BULLARD, *INVISIBLE HOUSTON: THE BLACK EXPERIENCE IN BOOM AND BUST* (Texas A&M Univ. Press, 1987).

11. *Environmental Justice Timeline*, EPA (last updated June 2, 2017), <https://www.epa.gov/environmentaljustice/environmental-justice-timeline> [hereinafter EPA EJ Timeline].

12. *Id.*

13. GEN. ACCOUNTING OFFICE, GAO/RCED-83-168, *SITING OF HAZARDOUS WASTE LANDFILLS AND THEIR CORRELATION WITH RACIAL AND ECONOMIC STATUS OF SURROUNDING COMMUNITIES* (1983).

14. *Id.*

status in determining a family's probability of living close to a toxic waste site.¹⁵ Armed with this compelling new research, the EJ movement began to take shape.

In 1990, the EPA created the Environmental Equity Workgroup, acknowledging that "racial minority and low-income populations bear a higher environmental risk burden than the general population."¹⁶ With new groups, endorsements, and federal support, this momentum led to the First National People of Color Environmental Leadership Summit in 1991, where the core seventeen Principles of Environmental Justice were developed, including the call for fair treatment and meaningful involvement.¹⁷ Just four years later, EJ was enshrined into federal law, when President Clinton signed Executive Order 12898 on February 11, 1994.¹⁸ This executive order reinforced and relied on two existing laws: Title VI of the Civil Rights Act of 1964 and the National Environmental Policy Act of 1969. This explicitly spotlighted EJ as a merging of civil rights and environmental rights.

In California, EJ issues rose to prominence around the same time as the statewide energy crisis. In 1999, the California Senate passed Senate Bill (SB) 115 to coordinate EJ programs.¹⁹ In 2001, SB 828 required an audit of California Environmental Protection Agency (CalEPA) to assess potential gaps that could impede progress in reaching the state's EJ goals.²⁰ In 2002, a year before Governor Gray Davis was recalled, AB 2312 established CalEPA's Environmental Justice Small Grant program to provide up to \$20,000 to nonprofits working on EJ issues.²¹

Because the challenges of the energy crisis and the Principles of Environmental Justice emerged into public consciousness during the same period of time, they are perhaps more inextricably intertwined in California than anywhere else. Thus, this shifting environmental awareness was subtly embedded into the policy solutions proposed to address the crisis—particularly in the creation of CCAs. As we will show in this Article, CCAs are aligned with some of the seventeen core Principles of Environmental Justice established in 1991 at the First National People of Color Environmental Leadership Summit. We will refer to several of these principles in particular:

- Principle 2 - Environmental justice demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.

15. CHURCH OF CHRIST COMMISSION FOR RACIAL JUSTICE UNITED, TOXIC WASTES AND RACE IN THE UNITED STATES: A NATIONAL REPORT ON THE RACIAL AND SOCIO-ECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES (1987).

16. EPA EJ Timeline, *supra* note 11.

17. See generally EJNET, *Principles of Environmental Justice* (Apr. 6, 1996), <https://www.ejnet.org/ej/principles.html> (stating the seventeen principles of Environmental Justice) [hereinafter *Principles of Environmental Justice*].

18. Exec. Order No. 12898, 59 C.F.R. § 7629 (1994).

19. CAL. S.B. 115, CAL. GOV'T CODE § 65040.12, CAL. PUB. RES. CODE §§ 72000-01 (1999).

20. CAL. S.B. 828, CAL. PUB. RES. CODE §§ 71110-15 (2001).

21. CAL. A.B. 2312, CAL. PUB. RES. CODE § 71116 (2002).

- Principle 3 - Environmental justice mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.
- Principle 5 - Environmental justice affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.
- Principle 7 - Environmental justice demands the right to participate as equal partners at every level of decision-making including needs assessment, planning, implementation, enforcement and evaluation.
- Principle 8 - Environmental justice affirms the right of all workers to a safe and healthy work environment without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.
- Principle 17 - Environmental justice requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth's resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to insure the health of the natural world for present and future generations.²²

By emphasizing fair treatment and meaningful involvement, EJ attempts to address the environmental racism that leads to communities of color bearing a disproportionate burden of the negative externalities of industry, such as pollution and contamination. To counter this history of marginalization, an environmentally just approach to the energy industry will include members of disenfranchised, underrepresented, and hidden communities in decision making processes. Because the CCA movement was born as a response to the unjust practices and market manipulations of the fossil fuel industries, it is only natural that the spirit of community choice is powered by the sustainable renewable energy sources that intend to revolutionize this industry.

II. COMMUNITY CHOICE AGGREGATION BACKGROUND

EJ Principle 2 “demands that public policy be based on mutual respect and justice for all peoples.”²³ CCAs are not-for-profit, public agencies formed by local advocacy and molded by community mandates. As locally controlled public actors, CCAs have a transparent governance structure, the ability to be nimble and innovative in building new programs, and a collaborative spirit that is indicative of a new era of community-sensitive energy policy and procurement.

22. *Principles of Environmental Justice*, *supra* note 17.

23. *Principles of Environmental Justice*, *supra* note 17.

EJ Principle 5 requires “political, economic, cultural, and environmental self-determination of all peoples.”²⁴ CCAs are governed by a board of directors composed of elected or appointed officials representing the community voice in agency decisions. In meetings open to the public, these boards vote on agency policy, approve programs, and set generation rates for electric services in a democratic, transparent forum. With their autonomy and public mandate, these governing bodies have the flexibility and authority to set the priorities and direction of the agency to reflect community values and concerns. Here, we will discuss the basic structure of CCA operations, as well as the sustainable policies and rate-setting design practices that infuse CCAs with this unique sensitivity to community needs.

CCAs build and buy electricity generation resources for customers in their communities (Figure 1). This electricity is then delivered to the customer over the poles and wires operated by the IOU. The electricity customer continues to receive uninterrupted service and continues to receive a single electric bill from the IOU, with newly included CCA generation charges to replace what they would have otherwise paid to their IOU. With no change in quality of service or in the billing process, the introduction of a CCA fits seamlessly into the customer experience. In addition, individuals are always able to opt-out of CCA generation services and retain their existing generation services from the incumbent IOU.

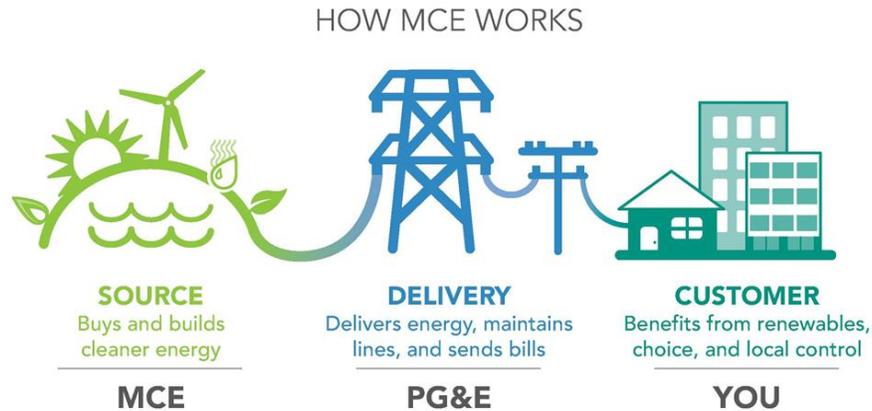


Figure 1: Community Choice Aggregation Model²⁵

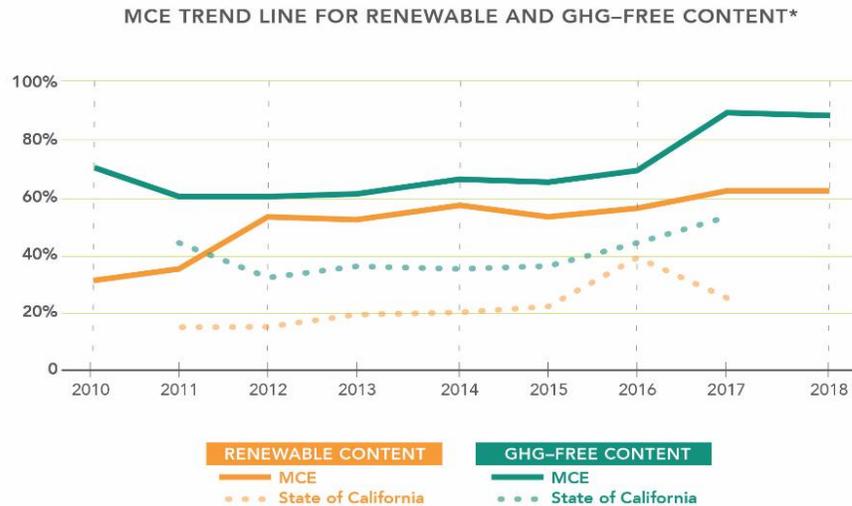
Over the past decade, CCAs have expanded across California as a growing number of communities seek to reduce electricity-related greenhouse gas emissions (GHGs).²⁶ For example, Marin Clean Energy (MCE), the first

24. *Id.*

25. *Competitive Rates Cleaner Power*, MCE, <https://www.mcecleanenergy.org/rates/> (last visited Jan. 21, 2020).

26. Kelly Trumbull et al., *The Rapid Growth of Community Choice Energy and its Acceleration of Renewable Energy A California Case Study*, UCLA LUSKIN CENTER FOR INNOVATION 12 (2019),

operational CCA in California, has proportionally outpaced the state of California in both its renewable and greenhouse gas-free (GHG-free) electricity (Figure 2).²⁷ In addition, because prices for renewable energy are decreasing as this technology becomes more widespread, MCE has saved its customers over \$50 million since its launch in 2010.²⁸ A 2017 study from the UCLA Luskin School of Public Affairs noted that CCAs had reduced approximately 590,000 metric tons of carbon dioxide equivalent in 2016.²⁹



*As reported to the California Energy Commission's Power Source Disclosure Program. MCE's 2018 data is subject to an independent audit and verification that will not be completed until October 1, 2019.

