IS RENEWABLE POWER REACHING THE PEOPLE AND ARE THE PEOPLE REACHING THE POWER? CREATING A JUST TRANSITION FROM THE GROUND-UP

By Caroline Farrell and Madeline Stano

The world’s supply of fossil fuels is dwindling and a transition to alternative energy production is inevitable. This transition presents numerous opportunities for job creation, pollution reduction, economic investments and improvements in the lives of many. Whether justice is at the center of this transition and who will benefit from it remains uncertain. Unless a holistic Just Transition framework is advanced to support extraction dependent communities, workers in the fossil fuel industry will face layoffs, falling incomes, and declining budgets to support public services. These risks will increase political resistance to effective climate policies. The Trump Administration is defunding climate research and rolling back international climate commitments. These efforts reinforce the fear of what a transition away from fossil fuel means. However, a Just Transition framework with a “from the ground up” approach to transitioning our economic system which addresses the needs of the low-income communities and communities of color that have been most impacted by the fossil fuel economy is what is needed to holistically solve our climate crises and improve our communities.

This article will examine how the Center on Race, Poverty & the Environment (CRPE) and the residents we work with are planning a Just Transition in the historic heart of California’s oil and gas industry. Like many extractive-based economies, the oil and gas industry has created dependence and cycles of poverty. Tied to oil and gas for its economic growth, yet overburdened by its pollution, California reflects the paradox facing many extractive economies around the world. The article will discuss how state climate policies and targeted private investment can be implemented at the local level to improve community health, build community wealth, and create accountable governance systems that benefit low-income communities and communities of color. We will begin by discussing the Environmental Justice’s Movements definition of a Just Transition. We will also discuss how California’s climate policy has evolved over the last few years to incorporate elements of a Just Transition Framework. Finally, the article will discuss the case study of Arvin, CA, a low-income Latino community in the heart of the oil and gas industry we are working with to plan a project to become 100% fossil fuel free.

What is Environmental Justice?

Environmental Justice (EJ) is the social movement for the right of people to live,
work, go to school, play, and pray in a healthy and clean environment.\(^1\) EJ is grounded in the reality that communities of color and low-income communities are disproportionately impacted by pollution and by disinvestment.\(^2\) EJ is often described as having three dimensions: distributive justice, procedural justice, and social justice.\(^3\) The EJ Principles developed at the First National People of Color Environmental Leadership Summit in 1991, reflect the need to build community power to achieve justice along all three dimensions. The preamble underscores the intersectional nature of EJ and centers communities of color at the heart of solutions to the issues created by our current extractive and exploitative economy.

\[\text{T}o\text{ begin to build a national and international movement of all peoples of color to fight the destruction and taking of our lands and communities, do hereby re-establish our spiritual interdependence to the sacredness of our Mother Earth; to respect and celebrate each of our cultures, languages and beliefs about the natural world and our roles in healing ourselves; to ensure environmental justice; to promote economic alternatives which would contribute to the development of environmentally safe livelihoods; and, to secure our political, economic and cultural liberation that has been denied for over 500 years of colonization and oppression, resulting in the poisoning of our communities and land and the genocide of our peoples, do affirm and adopt these Principles of Environmental Justice...}\(^4\)

The preamble recognizes that we need to shift our economy to put protecting people and the plant at the center. Those economic shifts need to remedy past harm and create equitable systems. These concepts are foundational to a *Just Transition*.

**What is a Just Transition?**

The foundation of the EJ Movement is rooted in a comprehensive analysis of how race and class intersect with economic and environmental benefits and burdens.\(^5\) CRPE bases our work on the reality that low-income communities and communities of color are disproportionately impacted by environmental harms and the lack of environmental benefits. Our comprehensive analysis of the problems with the fossil fuel economy also lends itself to holistic solutions. For us, we need to transition not

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\(^1\) **ROBERT D. BULLARD,** _DUMPING IN DIXIE: RACE, CLASS, AND ENVIRONMENTAL QUALITY_ xiii-xvii (2d ed. 1994).


\(^3\) **BULLARD,** _supra_ note 1, at 116.


\(^5\) _Id._
only to change the way we fuel our economy, but to create a truly just economy that transforms communities currently disproportionately negatively impacted by the fossil fuel economy. To do this, community residents need to be meaningfully involved in decision-making that affects their health and quality of life. This requires us to strengthen the democratic infrastructure of communities while finding healthy alternatives to our current extraction based economy.