Figure 2: Comparison between MCE and Statewide Energy Composition³⁰

EJ Principle 7 “demands the right to participate as equal partners at every level of decision-making.”³¹ Access to information is crucial if community members are to be empowered as partners in decision making. In California, CCAs are subject to transparency laws because they are government entities. The Brown Act mandates that all meetings of decision making boards of elected

https://innovation.luskin.ucla.edu/wp-content/uploads/2019/11/Rapid_Growth_of_Community_Choice_Energy.pdf.

27. MCE, *MCE 2019 Integrated Resource Plan* (2018), https://www.mcecleanenergy.org/wp-content/uploads/2018/11/MCE-2019-Integrated-Resource-Plan_FINAL_Approved-11-1-2018.pdf.

28. MCE, <https://www.mcecleanenergy.org/> (last visited Jan. 21, 2020).

29. J.R. DeShazo et al., *The Promises and Challenges of Community Choice Aggregation in California*, UCLA LUSKIN CENTER FOR INNOVATION 37 (2017), https://innovation.luskin.ucla.edu/wp-content/uploads/2019/03/The_Promises_and_Challenges_of_Community_Choice_Aggregation_in_CA.pdf.

30. MCE, *MCE Special Meeting Wednesday September 18, 2019 14* (2019), https://www.mcecleanenergy.org/wp-content/uploads/2020/01/MCE-Board-Retreat-Special-Meeting-Agenda-September_2019.pdf.

31. *Principles of Environmental Justice*, *supra* note 17.

officials are duly noticed to the public and allow for time to address any concerns.³² Members of the public can participate in public comment at all meetings. Under the Public Records Act, any member of the public may request any documents from the CCA covered by the law.³³ In addition to these statewide acts, there are also local ordinances that may impose additional layers of transparency.³⁴ This allows for a level of transparency and access that does not exist for IOUs. Indeed, in order for stakeholders to have input and transparency into IOU operations, the California Public Utilities Commission (CPUC) has created a complex adjudicatory process that must be navigated by lawyers with large up-front expenses.³⁵ These processes are created to ensure due process and public input, but can also serve as a barrier to entry.³⁶

MCE was the first CCA to begin serving customers in California in 2010, but it came at a steep cost. Because Marin County is known as one of the wealthiest counties in California,³⁷ there could be the misconception that community choice energy owes its establishment to socio-economically privileged communities. However, MCE's initial structure was substantially built on the foundation of a CCA in California's Central Valley which, for reasons outlined below, never launched.

After three years of preparation and feasibility analysis, fourteen jurisdictions had joined the San Joaquin Valley Power Authority (SJVPA) by November 2006. Led by the Kings River Conservation District (KRCD), SJVPA spanned Fresno County, Kings County, and Tulare County.³⁸ These counties consistently rank among the lowest in per capita income, median household income, and median family income in California.³⁹

32. First Amendment Coalition, *Open Gov Laws Brown Act Primer*, <https://firstamendmentcoalition.org/facs-brown-act-primer/> (last visited Jan. 20, 2020).

33. See CAL. GOV'T CODE §§ 6250–6253 (1998).

34. For example, the City and County of San Francisco have adopted a Sunshine Ordinance. The Sunshine Ordinance is designed to ensure easier access to public records and to strengthen the open meeting laws. The Sunshine Ordinance also outlines a procedure for citizens to follow if they do not receive public records that they have requested. City & County of San Francisco, *Sunshine Ordinance Task Force*, <https://sfgov.org/sunshine/> (last visited Jan. 20, 2020).

35. See CAL. CODE REGS. tit. 20 § 1 (2018) (containing the Cal. Pub. Utils. Comm'n Rules of Practice and Procedure).

36. Advocates without the funds to hire an attorney may wait years for the CPUC's intervenor compensation program to provide recompense. See *Intervenor Compensation Program*, CAL. PUB. UTILS. COMM'N, <https://www.cpuc.ca.gov/icompl/> (last visited Feb. 21, 2020).

37. See *Median Household Income in California by County*, U.S. CENSUS BUREAU, <https://data.census.gov/cedsci/table?q=Income%20%28Households,%20Families,%20Individuals%29&tid=ACSS1Y2018.S1903&vintage=2018&hidePreview=true&g=0400000US06.050000&moe=false> (last visited Feb. 24, 2020).

38. Communities in the joint powers agreement included: Kings County and the cities of Clovis, Corcoran, Dinuba, Fresno, Kerman, Kingsburg, Lemoore, Hanford, Parlier, Reedley, Selma, and Sanger. Cal. Energy Comm'n, *Progress Report on Resource Adequacy Among Publicly Owned Load-Serving Entities in California* 82 (May 2008), <https://ww2.energy.ca.gov/2007publications/CEC-200-2007-016/CEC-200-2007-016-SF.PDF>.

39. See *Median Household Income in California by County*, *supra* note 37.

In 2007, SJVPA was the first CCA to have an implementation plan certified by the CPUC.⁴⁰ But SJVPA suspended its efforts in June 2009 after facing a number of setbacks, including extended public conflict with PG&E, which sought to derail the plan. On June 25, 2007, KRCD filed a complaint alleging illegal IOU marketing against the CCA effort and use of ratepayer expenditures to stifle the CCA program.⁴¹ According to local news reports, PG&E had gone as far as threatening CCA member jurisdictions with financial liability, insisting on a \$140 million bond, aggressively encouraging community withdrawal from the CCA, and initiating an early opt-out provision to encourage customers to leave before program details had been established.⁴²

This barrage of attacks resulted in significant—and ultimately devastating—costs to the nascent Central Valley CCA. The CCA’s small staff of local government planners and assistants was forced to turn its attention to combatting the privately bankrolled opposition, which invariably sapped precious time and resources away from launching a new program. The enormous anti-CCA campaign led to the City of Fresno dropping out of the program, taking roughly half of SJVPA’s anticipated load with them.⁴³ After many months of costly deliberations at the CPUC, KRCD was forced to suspend its effort to launch SJVPA. Despite recent efforts to reintroduce CCA in the Central Valley, there is still no operational program.⁴⁴

Although KRCD’s CCA effort was unsuccessful, its presence is still largely felt. SJVPA’s foundational documents—including the joint powers agreement,⁴⁵ implementation plan, initial power supply request for proposals, and power supply agreements—became the templates used to launch MCE. In keeping with this tradition and example set by KRCD, MCE continues to provide access to

40. Steve Larson, *Letter to San Joaquin Valley Power Authority Authorizing Their Implementation Plan*, CAL. PUB. UTILS. COMM’N (Apr. 30, 2007), <http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=5882>.

41. Richard Halstead, *Energy hearing draws litany of complaints about PG&E tactics*, MARIN INDEP. J. (Nov. 11, 2010, 1:27 am), www.mercurynews.com/2010/11/11/energy-hearing-draws-litany-of-complaints-about-pgetactics.

42. *Id.*

43. Local Power Inc., *Community Choice Lessons Learned & Best Practices* 99–100 (2009), http://www.localpower.com/CCA_Lessons_AUG3109.pdf.

44. In March 2018, the California Choice Energy Authority applied for party status and proposed a CCA Feasibility Study to be considered among the affordable energy pilot projects for disadvantaged communities in the San Joaquin Valley. California Choice Energy Authority Proposed Pilot Project in Response to Assigned Commissioner’s Scoping Memorandum and Ruling, Rulemaking 15-03-010 (Cal. Pub. Utils. Comm’n Mar. 2, 2018). However, California Choice Energy Authority ultimately withdrew the pilot after several failed attempts to present this proposal at public meetings. The Clean Power Exchange is working and monitoring the situation closely. *Central Valley Overview*, Clean Power Exchange, <https://cleanpowerexchange.org/central-valley/> (last visited Mar. 9, 2020).

45. “Joint powers” is a term used to describe government agencies that have agreed to combine their powers and resources to work on their common problems. Joint powers agreements offer another way for governments to deliver services. See generally California State Legislature Senate Local Government Committee, *Governments Working Together A Citizen’s Guide to Joint Powers Agreements* (2007), <https://sgf.senate.ca.gov/sites/sgf.senate.ca.gov/files/GWTFinalversion2.pdf>.

these documents to help newly forming CCAs navigate the startup process, thereby reducing the costs of launching a program. The partnership, spirit of collaboration, and sharing of best practices between KRCD and MCE later became the basis for what is now known as CalCCA—the CCA trade association launched in 2016.⁴⁶ MCE’s formation, and the CCAs that followed, have all been built on the groundwork laid in the Central Valley.

MCE faced similar PG&E opposition. Retired PG&E engineers sent letters to elected officials, media outlets, and community-based organizations stating that the CCA would not work and sowing fear that the lights would go out if Marin were to join.⁴⁷ Among the tactics used was sending mailers to residents under the name of the “Common Sense Coalition,” a group whose president and vice president were both current or former PG&E vice presidents (Figure 3).⁴⁸ One of these mailers looked like an official opt-out notice, which led to CPUC threatening PG&E with “significant and continuing fines.”⁴⁹ In addition, PG&E provided \$44.1 million⁵⁰ to promote Proposition 16 on the 2010 state ballot, which would have severely hindered the ability of CCAs to form, virtually eliminating the possibilities of CCAs before they even launched.⁵¹

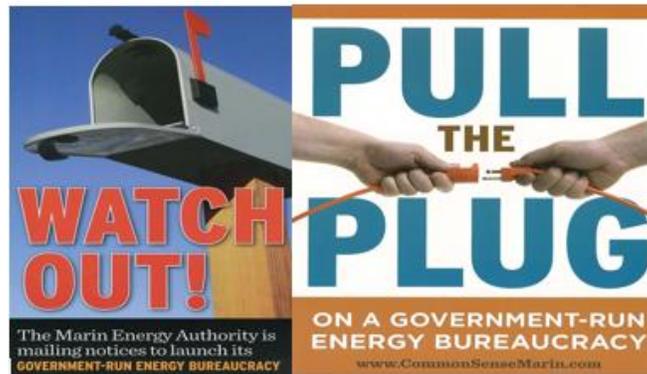


Figure 3: Examples of Ads from MCE Opponents⁵²

46. *CalCCA Advocates for Community Choice in California*, CalCCA, <https://cal-cca.org/about/> (last visited Feb. 21, 2020).

47. Local Power Inc., *supra* note 43, at 105.

48. Richard Halstead, *Coalition opposing Marin Clean Energy has strong ties to PG&E*, MARIN INDEP. J. (Feb. 26, 2010, 12:00 am), <https://www.marinj.com/2010/02/26/coalition-opposing-marin-clean-energy-has-strong-ties-to-pge/>.

49. David Baker, *State threatens PG&E with fines for Marin letter*, S.F. CHRONICLE (May 14, 2010, 4:00 am), <https://www.sfgate.com/bayarea/article/State-threatens-PG-E-with-fines-for-Marin-letter-3188666.php>.

50. *Campaign Finance YES ON 16*, CAL. SEC. OF STATE, <http://cal-access.sos.ca.gov/Campaign/Committees/Detail.aspx?id=1318623&session=2009&view=received> (last visited Jan. 22, 2020).

51. See Marc Lifsher, *PG&E; phone, mail tactics are illegal, regulators warn*, L.A. TIMES (May 4, 2010), <https://www.latimes.com/archives/la-xpm-2010-may-04-la-fi-prop16-puc-20100504-story.html>; Michael R. Peevy, *Op-Ed Proposition 16—Preserving Monopoly Power*, CAL. PUB. UTIL. COMM’N (May 23, 2010), <https://www.cpuc.ca.gov/General.aspx?id=4547>.

52. Advertisements from Common Sense Marin (2010) (on file with authors).

In response to the campaigns that were organized against SJVPA and MCE, SB 790 (2011) established an IOU Code of Conduct in order to limit the misinformation, staff time, and resources that could be used to undermine a launching CCA.⁵³ With this challenge minimized, the growth of CCAs in California has been unprecedented. As of 2019, there are nineteen operational CCAs serving approximately 10 million customers throughout California—25 percent of IOUs' original customer base (Figure 4, Table 1).⁵⁴ And there are more on the way.

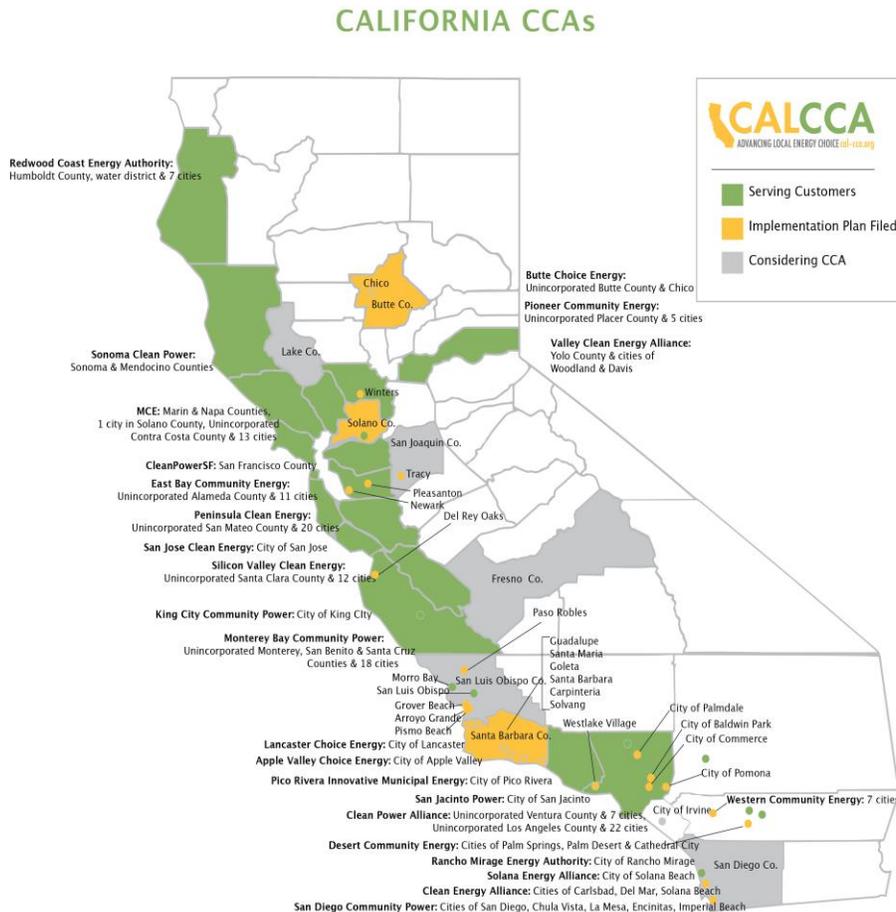


Figure 4: Map of Current and Potential CCA Programs in California⁵⁵

53. CAL. S.B. 599 CAL. PUB. UTIL. CODE §§ 331.1, 365.1, 366.2, 380, 281.1, 395.5, 396.5, 707 (2011).

54. Ashleigh Cotting et al., *Aggregators Supply nearly one-quarter of regulated load in California*, S&P GLOBAL MARKET INTELLIGENCE (Aug. 15, 2019), <https://www.spglobal.com/marketintelligence/en/news-insights/trending/OfUwtWWl8nb6uiplukkkqg2>.

55. *Community Choice Aggregation (CCA) What is it?*, CALCCA, <https://cal-cca.org/powered/> (last visited Feb. 21, 2020); see also *California Community Choice An Interactive Map*, Clean Power

Community Choice Agencies	Areas Served (County Jurisdiction Unless Otherwise Specified)
Apple Valley Choice Energy (AVCE)*	Town of Apple Valley
CleanPowerSF (CPSF)	San Francisco
Clean Power Alliance (CPA)	Los Angeles, Ventura
Desert Community Energy*	Cities of Palm Springs, Palm Desert, Cathedral City
East Bay Community Energy (EBCE)	Alameda
King City Community Power*	King City
Lancaster Choice Energy (LCE)	City of Lancaster
MCE	Marin, Napa, Contra Costa, Solano
Monterey Bay Community Power (MBCP)	Monterey, Santa Cruz, San Benito
Peninsula Clean Energy (PCE)	San Mateo
Pico Rivera Innovative Municipal Energy (PRIME)	City of Pico Rivera
Pioneer Community Energy (Pioneer)	Placer
Rancho Mirage Energy Authority	City of Rancho Mirage
Redwood Coast Energy Authority (RCEA)	Humboldt
San Jacinto Power (SJP)	City of San Jacinto
San Jose Clean Energy (SJCE)	City of San Jose
Silicon Valley Clean Energy (SVCE)	Santa Clara
Solana Energy Alliance (SEA)*	City of Solana Beach
Sonoma Clean Power (SCP)	Sonoma, Mendocino
Valley Clean Energy*	Yolo

Table 1: List of CCAs⁵⁶

III. COMMUNITY ENGAGEMENT IS FOUNDATIONAL TO ENVIRONMENTAL JUSTICE AND COMMUNITY CHOICE ENERGY

A universal service requirement and the opt-out structure built into the CCA model ensure that CCAs have the opportunity to serve all. However, CCAs must not rest there if they are to address historical inequalities of socioeconomic stratification or the additional linguistic, cultural, and geographic barriers that challenge our communities. Given CCAs' public governance, collaborative

Exchange, <https://cleanpowerexchange.org/california-community-choice/#map> (last visited Feb. 24, 2020) (displaying the most up-to-date locations of CCAs in California).

56. Adapted from CalCCA, *Beyond Diversity Supplier Report 1* (Oct. 4, 2018), <https://cal-cca.org/wp-content/uploads/2018/10/CalCCA-Beyond-Supplier-Diversity-Report.pdf>. Asterisks denote CCAs that did not contribute content to the CalCCA report.

missions, and direct connection to the community, many of their equity efforts are as diverse as the communities they serve. This embodies EJ Principle 17: that “individuals[] make personal and consumer choices to consume as little of Mother Earth’s resources and to reprioritize our lifestyles to ensure the health of the natural world for present and future generations.”⁵⁷

The following Subparts elaborate on how CCAs have worked toward EJ and diversity through energy procurement, agency policy, and program priorities. This is not a summary of all CCA efforts but, rather, a selection of case studies to illustrate the nature and potential of these efforts.⁵⁸

For example, when CleanPowerSF launched in 2016, it adopted policies the San Francisco Public Utilities Commission (SFPUC) developed on community benefits and EJ. The SFPUC’s Environmental Justice Policy affirms and commits CleanPowerSF to “the goals of environmental justice to prevent, mitigate, and lessen disproportionate environmental impacts.”⁵⁹ This policy has a triple bottom line analysis to guide decision making by balancing economic, social equity, and environmental goals.⁶⁰ CleanPowerSF also adopted the SFPUC’s Community Benefits Policy, which invites the public to provide input in designing and implementing projects to benefit the community.⁶¹ By embedding such values early on, these policies solidify EJ as central to the foundation of a CCA as it determines resource allocation and which community programs to support.

A. *Robust Community Engagement Requires Feedback Loops of Information Flows to and from the CCA*

EJ Principle 7 “demands the right to participate as equal partners at every level of decision-making, including needs assessment, planning, and implementation.”⁶² In addition to the intrinsically public nature of their agencies, CCAs have created communication channels that allow for additional approaches for community engagement. In this Subpart, we outline three distinct approaches.