*Just Transition* \(^6\) is a concept originally developed by the labor movement that’s evolved to describe the EJ movement’s goal to decarbonize our economy and the world with equity, workers and residents at the center. \(^7\) It’s a framework for holistically building a better world from the ground up. It recognizes and is rooted in lessons from the carbon-based economy—who benefited? Who experienced hardship? Why, how, and most importantly, can we do better? It is a reminder that some places and peoples’ economic livelihoods are dependent on activities that have a negative impact on the climate and they deserve to be a part of our climate solutions. It is an invitation to make progress on many problems beyond climate change.

In 2009-2010, we engaged the San Joaquin Valley residents with whom we work in a long-term planning process to define green jobs and help guide the components of a *Just Transition*. Community leaders stated they:

want to live in healthy, vibrant, rural communities where they can live, work, [pray] and play free from the threat of environmental harm; they want to breathe clean air, drink clean water, and have access to economic opportunities that lift their families out of poverty. They want access to equitable and sustainable green jobs, *that respect the dignity of workers, provide a living wage and year-round employment,* and protect the environment in which people live, work and play. \(^8\)

Residents also acknowledged that to achieve this vision, communities need to be able to meaningfully participate in community planning and decision-

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6 The term “just transition” was first published by Canadian Union Activist Brian Kohler arguing, “The real choice is not jobs or environment. It is both or neither.” Brian Kohler, *Just Transition – A Labour View of Sustainable Development*, CEP JOURNAL on-line, Summer, Vol. 6, No. 2. (1998).

7 Sharan Burrow, forward to Samantha Smith, *JUST TRANSITION: A REPORT TO THE OECD*, May 2017 at 1 (recognized the need to avoid stranded workers and stranded communities as we transition our economy in response to climate change).

This vision of a just economy that blends environmental health, economic prosperity, and local democracy is part of a larger trend among EJ and climate justice advocates.

The California Environmental Justice Alliance created a Green Zones framework to turn overburdened communities from “Red Zones” to healthier thriving “Green Zones.” This Green Zone framework involves developing community-driven land use plans, creating policies that reduce pollution in overburdened communities, and investing in environmentally and economically beneficial projects that improve opportunities for the existing community residents. Similarly, the Climate Justice Alliance has created a Manifesto that outlines four key principles for a Just Transition: understanding the root causes of current inequities to find comprehensive solutions, respecting the rights of oppressed peoples to self-determination, making reparations for past harms, and improving representation so that we have a strong democracy where people impacted are leading us to solutions. These definitions of Just Transition share several common components: reducing pollution in low-income communities and communities of color, creating economic opportunities that facilitate community ownership in overburdened communities, and improving democratic governance and decision-making.

How has California’s Climate Policy Evolved?

Over the last decade, California’s climate policy has evolved from prioritizing greenhouse gas reductions with some consideration of equity as a secondary goal to a more equity focused Just Transition framework. When the state passed its landmark climate change bill, AB 32, the Global Warming Solution Act in 2006,
the bill set a greenhouse gas reduction target and included provisions to protect public health and provide co-benefits to disadvantaged communities\textsuperscript{14} as part of implementation. Since then, California has passed a series of bills to ensure low-income communities and communities of color in the state benefit from the state’s efforts to mitigate and adapt to climate change. We will discuss several of these bills leading to the passage of AB 2722, Transformative Climate Communities which codified many aspects of the Just Transition Framework.

The Global Warming Solutions Act of 2006, AB 32, was spearheaded by Natural Resources Defense Council (NRDC) and Environmental Defense Fund (EDF). The goal was to set a target for the state to reduce greenhouse gas emissions to 1990 levels by 2020. These groups had real concern that EJ organizations would oppose the bill because one of the strategies for achieving this target was cap and trade.\textsuperscript{15} EJ Advocates have long opposed pollution trading programs because it allowed polluters who are disproportionately located in low-income communities and communities of color to avoid reducing pollution at their facilities by purchasing credits from other facilities that have reduced their pollution elsewhere. Thereby incentivizing pollution hot spots in EJ communities. NRDC and EDF were concerned that the Latino Caucus in the legislature would oppose the bill because of EJ opposition.\textsuperscript{16}

To avoid this, the environmental groups set out to work with EJ groups to find language that would address EJ concerns. Several parts of the bill reflected EJ input into climate policy. In addition to the target of reducing greenhouse gas emissions, the bill also removed any reference to cap and trade. Instead, the Air Resources Board (“ARB”) was authorized to adopt an appropriate market mechanism.\textsuperscript{17} ARB was also required to establish an Environmental Justice Advisory Group to advise on implementation.\textsuperscript{18} The bill also contained several provisions related to public health and environmental justice: ensure activities do

\textsuperscript{14} This article refers to “disadvantaged communities” because that is the wording used in California’s climate bills. Pursuant to Health and Safety Code Section 39711, California Environmental Protection Agency identifies disadvantaged communities “on geographic, socioeconomic, public health, and environmental hazard criteria…” However, EJ advocates do not like the term because it does not encompass the wisdom, knowledge and power within those communities. It is also does not adequately address the pattern of disparate impacts in low-income communities and communities of color. Some advocates use the alternative, “emerging communities,” to reframe the discussion while still acknowledging historical patterns of redlining, discrimination, and disinvestment.