First, some CCAs have formed Community Advisory Committees (CACs), composed of representatives from different sectors, industries, or identities

57. *Principles of Environmental Justice*, *supra* note 17.

58. Much of this material was previously used in an unpublished report from the California Community Choice Association and was based on information on programs gathered in late 2018.

59. San Francisco Pub. Utils. Comm’n, *Environmental Justice Policy* SFPUC Commission Resolution No.09-0170 (Oct. 13, 2009), <https://sfwater.org/modules/showdocument.aspx?documentid=3686>.

60. *Id.*

61. San Francisco Pub. Utils. Comm’n, *Community Benefits Policy* SFPUC Commission Resolution No.11-0f008 (Jan. 11, 2011), <https://sfwater.org/modules/showdocument.aspx?documentid=3676>.

62. *Principles of Environmental Justice*, *supra* note 17.

within the community.⁶³ This may mean recognition of certain socioeconomic factors or business interests or simply that each member jurisdiction is represented on the committee. CACs meet regularly to provide input, feedback, and recommendations to CCA staff and/or their respective boards. At East Bay Community Energy (EBCE), a CAC representative also holds a non-voting seat on the board of directors.⁶⁴ Currently, CleanPowerSF, Clean Power Alliance (CPA), EBCE, Monterey Bay Community Power (MBCP), Peninsula Clean Energy (PCE), Redwood Coast Energy Authority (RCEA), Sonoma Clean Power (SCP), San Jose Clean Energy, and Valley Clean Energy have CACs.⁶⁵

Second, another form of community engagement is the trifold approach. Silicon Valley Clean Energy (SVCE) has organized three major groups in order to gather feedback and engage with their communities: (1) Customer Program Advisory Group, (2) Member Agency Working Group, and (3) commercial and industrial customers through a quarterly “Watts for Lunch” series.⁶⁶ The Customer Program Advisory Group consists of at least one volunteer from each of SVCE’s thirteen member communities to provide guidance on residential programming.⁶⁷ The Member Agency Working Group is comprised of sustainability and public works managers from each member community to provide operational guidance and input for municipal-related programs.⁶⁸ “Watts for Lunch” is an ad hoc group of large commercial, industrial, and municipal representatives who come together to learn about decarbonization technology, such as building electrification, energy storage, and electric vehicles (EVs).⁶⁹

Third, MCE’s Community Power Coalition meets on a bimonthly basis. Formed in 2014, this representative collective of local advocacy organizations focuses on the interests of underrepresented and historically marginalized constituencies through collaborations and open dialogue with communities.⁷⁰ As of 2020, Community Power represents thirty-seven local organizations working on issues ranging from conservation to EJ. Member organizations include GRID Alternatives, Asian Pacific Environmental Network (APEN), Communities for a Better Environment (CBE), and the Greenlining Institute.⁷¹ It meets regularly to discuss regulatory and legislative issues, provide feedback on procurement and

63. CCA staff in discussion with Alexandra McGee, MCE (2018) [hereinafter *McGee Staff Discussion*].

64. East Bay Community Energy, *Community Advisory Committee Procedures 2*, <https://ebce.org/wp-content/uploads/CAC-Procedures.pdf> (last visited Feb. 18, 2020).

65. *McGee Staff Discussion*, *supra* note 63.

66. *Customer Program Advisory Group*, SILICON VALLEY CLEAN ENERGY 4 (Oct. 10, 2018), <https://www.svcleanenergy.org/wp-content/uploads/2018/10/2018-1010-CPAG-Presentation.pdf>.

67. *Customer Program Advisory Group*, SILICON VALLEY CLEAN ENERGY, <https://www.svcleanenergy.org/advisory-group/> (last visited Feb. 21, 2020).

68. See *Customer Program Advisory Group*, *supra* note 66, at 4.

69. *Watts for Lunch*, SILICON VALLEY CLEAN ENERGY, <https://www.svcleanenergy.org/wattsforlunch> (last visited Nov. 13, 2019).

70. MCE, *Community Power Coalition*, <https://www.mcecleanenergy.org/community-power-coalition/> (last visited November 13, 2019).

71. *Id.*

programs, build community awareness, and hear updates on the community choice movement.

*B. CCAs Partner with Community-Based Organizations
to Further Their Community Engagement*

Beyond formalizing groups to regularly meet, CCAs also support and facilitate community engagement in other ways. The three examples below illustrate how CCAs can provide additional support for hard to reach and hidden communities, either financially, linguistically, or politically.

PCE has funded grants of up to \$10,000 to support local nonprofits successfully working with low-income residents, seniors, customers eligible for Medical Baseline discounts,⁷² and customers who communicate primarily in a language other than English.⁷³ One of these grant partners works primarily in East Palo Alto,⁷⁴ where there is a significant Pacific Islander population, so they have translated informational materials into Tongan and Samoan.⁷⁵ SVCE has recently sought to replicate the success of this outreach grant process by awarding \$75,000 to community organizations to support engagement in difficult-to-reach communities.⁷⁶

MBCP has a partnership with Univision to provide program information to Monterey Bay agricultural workers in Spanish.⁷⁷ Staff also provide information about billing and rates on a biweekly basis to over 250 underserved agricultural workers to better learn how a CCA can meet their needs.⁷⁸

CCAs are a natural continuation of a pre-launch relationship, whereby constituents engage with elected officials about the opportunities afforded through community choice. The anecdotes are many, but San Francisco provides a succinct example. In 2004, the city elected to implement a CCA through SFPUC, in consultation with the San Francisco Local Agency Formation Commission and with input from the public.⁷⁹ After many years of engagement

72. Medical Baseline accounts represent customers who have medically related electricity needs, such as life-support equipment.

73. *McGee Staff Discussion*, *supra* note 63.

74. East Palo Alto ranks in the eighty-fifth to ninety-fifth percentile in CalEnviroScreen 3.0 tool. In January 2017, the Office of Environmental Health Hazard Assessment (OEHHA), on behalf of the California Environmental Protection Agency (CalEPA), released Version 3.0 of the California Communities Environmental Health Screening Tool (CalEnviroScreen). CalEnviroScreen identifies California communities by census tract that are disproportionately burdened by, and vulnerable to, multiple sources of pollution. Cal. Office of Env'tl. Health Hazard Assessment, *CalEnviroScreen 3.0*, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30> (last updated June 25, 2018) (follow the link for the CalEnviroScreen 3.0 Map to view health hazards).

75. *Id.*

76. *SV Clean Energy Grants \$75,000 to Nonprofits for Community Engagement*, SILICON VALLEY CLEAN ENERGY (Nov. 19, 2018), <https://www.svcleanenergy.org/news/sv-clean-energy-grants-75000-to-nonprofits-for-community-engagement/>.

77. *McGee Staff Discussion*, *supra* note 63.

78. *Id.*

79. *Id.*

and deliberation, CleanPowerSF launched in 2016 with the vocal support of environmental groups including the Sierra Club and labor organizations such as the Northern California District Council of Laborers, representing fifteen union locals advocating for a robust build-out of local renewable resources.⁸⁰

Extensive public participation in a CCA's early developmental stage is common. Combined with board direction, this multi-directional engagement ensures that CCAs incorporate community representation into their priorities and decision-making processes and that program development aligns with the EJ values of meaningful involvement.

IV. CCAs' RENEWABLE ENERGY DEVELOPMENTS REDUCE GHGS AND PROMOTE EJ GOALS

EJ Principle 3 "mandates the right to ethical, balanced, and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things."⁸¹ New renewable energy developments clearly support this goal by increasing local sustainability and reducing GHGs that are spurring global climate change.

The basic function of load-serving entities like CCAs is to provide customers electricity by matching electricity supply with their customer demand.⁸² Ensuring a responsible and appropriate electricity supply is essential to meeting local, regional, and statewide goals. For the purposes of this Article, we will focus on the social benefits of appropriate procurement and contracting.

Between photon and electron lies an ocean of potential. Local Development Business Plans (LDBP) provide a map to take inventory of local needs and resources, as well as economic and job creation benefits through clean energy projects and programs. LDBPs create a strategy for implementation, which often assesses the potential for programs such as demand response, energy efficiency, EVs, community solar, microgrids, and Feed-in Tariffs (FIT).⁸³ Some of these programs are described in more detail below. With innovative partners and creative approaches, these projects can deliver multi-faceted community benefits that exceed the sum of their parts.

A. Feed-in Tariffs

Feed-in Tariffs (FIT) are standard offer contracts for local renewable energy projects. They offer attractive rates to incentivize private developers to finance projects in communities where they otherwise might not be built. While each CCA has a slightly different FIT structure, they all attempt to catalyze local job

80. *Id.*

81. *Principles of Environmental Justice*, *supra* note 17.

82. A load-serving entity is defined as an electrical corporation (an investor-owned utility), an energy service provider (direct access supplier), or a CCA. CAL. PUB. UTIL. CODE § 380(k).

83. See, e.g., East Bay Community Energy, *Local Development Business Plan 2018 4-7* (2018), https://ebce.org/wp-content/uploads/Local-Development-Business-Plan_FINAL_7-12-18_hi-res.pdf.

creation associated with the construction, operation, and maintenance of these projects. Given high demand, MCE's FIT has expanded to offer a total capacity of 45 megawatts (MW) on a first-come, first-served basis for projects sized up to 5 MW each.⁸⁴ MCE has 30 MW of local renewable development within its service area, with plans for an additional 9 MW to be built. These projects rely on local labor, workforce development partners, and trade unions.

SCP has fully subscribed its FIT queue, completing 2 MW of new capacity, with an additional 4 MW in process. In the spirit of this local investment, SCP has spent more than 25 percent of all its income inside its territory on services, energy, reliability, and normal operating costs.⁸⁵ These FIT projects link local construction to local jobs, which aligns with the EJ focus on a just transition and clean job employment opportunities.

B. Power Purchase Agreements and Public Private Partnerships

Power Purchase Agreements (PPAs) and Public Private Partnerships are exciting frontiers because CCAs, in their capacity as public agencies, can engage the private sector to leverage additional community benefits. For example, EBCE has worked with PG&E through the Oakland Clean Energy Initiative to replace an aging electricity generator running on jet fuel with newer, reliable sources of clean energy storage.⁸⁶ Not only does this create jobs, but it also reduces the noxious air pollution associated with jet fuel energy production in their community.

In the northwest corner of California, Redwood Coast Energy Authority (RCEA) has two PPAs for 23.25 MW with local biomass generators.⁸⁷ One of these projects had previously been shuttered and was only able to come back online due to RCEA's contract.⁸⁸ These contracts support about fifty employees in a rural community with economic development needs, demonstrated by the fact that 28 percent of RCEA's customers are enrolled in the California Alternate Rates for Energy (CARE) energy discount program.⁸⁹

RCEA is also contributing \$6 million in funds to match the California Energy Commission's \$5 million grant to develop a 2.25 MW solar microgrid at the Arcata-Eureka Airport, in partnership with the Schatz Energy Research

84. *Feed-in Tariff*, MCE, <https://www.mcecleanenergy.org/feed-in-tariff/> (last visited Nov. 13, 2019).

85. *McGee Staff Discussion*, *supra* note 63.

86. Julian Spector, *Oakland to Swap Jet-Fuel-Burning Peaker Plant for Urban Battery*, GREEN TECH MEDIA (June 26, 2019), <https://www.greentechmedia.com/articles/read/oakland-to-swap-jet-fueled-peaker-plant-for-urban-battery>.

87. See Redwood Coast Energy Auth., *2018 Integrated Resource Plan 16* (2018), <https://redwoodenergy.org/wp-content/uploads/2018/08/RCEA-2018-Integrated-Resource-Plan-redacted-1.pdf>.

88. *McGee Staff Discussion*, *supra* note 63.

89. *Id.*

Center at Humboldt State University.⁹⁰ Further, RCEA is leading a consortium of partners to develop a 100–120 MW wind project off the coast of Humboldt County.⁹¹ RCEA's ocean lease application submitted to the Bureau of Ocean Energy Management included over twenty letters of support from stakeholders including local advocacy organizations, trade unions, tribes, and state politicians, demonstrating meaningful involvement from the community.⁹²

CleanPowerSF's Social Impact Program encourages private sector partners to include community benefit programs in bids for anticipated contracts of \$5 million and above.⁹³ These programs can include financial contributions, volunteer hours, or in-kind contributions—at zero additional cost to ratepayers. Social impact partners have supported local nonprofits and schools and have invested millions of dollars in education, workforce development, economic development, EJ, and corporate social responsibility programs.⁹⁴

MCE has committed approximately \$2 billion to support roughly 924 MW of new California renewable energy projects.⁹⁵ Of these 924 MW, 803 MW (thirty-seven contracts) have durations of twelve years or longer, while roughly 120 MW represent short-term contracts that accelerated the delivery of energy, bringing projects online several years earlier than anticipated.⁹⁶ Most of these projects have created job growth in the Central Valley and the inland corridor.⁹⁷ These investments redistribute funds from California's wealthier coastal communities to facilitate economic development and promote green collar jobs in some of California's more concentrated low-income communities. This allows workers to have safe and environmentally sound workplaces, in further alignment with EJ Principle 8.⁹⁸

90. *Schatz Center Receives \$5M Grant for Airport Microgrid*, HUMBOLDT STATE NOW (Feb. 23, 2018), <http://now.humboldt.edu/news/schatz-center-receives-5m-grant-for-airport-microgrid/>.

91. See generally Nancy Stephenson, *Offshore Wind Energy*, REDWOOD COAST ENERGY AUTH. (Jan. 19, 2018), <https://redwoodenergy.org/offshore-wind-energy/> (discussing the potential of the Humboldt Bay region's offshore wind energy generation).

92. Redwood Coast Energy Auth., Bureau of Ocean Energy Mgmt., *Unsolicited Application for an Outer Continental Shelf Renewable Energy Commercial Lease Under 30 CFR 585 230*, Redwood Coast Offshore Wind Project, Appendix F (2018).

93. *Social Impact Partnerships Achieving Collective Impact*, SAN FRANCISCO WATER POWER SEWER, <https://sfwater.org/index.aspx?page=643> (last visited Nov. 13, 2019).

94. For example, one partner provided funding for ECO2school, the Center for Climate Protection's youth leadership program. The program aims to engage students and at-risk youth at underserved schools with educational activities, including energy literacy and leadership workshops.

95. *CCA Power Purchasing*, CalCCA, <https://cal-cca.org/wp-content/uploads/2018/09/CCA-Power-Purchasing-Fact-Sheet-2.pdf> (last visited Nov. 13, 2019).

96. *McGee Staff Discussion*, *supra* note 63.

97. *Id.*

98. See *Principles of Environmental Justice*, *supra* note 17.

*C. Workforce Development Efforts Focus on Seeding the
Local Green-Collar Economy*

Creating long-term employment opportunities in the field of sustainability is fundamental to securing a just transition to a clean energy economy. This is especially true in areas where the fossil fuel industry has long been a source of work and income for generations of families. To ensure these workers are not left behind in a decarbonized energy future, training programs are needed to equip community members with the skills needed to enter the green economy. This embodies EJ Principle 8, which “affirms the right of all workers to a safe and healthy work environment” and also “affirms the right of those who work at home to be free from environmental hazards.”⁹⁹ Although the workers we touch upon here are not working from home, they are working close to their homes in their own communities that may have suffered from past environmental injustices. Here, we will touch on CCA efforts in workforce development to create pipelines to green-collar careers, investments in low-income solar programs, and other incentive programs to mobilize outreach and partnerships.

PCE’s Sustainable Workforce Policy requires payment of prevailing wages for any facilities contracted with through PPAs, multitrade project labor agreements on proposed projects, and the use of state-approved apprenticeship programs.¹⁰⁰ This policy is applicable to PPAs with third parties, PCE-owned generation facilities, FIT projects, energy efficiency projects, PCE’s own procurement of services and supplies, and direct hiring.¹⁰¹

Similarly, MCE’s Sustainable Workforce and Diversity Policy makes supporting sustainable workforce opportunities, local economic sustainability, and diversity and inclusion through contracting and agency initiatives a key priority.¹⁰² This policy emphasizes support for fair compensation, local renewable development, union labor, training and apprenticeship programs, local businesses, and workforce initiatives in low-income and CalEnviroScreen-designated Disadvantaged Communities.¹⁰³

MCE also supports workforce development training and career pathways through the construction of local renewable projects, direct installation of energy efficiency measures, and even call center staffing. In Marin County, MCE has partnered with the Marin City Community Development Corporation since 2012 to train at least sixty-two disadvantaged community members and connect them to solar installation and energy efficiency jobs. In Contra Costa County, MCE,

99. *See id.*

100. Peninsula Clean Energy, *Inclusive and Sustainable Workforce Policy* (Oct. 25, 2018), <https://www.peninsulacleanenergy.com/wp-content/uploads/2018/10/Policy-10-Inclusive-and-Sustainable-Workforce-revised-10-25-18.pdf>.

101. *Id.*

102. MCE, *Sustainable Workforce and Diversity Policy 011* (last visited Nov. 13, 2019), https://www.mcecleanenergy.org/wp-content/uploads/2018/04/Policy-011-MCE-Sustainable-Workforce-and-Diversity-Policy_Update-11.2017.pdf.

103. *Id.*

together with its nonprofit partner Rising Sun Energy Center, trained youth to provide no-cost energy savings and water assessments in the cities of Richmond, El Cerrito, and San Pablo.

MCE has also worked with nonprofit partner RichmondBUILD to help students develop construction, numeracy, and literacy skills, and later connect them with related jobs for large-scale solar installation projects¹⁰⁴ and an LED streetlight retrofit project in Richmond. In Pittsburg, MCE helped coordinate the installation of a new call center and then partnered with a county workforce development program and private company to train students on call center basics, call handling, energy data, and more.¹⁰⁵ Graduates were offered positions at the new call center. Finally, in 2018, the CPUC approved MCE's application for an additional \$2.24 million for workforce development activities for 2019 through 2025.

These green jobs are key to a just transition to a clean energy economy. As laid out in MCE's 2018 Open Season Request for Offers, if a renewable energy project is located within MCE's service area, the seller must certify that 100 percent of employees hired during construction are paid at least prevailing wage and that at least 50 percent of the construction work-hours from its workforce (including contractors and subcontractors) are obtained from permanent residents who live within the same county.¹⁰⁶ CCAs can follow this lead by requiring projects to comply with project labor agreements with local unions, similar to the project labor agreement that MCE has with International Brotherhood of Electrical Workers Local 302 in Contra Costa County.

D. Case Study: MCE Solar One

MCE led the development of MCE Solar One, a 10.5 MW project located at the Chevron Corporation's refinery in Richmond on a sixty-acre remediated brownfield site. When considering the project, MCE solicited feedback from members of the Community Power Coalition (*supra* Part III.A.) that had been organizing for climate justice in Richmond. With strategic input and partnership from these groups, MCE moved forward with the development of this project. This process demonstrates EJ Principle 7 of the "right of communities of color to participate as equal partners at every level of decision making."¹⁰⁷

The project has provided solar power to MCE since 2017. As a result of the City of Richmond's participation in the negotiations, this project was built with

104. See discussion *infra* Part IV.D.

105. Kalicia Pivrotto, *Public-Private Partnership Brings Call Center and Local Jobs to Pittsburg*, MCE (Dec. 19, 2017), <https://www.mcecleanenergy.org/news/call-center/>; see also MCE, *Community Partnership Future Build and MCE*, YOUTUBE (Dec. 4, 2017), <https://www.youtube.com/watch?v=ZVIW9e8yQrs>.