\textsuperscript{16} \textit{Id}.

\textsuperscript{17} \textsc{cal health & safety code} § 38562(c) (2017).

\textsuperscript{18} \textsc{id} § 38591.
not disproportionately impact low-income communities,\(^{19}\) ensure activities do not interfere with air quality standards and efforts to reduce toxic air contaminants,\(^{20}\) consider “localized impacts in communities that are already adversely impacted by air pollution” when including market mechanisms,\(^{21}\) and prevent any increase in toxic air contaminants or criteria air pollutants in designing market mechanisms.\(^{22}\)

However, during AB 32’s implementation it became clear that EJ remained an afterthought in climate policy. When the EJAC felt ignored by ARB, it successfully sued ARB when it moved forward with a Scoping Plan that included cap and trade as the strategy for reducing industrial emissions without adequately discussing alternatives to cap and trade to avoid disparate impacts to low-income communities and communities of color.\(^{23}\) As a result, ARB bolstered its analysis of cap and trade satisfying the court’s concerns. In 2010, ARB adopted a cap and trade regulation.\(^{24}\) This was a real disappointment to EJ groups and more sharply defined the distinction between mainstream environmental groups and EJ groups that has continued to play out as California has created new climate policies.\(^{25}\)

Interestingly, 2010 was also when EJ and equity groups demonstrated their power by joining together to defeat Proposition 23, the Clean Jobs Initiative. This measure was an attempt by the oil companies to suspend AB 32 implementation until the State’s unemployment rate had dropped below 5.5% for four quarters in a row, something that had not happened in over 40 years.\(^{26}\) The oil companies focused heavily on the message that climate and environmental regulations cost jobs. Two coalitions formed in opposition to the ballot measure. One made up of

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\(^{19}\) Id. at § 38562(b)(2).
\(^{20}\) Id. at § 38562(b)(4).
\(^{21}\) Id. at § 38565.
\(^{22}\) Id. at § 38570(b)(1).
\(^{23}\) Caroline Farrell, A Just Transition: Lessons Learned from the Environmental Justice Movement, 4 DUKE FORUM FOR LAW AND SOCIAL CHANGE 58 (2012).
\(^{25}\) This dynamic continues to influence California’s climate policy today. In 2016, a USC study analyzing the first round of cap and trade compliance reports found a correlation between the largest greenhouse gas emitters, increases in localize air pollution and toxic contamination, and communities of color. The report found that while the state as a whole is meeting its AB 32 targets, many industrial sectors covered under cap-and-trade report increases in localized in-state greenhouse gas emissions since 2013. Lara J. Cushing, et al. A PRELIMINARY ENVIRONMENTAL EQUITY ASSESS OF CALIFORNIA’S CAP-AND-TRADE PROGRAM (2016) at http://dornsife.usc.edu/assets/sites/242/docs/Climate_Equity_Brief_CA_Cap_and_Trade_Sept 2016_FINAL2.pdf..
mainstream environmental groups called Stop Dirty Energy and the other comprised of EJ, racial justice and economic justice groups called Communities United Against the Dirty Energy Proposition (Communities United). Communities United’s messaging focused on protecting community health and providing for economic opportunities in low-income communities and communities of color on the frontlines of the fossil fuel economy in the green economy. Prop 23 was defeated with 61.6% of voters voting no. Voters of color were instrumental in defeating Prop 23. Voters of color comprised 37% of the electorate, but 73% of voters of color voted in opposition to Prop 23 compared to 57% of white voters. Communities of color were credited with protecting AB 32 and now found themselves with a seat at the table to make climate policy more equitable going forward.