106. *2018 Open Season Request for Offers Procedural Overview & Instructions*, MCE, https://www.mcecleanenergy.org/wp-content/uploads/2018/03/MCE-2018-Open-Season_Overview_Instructions_V2.pdf (last visited Nov. 13, 2019).

107. See *Principles of Environmental Justice*, *supra* note 17.

a 50 percent local hire requirement in a community of color with a high unemployment rate.¹⁰⁸ Local nonprofit partner RichmondBUILD trained multiple cohorts of students to work on the project. RichmondBUILD's students are all low income and predominantly people of color, and some have a history with the criminal justice system.¹⁰⁹ Training and hiring a local workforce guaranteed that the associated benefits of this project reached community members who have been historically excluded from the economic rewards of development. This is in alignment with EJ Principles 2, 5, and 8, which demand public policy is free from discrimination or bias, that all peoples have economic self-determination, and that all workers have a safe and healthy work environment.¹¹⁰

The project also hired union workers from the United Brotherhood of Carpenters and Joiners of America and Laborers Union (Local 152), International Brotherhood of Electrical Workers (Local 302), International Brotherhood of Electrical Workers (Local 1245), Laborers Union (Local 324), Operating Engineers (Local 3), and Steamfitters (Local 342).¹¹¹

MCE Solar One is an example of the success that can happen when combining local community input with green-collar job development and city programs. As with other renewable energy developments, this is in alignment with EJ Principle 3 of “ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.”¹¹²

V. PROGRAMS FOR LOW-INCOME OR MARGINALIZED COMMUNITIES FOCUS ON A COMMUNITY'S MOST VULNERABLE MEMBERS, DEMONSTRATING EJ VALUES

As noted above, EJ Principle 2 “demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.”¹¹³ CCA programs emerge as a direct result of community need and grassroots advocacy. CCA responses to community priorities, constraints, and concerns are specifically tailored to the people and places they serve. These customized, localized programs reflect the adaptability of these agencies to go the extra mile in order to best serve their communities. This allows CCAs to implement what the Greenlining Institute calls “truth grounding”—proactively

108. “The unemployment rate in Richmond is 6%, which is 30% higher than[] the national average. The poverty rate in Richmond is 17% which is 10% higher than[] the national average.” *Richmond Employment Information*, AREAVIBES, <https://www.areavibes.com/richmond-ca/employment/> (last visited Mar. 4, 2020).

109. *RichmondBUILD Academy, CITY OF RICHMOND*, <https://www.ci.richmond.ca.us/1243/RichmondBUILD> (last visited Nov. 13, 2019).

110. See *Principles of Environmental Justice*, *supra* note 17.

111. Alexandra McGee, *Building Local and In-State Renewable Projects*, MCE (Nov. 16, 2018), <https://www.mcecleanenergy.org/news/powering-equity-part-3/>.

112. See *Principles of Environmental Justice*, *supra* note 17.

113. *Id.*

engaging community members in order to verify that the seemingly objective data and models they lean on for their decision making accurately reflect the lived reality and expertise of those communities.¹¹⁴ In this way, CCA programs designed specifically for low-income and marginalized customers can address historical discrimination, build equitable access to renewable energy, provide tools to reduce GHGs, and pave a pathway to a sustainable future, even when rebuilding from recent wildfire devastation.

A. Low-Income Solar Installation Programs

As the largest nonprofit solar installer in the United States, GRID Alternatives makes solar technology accessible to low-income communities while also providing hands-on installation experience for job seekers and community volunteers.¹¹⁵ Their reputation, mission, and statewide resources make them a key partner for community choice programs.

This partnership can take shape in many ways. Some CCAs, like CleanPowerSF, MBCP, and MCE, choose to provide gap funding for low-income single-family homes, while others support multifamily housing.¹¹⁶ For example, as of 2018, MCE allocated \$345,000 toward low-income solar rebates to help to build ninety-eight systems, totaling nearly 207 kilowatts of new rooftop solar energy.¹¹⁷ GRID Alternatives reported that program participants will save over \$2 million on monthly utility bills and eliminate over 4,000 metric tons of GHG emissions over the lifetime of those systems.¹¹⁸ To help build trust in communities, other CCAs, including MCE, RCEA, and SCP, have offered to co-market GRID's no-cost solar programs.¹¹⁹

B. Electric Vehicle Programs

As California's electricity sector decarbonizes, the transportation sector is the largest contributor of GHGs emitted in the state.¹²⁰ In furtherance of their own missions to reduce GHGs and EJ Principle 3, CCAs have created a large variety of EV programs. By reducing fossil fuel usage in cars and by providing

114. See generally Ben Green, *Data Science as Political Action: Grounding Data Science in a Politics of Justice* (2018) (unpublished working paper) (on file with author) (arguing data science is political and should include the participation of people directly affected by data-driven decisions).

115. *Get Involved*, GRID ALTERNATIVES, <https://gridalternatives.org/get-involved> (last visited Nov. 13, 2019).

116. *McGee Staff Discussion*, *supra* note 63.

117. MCE, *MCE's Low-Income Solar Rebate Program* (Jul. 30, 2018), https://www.mcecleanenergy.org/wp-content/uploads/2018/07/Low-Income-Solar-Rebate-Program-GRID-1-pager_07.30.18.pdf.

118. *Id.*

119. *McGee Staff Discussion*, *supra* note 63.

120. MAC TAYLOR, LEGISLATIVE ANALYST'S OFFICE, *ASSESSING CALIFORNIA'S CLIMATE POLICIES – TRANSPORTATION 3* (2018).

clean electricity for EVs, CCAs can address two key drivers of climate change simultaneously.

With its DriveEV program, SCP was the first CCA to work on EVs—offering \$2,000 to \$4,000 in cash incentives to create a large total discount for low-income customers.¹²¹ In a competitive, winner-take-all solicitation, local EV car dealers were asked to offer their deepest discounts to SCP customers. Combined with these discounts, SCP leveraged over \$10 million in EV discounts with approximately \$2 million of SCP funds. Thanks to intensive outreach, the program has largely benefited low-income customers.¹²² In relation to DriveEV, SCP also provides free EV charging hardware and the option to participate in a demand response program using the car chargers provided by the program.¹²³

Rather than focus on single passenger vehicles, Lancaster Choice Energy (LCE) has focused on electrifying public transportation, leading to Antelope Valley Transit Authority's first fully electric bus system.¹²⁴ The eighty-three electric buses were built within the City of Lancaster at the Build Your Dreams Manufacturing facility.¹²⁵ This cutting-edge technology requires training that creates valuable, highly skilled jobs. LCE incentivized this transition to an all-electric fleet by offering a special generation rate designed for the fleet's needs. The City of Lancaster also operates twenty-nine public EV stations and plans to add thirty-six more in 2020. Given the low-income sensitivity of their demographic, ten of these charging stations are offered for use at no charge to the customer.¹²⁶

MCE operates MCEv, a three-year, \$1.5 million program for incentivizing charging infrastructure for EVs.¹²⁷ MCEv builds upon PG&E's existing charging program by covering the gap cost of charging equipment in PG&E-qualified projects. In addition, MCEv covers the full cost of charger installation at certain sites ineligible for PG&E's program because they are too small.¹²⁸ This allows locations with fewer resources and a smaller population to access EV infrastructure without such significant up-front costs. In addition, MCEv offers

121. *Drive EV*, SONOMA CLEAN POWER, <https://sonomacleanpower.org/programs/drive-ev> (last visited Nov. 13, 2019).

122. *McGee Staff Discussion*, *supra* note 63.

123. *GridSavvy*, SONOMA CLEAN POWER, <https://sonomacleanpower.org/programs/gridsavvy> (last visited Feb. 21, 2020).

124. See Matt Brown, *Lancaster, California – A Choice Location – Featured Article in Business View Magazine*, LANCASTER CHOICE ENERGY (Sept. 12, 2019), <https://www.lancasterchoiceenergy.com/2019/09/27/lancaster-california-a-choice-location-featured-article-in-business-view-magazine/>.

125. *Id.*

126. *McGee Staff Discussion*, *supra* note 63.

127. See Kalicia Pivrotto, *MCE Launches Electric Vehicle Programs, Offers Competitive Charging Rates*, MCE (Sept. 12, 2018), <https://www.mcecleanenergy.org/news/press-releases/electric-vehicle-programs-2018/>.

128. *Id.*

a low-income qualifying rebate for up to \$3,500 for a new EV, helping low-income communities access funds for cleaner vehicles.¹²⁹

PCE's DriveForward electric program provides an income-qualified rebate for used plug-in hybrids.¹³⁰ This rebate is combined with used car financing and outreach to community-based organizations focused on increasing EV adoption in low-income communities. PCE hopes to provide access to affordable plug-in vehicles for low-income residents, facilitate one hundred plug-in hybrid EV sales, and deliver significant cost savings to participants by reducing transportation costs. PCE also launched a technical assistance program to assist school districts in disadvantaged communities with applications to the California Energy Commission for electric bus grants.¹³¹

RCEA owns and operates fourteen EV charging stations in Humboldt County and has participated in numerous alternative transportation and advanced fuel readiness studies, including a Zero-Emission Vehicle Implementation Study and the North Coast Plug-In Electric Vehicle Readiness Plan.¹³² These efforts have been funded through California Energy Commission grants. Now with CCA revenue, RCEA plans to offer charging station site host incentives through a rebate catalog, as well as match funding for a high-volume charging cluster that participates in PG&E's EV Charging Network program.¹³³

MBCP currently sets aside 2 percent of gross revenue for energy programs focusing on transportation electrification, building electrification, and distributed energy resources. In fiscal year 2018–19, MBCP allocated roughly \$850,000 in EV incentives.¹³⁴ MBCP plans to invest roughly \$3 million in EV infrastructure for Level 2 and DC fast chargers in the next three years and is supporting local ordinances for streamlined permitting to maximize these adoptions.¹³⁵

C. Energy Efficiency

The cleanest and least expensive energy is the energy that is not used. The “nega-watt” is an important component of decarbonizing our grid and supporting social equity. Not only does reducing energy use decrease GHG emissions (which supports EJ Principle 3), but installing efficient measures also saves money, reduces grid strain, and improves quality of life in homes and businesses.

129. *Need a Reliable Car that Fits Your Budget? Perks of Driving an Electric Vehicle*, MCE, <https://www.mcecleanenergy.org/ev-drivers/> (last visited Feb. 21, 2020).

130. *DriveForward Electric*, PENINSULA CLEAN ENERGY, <https://www.peninsulacleanenergy.com/driveforwardelectric/> (last visited Nov. 13, 2019).

131. *McGee Staff Discussion*, *supra* note 63.

132. *See, e.g.*, Redwood Coast Energy Auth., *North Coast Plug-in Electric Vehicle Readiness Plan* (2014), <https://redwoodenergy.org/wp-content/uploads/2019/02/North-Coast-Plug-in-Electric-Vehicle-Readiness-Plan.pdf>.

133. *McGee Staff Discussion*, *supra* note 63.

134. *Id.*

135. *Id.*

LCE is in Southern California's high desert, resulting in a significant electrical demand for air conditioning. The median income in Lancaster is \$49,000, and 48 percent of LCE's customer base is on the CARE energy discount rate.¹³⁶ Additionally, LCE's programs must align with the City of Lancaster's Net Zero City goals.¹³⁷ To reach these goals without financially impacting customers, LCE secured an Electric Program Investment Charge (EPIC) grant from the California Energy Commission for Zero Net Energy (ZNE) affordable housing to provide eligible homeowners with highly efficient ZNE homes.¹³⁸ LCE hopes to incorporate the homes into a future microgrid, dispatchable on demand. In a win-win scenario, homeowners will have minimal energy charges and LCE will control the microgrid as part of its overall portfolio, creating a local source of load arbitration. Depending on the success of this initial effort, LCE may replicate it with all future affordable housing developments.¹³⁹

On top of its ZNE efforts, LCE launched its Energy Advisor program in 2018. This residential energy efficiency program provides a self-audit and reporting mechanism to identify household upgrade needs and opportunities.¹⁴⁰ LCE also launched its Small Commercial Direct Install program to offer no-cost upgrades such as LED lighting and weatherization to qualifying small businesses.¹⁴¹ This program helps cover the gap for small businesses that cannot afford electrical upgrades.

SCP provides free multilingual Do-It-Yourself energy efficiency toolkits for home retrofits and makes them available at local libraries so all residents have equal access at no cost.¹⁴² The toolkits include light bulbs, insulation strips, water efficiency fixtures, and other tools to make homes more energy efficient. These have been so popular that SCP had to increase the number of toolkits in circulation.¹⁴³ As one of their most popular and cost effective programs, SCP also lends a portable induction cooktop to interested customers so they can experience electric induction cooking prior to making a significant purchase or deciding to move away from natural gas in their kitchens.¹⁴⁴

Similar to SCP's toolkits, RCEA offers an internally funded Residential Energy Services Program through which customers can receive a \$75-value customized energy efficiency kit in the mail.¹⁴⁵ The program targets hard-to-

136. *Id.*

137. *Id.*

138. Lancaster Clean Energy, *City of Lancaster Zero Net Energy Home Ordinance Approved by California Energy Commission* (Oct. 12, 2017), <https://www.lancasterchoiceenergy.com/2017/10/12/1274/>.

139. *McGee Staff Discussion, supra* note 63.

140. *Id.*

141. *Id.*

142. *DIY Home Toolkits*, SONOMA CLEAN POWER, <https://sonomacleanpower.org/programs/diy-toolkit> (last visited Nov. 13, 2019).

143. *McGee Staff Discussion, supra* note 63.

144. *Id.*

145. *Id.*

reach, rural customers who may not otherwise access RCEA and IOU services. To further engage hard-to-reach customers, RCEA offers initial efficiency assessments and final ratings to qualified customers for rebates through the Home Upgrade Program.¹⁴⁶ To incentivize quick implementation, RCEA provides a refund of the service fee (\$500 for single family homes) when customers complete a qualifying project within one year. RCEA also assists local educational agencies in accessing California Proposition 39 funding for energy efficiency and renewable energy upgrades for their facilities.

MCE's Multifamily Energy Savings Program offers complimentary walk-through energy assessments and technical assistance to multifamily dwellings to identify energy- and water-saving opportunities. It provides cash rebates for upgrades, assists with contractor bid solicitations, trains operations and maintenance staff, and offers free direct installation of efficient equipment.¹⁴⁷ A complement to this program is the Low-Income Families and Tenants Program, which provides an additional \$1,200 per unit for multifamily properties with tenants at or below 200 percent of the Federal Poverty Guidelines, as well as electric heat pumps at no cost.¹⁴⁸ Finally, MCE offers a Small Commercial program as well as an Agricultural and Industrial Resource program to target non-residential properties to offer technical assistance, cash incentives, and turn-key contracting and procurement at little or no cost to customers.¹⁴⁹

Pioneer Community Energy operates a Property Assessed Clean Energy (PACE) program that has financed improvements on 2,400 properties for almost \$99 million, aggregating an estimated GHG savings of more than 24,000 tons carbon dioxide equivalent.¹⁵⁰ And finally, SVCE has a Bay Area Air Quality Management District grant to implement a heat pump water heater retrofit program in existing buildings with special considerations given to projects for CARE and FERA customers, enabling them to participate with no customer contribution.¹⁵¹

D. Wildfire Rebuild Support

As a continued dedication to addressing urgent environmental justice needs of our communities, CCAs are starting to turn their attention to building resiliency in the face of California's increasingly devastating wildfire season. A

146. *Id.*

147. *Energy Savings For Your Multifamily Property*, MCE, <https://www.mcecleanenergy.org/multifamily-savings/> (last visited Nov. 13, 2019).

148. *MCE Launches Pilot Program for Low-Income Families and Tenants*, MCE (Nov. 23, 2017), <https://www.mcecleanenergy.org/news/press-releases/lift-2/>.

149. *Energy Savings for Commercial Customers*, MCE, <https://www.mcecleanenergy.org/business-savings/> (last visited Nov. 13, 2019); <https://www.mcecleanenergy.org/air/> Accessed 3/4/2020

150. *McGee Staff Discussion*, *supra* note 63.

151. See Silicon Valley Clean Energy, *Customer Program Advisory Group Meeting* (June 20, 2018, 11:00 AM), <https://www.svcleanenergy.org/wp-content/uploads/2018/06/2018-0620-SVCE-Customer-Program-Advisory-Group-Agenda-Packet.pdf>.

wildfire will not discriminate between the rich and poor, but socioeconomic security will determine the resources that refugees can access after recovering from a deadly blaze. While the wealthiest Californians can hire private firefighters,¹⁵² low-income residents may not be able to even pay for home insurance.¹⁵³ Intensifying this poverty, community members may then face price gauging on the newly limited housing stock both in rents¹⁵⁴ and property values,¹⁵⁵ further exacerbating California's already acute housing crisis.

With construction costs on the rise and more insurers impacted by the growing footprint of these fires, rebuilding is sometimes more costly than the insurance companies can pay.¹⁵⁶ A paper published in the National Bureau of Economic Research found that major catastrophes increase a county's poverty rate by an average of 1 percent, either because the wealthy move away from disaster-prone areas or those who stay drop into poverty.¹⁵⁷ Ultimately, if a family does not have the resources to rebuild, they either move¹⁵⁸ or become homeless.¹⁵⁹

152. Chiara Sottile, *Wealthy's use of private firefighters ignites debate in wildfire country*, NBC NEWS (May 4, 2018, 1:37 AM), <https://www.nbcnews.com/storyline/western-wildfires/wildfire-prone-states-wealthy-pay-have-private-firefighters-protect-their-n869061>.

153. See generally *Current Graph of Wildfire Losses In the United States, 2009-2018 & Archived Graphs of Wildfire Losses in the United States*, INSURANCE INFORMATION INST., <https://www.iii.org/graph-archive/208963> (last visited Nov. 13, 2019).

154. After the Tubbs fire damaged 5 percent of the housing stock in Santa Rosa, rent in Sonoma County increased 35 percent. Stephen R. Miller, *Wildfires Have Worsened the Bay Area's Housing Crisis*, CITYLAB (Nov. 28, 2017), <https://www.citylab.com/equity/2017/11/wildfires-have-worsened-the-bay-areas-housing-crisis/546647/>; see also Kevin Fixler, *Marin County landlord charged with price gouging as prosecutors scour for cases after wildfires*, N. BAY BUS. J. (Apr. 19, 2018), <https://www.northbaybusinessjournal.com/northbay/marincounty/8241236-181/marin-novato-landlord-rent-gouging-wildfire>.

155. Robert Digitale, *Home prices jump to record highs after Sonoma County fires*, PRESS DEMOCRAT (Nov. 18, 2017), <https://www.pressdemocrat.com/business/7635305-181/home-prices-jump-to-record>.

156. Jeff Quackenbush, *Rebuilding a Wine Country home after fire may cost way more than insurance provides, architects say*, N. BAY BUS. J. (Oct. 20, 2017), <https://www.northbaybusinessjournal.com/northbay/sonomacounty/7543341-181/sonoma-insurance-rebuilding-construction-costs>.

157. Leah Platt Boustan et al., *The Effect of Natural Disasters on Economic Activity in US Counties A Century of Data* 12–13 (Nat'l Bureau of Econ. Research, Working Paper No. 23410), <https://www.nber.org/papers/w23410.pdf>.