To address some of the inequities of cap and trade, the legislature passed SB 535 in 2011. SB 535 was necessary because AB 32 did not define disadvantaged communities and did not provide direction on how the state would mitigate harmful impacts from climate change. SB 535 did two important things for EJ interests. First, it required ARB identify disadvantaged communities in the state. EJ advocates had long recommended the state creating a screening tool to identify EJ communities because you cannot reduce disparities if you cannot identify where they occur. Second, SB 535 set aside 25% of money available in the Greenhouse Gas Reduction fund for projects that provide benefits to disadvantaged communities, and allocate 10% of the available funds to projects located within disadvantaged communities. The Legislature described its intent with this bill to direct “resources to the state’s most impacted and disadvantaged communities to ensure activities taken pursuant to that authority will provide economic and health benefits to these communities as originally intended.” The legislation clearly

27 Id.
28 Id.
29 (2011) SB 535 Sec. 1(e)
30 The State has developed CalEnviroScreen which identified disadvantaged communities based on geographic, socioeconomic, public health and environmental hazards as directed. Health & Safety Code § 79711. California’s Office of Environmental Health Hazardous Assessment has developed this tool and has recently released the third iteration of the tool. https://oehha.ca.gov/calenviroscreen.
32 The Greenhouse Gas Reduction Fund is where funds generated by ARB’s market mechanism are deposited.
33 HEALTH & SAFETY CODE § 39713(a).
34 Id. at § 39713(b).
linked health and economic benefits explicitly in climate policy and focused on multiple benefits beyond greenhouse gas reductions. However, the EJ movement continued to have significant reservations about the cap and trade system which remained in place and provided the source for the funding in the Greenhouse Gas Reduction Fund. Communities would still be denied pollution reductions, and revenue was not really a solution to that. Also, it was unclear how communities most impacted would benefit from projects funded through SB 535. While problematic, this bill marked an attempt to create climate policy that was specifically beneficial to disadvantaged communities and recognized that focusing only on greenhouse gas emissions was a missed opportunity to provide additional benefits.

In 2015, California took another incremental step towards a *Just Transition* with the passage of SB 350. This bill required the state to acquire 50% of its energy from renewable sources and double the state’s energy efficiency standards by 2030. In setting these standards, the legislature recognized that there are existing barriers to low-income communities and communities of color to access renewable energy. The bill required the California Energy Commission (CEC) to prepare a study examining obstacles to accessing renewable energy, weatherization and energy efficiency programs for low-income and disadvantaged communities. In addition, the bill discusses the need to prioritize improving public health, economic opportunity, and increased public involvement for EJ communities in the energy sector.

By increasing the Renewable Portfolio Standard to 50%, the state recognized there were several benefits to doing this. There were clear environmental benefits from displacing fossil fuel consumption, reducing air pollution, and reducing greenhouse gas emissions. The legislation also required that when soliciting and procuring eligible projects within California, electricity providers “shall give preference to renewable energy projects that provide environmental and economic benefits to communities afflicted with poverty or high unemployment, or that suffer from high emission levels of toxic air contaminants, criteria pollutants, and greenhouse gases.” The bill also specifies several activities the state must do to meet the its clean energy and pollution reduction objectives. This includes accounting for: the use of distributed generation that provides economic and environmental benefits in disadvantaged communities; opportunities to decrease costs and increase benefits, including pollution reduction, and to the extent feasible

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36 (2015) SB 350 Section 2 (a)(1) and (a) (2) respectively, at http://www.leginfo.ca.gov/pub/15-16/bill/sen/sb_0301-0350/sb_350_bill_20151007_chaptered.pdf

37 CAL. PUB. RES. CODE § 25327(a)(b)(c)

38 Id. at § 25943(c)(8) and (d)(6); CAL. PUB. UTIL. CODE § 399.13(a)(4)(A)(iv); 399.13a4Aiv

39 CAL. PUB. UTIL. CODE §§ 399.11(b)(1),(3), (4).

40 Id. at § 399.13a7.
give first priority to the manufacture and deployment of clean energy and pollution reduction technologies that create high wage, high skilled employment opportunities.\footnote{Id. at § 400 (a),(b),(e).}

In the bill, the legislature also defined “interest of the ratepayer” broadly to include any one of the following “reduction of health and environmental impacts from air pollution, increased use of alternative fuels, and creating high-quality jobs or other economic benefits, including in disadvantaged communities.”\footnote{Id. at § 740.8(b)2,4,5.} This bill presented an important milestone in signaling the state wanted to combine strong climate policy with public health, pollution reduction, equity, and workforce development elements in the energy sector while establishing an ambitious renewable energy goal. However, it also presented an important setback. Originally, SB 350 included a commitment to reduce fuel use by 50\% by 2030.\footnote{http://www.leginfo.ca.gov/pub/1516/bill/sen/sb_03010350/sb_350_bill_20150224_introduced.pdf} This was an opportunity to truly transition away from oil while simultaneously increasing renewable energy production. This language was amended as a political compromise to remove oil industry opposition to the bill. But, it also signaled that the state was not ready to combine reducing fossil fuel production and use with increased renewable energy production.

Last year was another landmark year in California’s climate policy with a \textit{Just Transition} framework playing a more pivotal role. In 2016, the California legislature passed SB 32 which extended California’s Climate goals beyond AB 32’s 2020 timeframe, AB 197 which required the State to meet certain requirements in achieving SB 32’s targets, and AB 2722 which institutionalized a Just Transition framework for addressing climate change at the local level. With SB 32 and AB 197, the legislature joined the bills together each becoming operative if the other became effective as of January 2017.\footnote{(2016) SB 32 Sec. 3; (2016) AB 197 Sec. 9.} SB 32 extended California’s greenhouse gas reduction targets beyond 2020 requiring that the state reduce greenhouse gas emissions by 40\% of 1990 levels by 2030.\footnote{HEALTH & SAFETY CODE § 38566.} In extending the target, the legislature recognized that “continuing to reduce greenhouse gas emissions is critical for the protection of all areas of the state, but especially for the state’s disadvantaged communities, as those communities are affected first, and most frequently, by adverse impacts of climate change.”\footnote{Id. at § 38500c.} The legislation requires ARB to achieve reductions “in a manner that benefits the state’s most disadvantaged communities and is transparent and accountable to the public and the Legislature.”\footnote{Id. at § 385(d).}
While SB 32 sets the target and references the need to benefit disadvantaged communities in meeting that target, AB 197 provides more guidance on how ARB is to achieve the target. This approach in separating the target from the means to achieve the target could cure one of the problems of AB 32 implementation. Since AB 32 included both the target and the means for achieving the target, ARB was able to prioritize meeting the target, relegating the means for achieving the target to ancillary goals of the legislation. By separating the equity provisions in a different bill, it forces the ARB to confront them as distinct legal authority and allows the legislature and the public to monitor compliance more transparently.

AB 197 did several things to advance EJ while meeting SB 32’s targets. The bill increased transparency and oversight by setting term limits for members of the ARB, adding two non-voting members to the Board from the Legislature, and creating a Joint Legislative Committee on Climate Change Policies.48 Annually, the Air Resources Board is required to report to the Joint Legislative Committee on the emissions of greenhouse gas emissions, criteria pollutants, and toxic air contaminants from sectors of the economy covered by ARB’s climate change regulations and market mechanisms.49 This could help track emissions trends and allow the legislature to intervene to reduce localized air pollution in disadvantaged communities.

In addition, AB 197 repeats SB 32’s recognition that climate change impacts disadvantaged communities first and worst. It also requires the ARB to consider social costs when adopting rules and regulations, and prioritize direct emission reductions from greenhouse gas emission sources rather than market mechanisms.50 Social costs means “an estimate of the economic damages, including, but not limited to, changes in net agricultural productivity, impacts to public health, climate adaptation impacts…; and changes in energy system costs, per metric ton of greenhouse gas emissions per year.51 This is an important recognition that there are costs to doing nothing regarding climate change that are often unaccounted for when only looking at the costs to business of installing pollution control technology. These costs are often borne by low-income communities and communities of color in terms of public health, housing, and transportation. By factoring in social costs of our carbon-based economy, ARB will capture costs typically externalized by polluters thus making control technology more economically feasible. It also allows the state to prioritize regulations that achieve multiple benefits moving us closer to a Just Transition framework.

However, in 2016, the legislature passed another bill that explicitly set out a Just Transition Framework. AB 2722 creates the Transformative Climate Communities

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48 CA GOV’T CODE § 9147.10(a).
49 Id. at § 9147.10(c).
50 HEALTH & SAFETY CODE § 38562.5(a).
51 Id. at § 38506.
(TCC) Program within the Strategic Growth Council. This was an interesting approach. The other bills discussed in this article were housed in regulatory agencies dedicated to specific sectors. For example, the ARB’s mission is “to promote and protect public health, welfare and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the effects on the economy of the state.”\(^5\) Housing the program in the Strategic Growth Council is a significant opportunity to broaden the purpose and impact of the program. The Strategic Growth Council’s mission is to coordinate “the activities of State agencies and partner with stakeholders to promote sustainability, economic prosperity, and quality of life for all Californians.”\(^5\) The Strategic Growth Council also has a broad range of institutional objectives ranging from environmental (improving air and water) to improving public health and equity to strengthening the economy. The Strategic Growth Council's wide purview allows it to be comprehensive in the development of its programs.