158. In the most heartbreaking of cases, they move to areas that get hit by a wildfire during the next fire season, where they'll need to start again. See Risa Johnson, *Butte County lacks housing capacity for those displaced by Camp Fire*, LAKE COUNTY RECORD-BEE (Nov. 13, 2018, 6:31 AM), <https://www.record-bee.com/2018/11/13/butte-county-lacks-housing-capacity-for-those-displaced-by-camp-fire/>.

159. Mary Nugent, *Fire Evacuees camp outside Walmart We're all in the same place*, ENTERPRISE-RECORD, <https://www.chicoer.com/2018/11/13/fire-evacuees-camp-outside-walmart-were-all-in-the-same-place/> (last updated Nov. 13, 2018).

In Sonoma County, the homelessness rate climbed 6 percent in the aftermath of the Tubbs Fire.¹⁶⁰ Again, not all are impacted equally. A 2018 study found that African American and Latino communities are 50 percent more vulnerable to the impacts of wildfire than their white counterparts.¹⁶¹ Compounding socio-economic factors determine the future wildfire risk and the anticipated resiliency for disaster recovery. There are seventy-five California towns and cities that are in a “Very High Fire Hazards Severity Zone,” representing roughly 2.7 million Californians or 7 percent of the state’s population.¹⁶² There are roughly 2,019,800 California properties still at extreme wildfire risk.¹⁶³

In October 2017, wildfires destroyed 5,800 homes in Sonoma County. In response, SCP’s Advanced Energy Rebuild Program was built in partnership with the local builders exchange, the Bay Area Air Quality Management District, and PG&E.¹⁶⁴ This program provided up to \$17,500 to owners of destroyed homes who chose to rebuild their homes to be energy efficient, all-electric, gas-free, include EV charging, or have solar plus storage.¹⁶⁵ The program has trained hundreds of local architects, engineers, contractors, and homeowners on the methods and principles of zero carbon design and going beyond “net zero.” In conjunction, California Energy Commission awarded SCP approximately \$10 million to promote electrification in the built environment.¹⁶⁶

Similarly, MCE partnered with the Bay Area Air Quality Management District, Napa County, BayREN, and PG&E to administer up to \$1 million for electrification and solar rebates for single family homes affected by the 2017 and 2018 wildfires in Napa County. Rebuilding homeowners could access up to \$12,500 in incentives for electrification measures, including high performance attics and walls, efficient windows, heat pump water and space heaters, smart

160. Mary Callahan, *Sonoma County declares homeless emergency*, PRESS DEMOCRAT (July 10, 2018), <https://www.pressdemocrat.com/news/8515224-181/sonoma-county-declares-homeless-emergency?sba=AAS>.

161. Ian P. Davies et al., *The unequal vulnerability of communities of color to wildfire*, PLOS ONE 1, 6–11 (2018), <https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0205825&type=printable>.

162. According to Direct Relief, the following factors contribute to “social vulnerability”: poverty rates, access to vehicles, percentage of people aged 65 years and older, percentage of housing with 10 or more units, percentage of non-institutionalized populations with a disability. *California Wildfires Social Vulnerability Risk, DIRECT RELIEF*, <https://directrelief.maps.arcgis.com/apps/InteractiveLegend/index.html?appid=8d1fc11b7d1e4ac8a1e7ce2a27ef7e09> (last visited Feb. 18, 2020).

163. 2019 *Verisk Wildfire Risk Analysis*, VERISK, <https://www.verisk.com/insurance/campaigns/location-fireline-state-risk-report/> (last visited Nov. 13, 2019).

164. *Your Home. Our Community*, SONOMA CLEAN POWER, <https://sonomacleanpower.org/programs/advanced-energy-rebuild> (last visited Nov. 13, 2019).

165. *Id.*

166. *McGee Staff Discussion*, *supra* note 63.

thermostats, EV charging, and solar plus storage.¹⁶⁷ This process braids multiple funding sources through one application process. An additional 20 percent incentive is provided to income-qualified households.¹⁶⁸

Not only can CCAs strengthen resiliency by investing in residential rebuilds, but they are well placed to invest in community infrastructure, such as in solar plus storage back-up systems or microgrids to keep the lights on during blackouts. CCAs should consider investing in battery backup systems to keep the lights on in critical facilities in order to minimize the disruption and additional vulnerability created by these fires. In particular, providing the necessary islanding technology for schools can support a community during wildfire season, since these have lost more than 21,000 days of instruction due to wildfires since 2002—with more than half of those lost days since 2015.¹⁶⁹ Schools that have had to cancel many weeks of class due to wildfire are seeing increased chronic absenteeism and reduced student performance. For example, a year after the Valley Fire, the small unincorporated town of Middletown in Lake County, California saw the proportion of graduating seniors in the district deemed “college and career ready” drop from about 50 percent to 27.5 percent.¹⁷⁰

With seven of the ten most destructive and deadly California fires having happened in the last decade¹⁷¹—and the resulting air pollution killing thousands more people¹⁷²—surviving a wildfire is not just a financial question; it is a matter of life or death. In 2019, the microgrid Blue Lake Rancheria in RCEA’s service area was reported to have saved four lives during an extended power outage by providing electricity for those dependent on electrical medical equipment.¹⁷³ These medically dependent customers are typically on the Medical Baseline electric discount rate, allowing CCAs to target proactive, community-sensitive technology deployment for customers left most vulnerable during power-shut offs. Attuned to local needs and vulnerabilities, CCAs can provide a variety of

167. *Advanced Energy Rebuild Napa*, MCE, <https://www.mcecleanenergy.org/rebuildnapa/> (last visited Nov. 13, 2019).

168. *Id.*

169. Ricardo Cano, *What wildfire did to one California town’s schools in four years*, CAL MATTERS (Sept. 16, 2019), <https://calmatters.org/projects/california-school-closures-wildfire-middletown-paradise-disaster-days/>.

170. *Id.*; Notably, an *L.A. Times* analysis found that more than 50 percent of Lake County’s land has been burned from 2012–2018. Alejandra Reyes-Velarde & Priya Krishnakumar, *More than 50% of this California county has burned since 2012. Some residents say they’ve had enough*, L.A. TIMES (Aug. 14, 2018), <https://www.latimes.com/local/lanow/la-me-lake-county-fire-epicenter-20180814-story.html>.

171. *See Most destructive California wildfires in history*, ABC7 NEWS (Aug. 24, 2019), <https://abc7news.com/most-destructive-wildfires-in-california-history/2516857/>.

172. Will Peischell, *Wildfires Are Making California’s Bad Air Quality Even Worse—And It’s Killing People*, MOTHER JONES (Oct. 31, 2019), <https://www.motherjones.com/environment/2019/10/wildfires-are-making-californias-bad-air-quality-even-worse-and-its-killing-people/>.

173. Peter Maloney, *Life Won Thanks to the Blue Lake Rancheria Microgrid*, MICROGRID KNOWLEDGE (Nov. 11, 2019), <https://microgridknowledge.com/blue-lake-rancheria-microgrid-outages/> Accessed 3/4/2020.

programs and projects geared specifically to low-income, marginalized, or vulnerable community members, and in this way effectively enact EJ Principles 2, 3, and 5, reflecting equity and access.

CONCLUSION

As we have demonstrated, community participation and engagement are foundational to both EJ and the community choice energy model. Unlike IOUs, CCAs are governed by local public officials who are familiar with and sensitive to the communities they serve. As a result of their proximity, the local officials are best able to guide their respective agency's formation, policies, procurement, and rate design with community priorities. Given the public nature of their role, they can further align CCAs with the objectives laid out by their corresponding town, city, and county governments—further integrating CCAs into the social fabric of their communities; this reflects EJ Principle 7. In addition, individuals who participate in CCA programs are making personal and consumer choices to consume fewer resources in alignment with EJ Principle 17.

CCA renewable energy development and programs for low-income or marginalized communities also align with EJ Principles 2, 3, 5, and 8. Flexibility in program development provides a fertile opportunity for equity, inclusion, and diversity. CCAs can express shared priorities and address community needs by investing in workforce development, low-income residential solar installations, transportation electrification, energy efficiency, and wildfire resiliency to deliberately address systemic social inequity that exacerbates the barriers and challenges marginalized communities face. Each community is shaped by unique circumstances, therefore requiring a customized approach to addressing local inequalities.

As PG&E looks to emerge from bankruptcy by mid-2020 due to legislative deadlines,¹⁷⁴ California's policymakers should incorporate best practices from CCAs in PG&E's restructuring. For example, this should include transparent decision making in open meetings that are noticed to the public, similar to rules for government agencies. PG&E should also take a more localized and community-based approach to its vast service area, focusing on more direction from local governments and coordinating better with CCAs. This would allow for more integration of EJ Principles 2, 3, 5, and 7 within PG&E's traditional utility model. Regarding EJ Principle 17, there should also be careful consideration of whether PG&E should continue its business in energy generation, given the exponential growth of CCAs throughout the state and their community-informed strategies.

As public not-for-profit agencies, CCAs have a rich opportunity to develop policies, programs, and procurement at the ground-level with input from

174. See Jill Cowan, *What's Ahead for PG&E?*, N.Y. TIMES (Dec. 12, 2019), <https://www.nytimes.com/2019/12/12/us/update-pge-bankruptcy.html>.

grassroots partners and direction from community representatives to ensure that a diverse set of community interests benefit from this industry. All CCAs owe a debt of gratitude to the Central Valley communities who formed the SJVPA, whose bold leadership advocating for affordable rates, local jobs, and community benefits set the bar for the good work continued by all CCAs today. As California's electricity market evolves as a result of climate change, catastrophic wildfires, and growing democratization, it is clear that the community choice aggregation movement is pushing this multi-billion dollar industry towards environmental justice.

We welcome responses to this Article. If you are interested in submitting a response for our online journal, Ecology Law Currents, please contact cse.elq@law.berkeley.edu. Responses to articles may be viewed at our website, <http://www.ecologylawquarterly.org>.