Substantively AB 2722, creates a program that will fund “neighborhood-level transformative climate community plans that include multiple, coordinated greenhouse gas emission reduction projects that provide local economic, environmental, and health benefits to disadvantaged communities.”\(^5\) Unlike other funding opportunities which require applicants to be government entities, TCC funding can be awarded to non-profit organizations, community development organizations and must demonstrate multi-stakeholder partnerships with local community-based groups, labor, and workforce development boards at all phases.\(^5\) Projects that receive funding are required to maximize climate, public health, and environmental, and economic benefits.”\(^5\) The bill also allows the Strategic Growth Council to prioritize funds in communities that have a high proportion of census tracks identified as disadvantaged communities and that focus on communities that are most disadvantaged.\(^5\)

The TCC program is just developing now. EJ groups have commented on ways the program can meet its ambitions to incentivize *Just Transition* projects in some of the most disadvantaged communities. These include environmental indicators: reduced greenhouse gas emissions, improved air quality and water quality and quantity, increased access to renewable energy, increased mobility and public transit, increased open space and green infrastructure, and improved land use

\(^{52}\)Air Resources Board, Mission, available at https://www.arb.ca.gov/html/mission.htm

\(^{53}\) Strategic Growth Council, About Us, http://www.sgc.ca.gov/About-Us/.

\(^{54}\) CA PUB. RES. CODE § 75249.

\(^{55}\) Id. at § 75241(a).

\(^{56}\) Id. at § 75241(e).

\(^{57}\) Id. at § 73241b2. This references the screening tool that was authorized under (2011) SB 535.
planning.\textsuperscript{58} There are also economic indicators: more workforce development opportunities, stabilized and increased affordable housing options, anti-displacement programs, and an increase in locally owned small businesses.\textsuperscript{59} There are also goals for increased social cohesion with greater community engagement and community partnerships.\textsuperscript{60} There is significant funding attached to this project with awards ranging from $35 million to $70 million for TCC projects in three to five selected areas.\textsuperscript{61} It is too early to tell whether the TCC will help to create a Just Transition in the communities chosen. EJ advocates are engaged in designing the selection criteria as well as in creating projects for funding. The proof will be in implementation, but this is the first-time California has institutionalized a policy that could provide a blueprint and funding for a Just Transition. Over the last decade, California has created a patchwork of bills to address climate change that build on each other and create framework for a Just Transition. One reason these bills feel connected, but incomplete is that California did not prioritize equity and multiple benefits in its climate policy from the beginning. While language was included in AB 32 around co-benefits and avoiding localized pollution, the language was included as part of a political compromise rather than reflective of an approach to addressing climate change. However, California’s climate policy is evolving to be more inclusive of equity at the center of strategies. This evolution is the result of several key factors: the changing demographics in state whereby California is a majority people of color state both within the electorate and state legislative leadership which has led to shifting environmental policy to be more public health focused. These shifts have also increased the power of EJ groups in the state which has led to substantive changes in environmental policy. Issues of public health, workforce development, and public participation are not seen as add-ons to particular bills or unrelated to environmental or climate policy. Now they are understood to be interconnected and vital to passing relevant and effective policy. Climate issues are not just an environmental, but social and economic as well. This reflects the lived experience low-income communities and communities of color on the frontlines of the fossil fuel economy. To gain political support and prevent defeat attempts by polluters to stop progress on climate change, policy must address community needs. Therefore, developing a community-centric approach to policy is a crucial first step to advancing equity and a Just Transition. The key to success however is community-centered implementation which we discuss further below.

\textsuperscript{59} http://caleja.org/wp-Id.
\textsuperscript{60} \textit{Id.}
\textsuperscript{61} Strategic Growth Council, Transformative Climate Communities, available athttp://sgc.ca.gov/Grant-Programs/Transformative-Climate-Communities-Program.html.
Is California Transitioning?

The Renewable Portfolio Standard (RPS) in SB 350 requires the state to serve 50% of electricity use from renewable sources by 2030. The CEC tracks the state’s progress toward reaching this goal on a quarterly basis. California is currently ahead of its own RPS schedule generating 27% of electricity sales in 2016 by renewable energy. Renewable generation and capacity have grown tremendously from under 20,000 gigawatt hours in 1983 to nearly 70,000 gigawatt hours in 2016. While a number of global market trends and technological innovations occurred during 1983 to 2016, there is significant measurable growth in California’s renewable generation following the initial RPS standard in 2002 and its subsequent target increases during 2006, 2011, and 2015. This progress is complicated by increased production of oil in California from 2011 to 2015. Since the RPS standard measures total percentage of electricity sales, oil and fossil fuel production can hypothetically increase while their percentage of total electricity sales decreases. The RPS is an important step toward total energy production from renewable sources, but does not on its own decarbonize the economy.

In regard to energy jobs, a perfect storm of historically low oil prices from domestic over-production, increased mechanization and automation of fossil fuel production, California climate policies, decreased prices of renewables, and increased battery storage worked together to produce a tremendous shift in jobs

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63 Id.


65 Id.


68 “As much as 1,800 megawatts of new energy storage — mostly from lithium-ion batteries — is expected to come online by 2021.” Daniel Cusick, Battery Storage
from dirty to cleaner energy. In 2017, California employs 427,614 traditional energy workers with largest segments in energy efficiency and electric power generation.\textsuperscript{69} Within electric power, solar employs 75\% of all workers whereas all fossil fuels employ only 9\% of workers.\textsuperscript{70} California leads the nation in clean energy jobs and experienced 32\% job growth between 2015 and 2016 alone.\textsuperscript{71} It remains unknown whether renewable jobs are reaching disadvantaged communities and former fossil fuel workforce.

Renewable job growth and electricity generation suggest an incredible energy transition is well underway in California and will continue. What remains in question is who stands to benefit the most from this transition and who if anyone is already being excluded from it. As it is now, California is changing how its energy is being produced, but there are still questions as to whether it is transitioning to a cleaner economy with multiple benefits for low-income communities and communities of color on the frontlines of the fossil fuel economy.

How Just is California’s Transition?

We have some preliminary answers and a roadmap forward from the work of the CEC. In December of 2016, the CEC released and adopted the SB 350 Barriers Study which identifies key barriers for low-income and disadvantaged communities to participating in the state’s clean energy, energy efficiency and weatherization programs.\textsuperscript{72} The report and others find low-income and disadvantaged communities experience greater barriers to accessing utility services in general.\textsuperscript{73} The report finds low-income and disadvantaged communities face many barriers to participating including, but not limited to, spending three-times the percentage of their income on energy costs than other Californians, low home ownership rates, ages of their buildings, insufficient access to capital, financial

\textsuperscript{70} Id.
\textsuperscript{71} Solar Foundation, SOLAR JOB CENSUS 2016 http://www.thesolarfoundation.org/national/
\textsuperscript{72} SB 350 BARRIERS REPORT http://www.energy.ca.gov/sb350/barriers_report/
\textsuperscript{73} EJ advocates define the human right to access energy and utility services as “energy justice.” “The energy justice movement upholds that all individuals have the right to: safe, sustainable energy production; resilient and updated energy infrastructure; affordable energy; and uninterrupted energy service.” NAACP, LIGHTS OUT IN THE COLD: Reforming Utility Shut-Off Policies as if Human Rights Matter http://live-naacp-site.pantheonsite.io/wp-content/uploads/2017/03/Lights-Out-in-the-Cold.pdf NAACP
obstacles for small businesses, remote or underserved communities, and so on. The report found that residents in low-income and disadvantaged communities directly pay into California’s renewable energy programs as taxpayers and ratepayers, but the benefits of those programs rarely reach them.

The report recommends several strategies to build more equity into renewable, energy efficiency and weatherization programs. The report advocates for better state agency coordination, developing a task force, intentionally developing an action plan to do better, ensuring all state programs identify and prioritize best practices to achieve greater access and requiring funds like the Electric Program Investment Charge (EPIC) make a financial commitment to equity and reaching low-income and disadvantaged communities. This work is important for identifying the gaps in California’s existing renewable programs and proposing policy recommendations to move justice forward. But the report points out a troubling flaw consistent with much of California’s climate policy as with AB 32 and its descendants, the legislators and implementing state agencies did not design renewable and climate focused programs to center equity from the beginning.

The policies largely focus on generation targets, market transformation, reduction of greenhouse gas emissions from a 30,000-foot point of view. These policies, as a whole, do not address many of the localized problems of the fossil fuel economy in California. California is the third largest oil producing state in the country and policies to promote unconventional oil extraction in the state occurred simultaneously with policies designed to promote renewable energy production. For example, Senate Bill 4 of 2013 commits the state to carbon intensive well stimulation technologies likes fracking and commits California to “boosting oil and gas production.” California’s oil production increased from 2011 to 2015 overall from 196.8 million barrels to 201.7 million barrels in large part due to new unconventional technologies. California’s commitment to solving or reducing the impacts of climate change has yet to significantly impede actual fossil fuel extraction in the state.

In 2017, climate and EJ advocates are crafting and pushing several policy solutions

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74 Id.
75 EPIC funds innovative investments in clean energy technologies for the benefit of electricity ratepayers of California’s three largest electric investor-owned utilities. While disadvantaged communities constitute 25% of the state’s population they only received 14% of the funds. See SB 350 BARRIERS REPORT http://www.energy.ca.gov/sb350/barriers_report/
76 Id.
to put as much equity as possible into state policies going forward. These solutions seek to decrease fossil fuel production in overburdened communities and prioritize their ability to experience the benefits of the renewable economy.

- Senate Bill 100\(^{80}\) requires 100% electricity sales in California from renewable sources by 2045. The bill directs the Public Utilities Commission (PUC), CEC, and ARB to prevent resource shuffling, transition fossil fuel generation to zero-carbon fuels, exclude the use of offsets and credits.
- Assembly Bill 1088\(^{81}\) requires the CEC to develop statewide performance based goals to reduce energy consumption and greenhouse gases from multi-family residential housing thereby achieving financial savings for more low-income customers.
- Assembly Bill 523\(^{82}\) targets 25% of renewable energy, weatherization and energy efficiency investments of the EPIC program to projects located in disadvantaged communities and an additional 10% of investments to low-income communities.
- Senate Bill 366\(^{83}\) expands renewable energy and increases savings for low-income customers. It expands available megawatts for shared renewable energy projects located in EJ communities.
- Assembly Bill 1431\(^{84}\) requires the CEC to organize a working group for energy issues including weatherization, renewable energy production, and energy efficiency in low-income and disadvantaged communities.
- Assembly Bill 1259\(^{85}\) provides loans and financial assistance for low-income consumers to electric vehicles thereby decreasing tailpipe emissions in low-income communities.

\(^{80}\) SB 100, California Legislative Information, [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100) (last visited July 21, 2017).


Advocates are also pushing Just Transition solutions in the implementation of bills already passed through the legislature and overseen by the Energy Division of the PUC. This work consists of educating and partnering with the Commission to ensure each implementation proceeding maximizes the benefits of clean energy development in low-income and disadvantaged communities.

- R. 14-07-002 requires development of alternatives to promote renewable generation in disadvantaged communities.
- A. 17-05-003 mandates identification of methods to increase affordable access to energy in disadvantaged communities within the San Joaquin Valley.
- R. 15-03-010 evaluates triennial investment plans and guidelines for the Electric Program Investment Charge clean energy research fund.86

These bills, if successfully signed into law and implemented, will increase both the speed and the justice of California’s transition from fossil fuels. However, it is important to note, legislators in 2017 refused to introduce bills proposed by EJ advocates placing health-focused limits on fossil fuel extraction in the state.87 The success of energy equity work does not yet incorporate fossil fuel production reductions not for lack of trying, but due to continued unwillingness from state representatives.88 This creates a real barrier to a Just Transition in California. It

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86 For more information, see http://www.cpuc.ca.gov/ (last visited July 21, 2017).
87 56% of voters in Monterey, California successfully banned unconventional oil drilling techniques like fracking in November 2016 making it the seventh county in the state to do so. The success of local fracking bans in California suggest residents desire more protection from fossil fuel extraction despite failures to do so by Governor Jerry Brown or the legislature. http://www.mercurynews.com/2016/11/09/fracking-ban-environmentalists-declare-victory-on-monterey-measure-z/
88 This trend of advancing parts of a Just Transition while protecting fossil fuel extraction and production was reinforced with that recent passage of AB 398 in July 2017. This bill extended California’s cap and trade program beyond 2020 through 2031.88 EJ organizations were strongly opposed to the extension of cap and trade for all the reasons they opposed the program because of disproportionate impacts in low-income communities and communities of color. The bill included some provisions consistent with a Just Transition. One provision requires ARB to set a price ceiling to try to contain the costs to industry of reducing carbon. In setting the price ceiling, the Board must consider the social cost of carbon. The bill also prioritizes using auction revenue for reductions in air pollution and air toxics. The bill also requires the California Workforce Development Board to prepare a report to the Legislature ‘to help workers, and communities transition to economic and labor-market changes related to statewide greenhouse gas emission reduction goals. However, the bill also prohibits ARB from regulating refiners’ carbon dioxide emissions beyond cap and trade. Additionally, the bill prohibits...
also creates real disparities in the state with communities living near oil and gas extraction sites who are often communities of color continuing to bear harm. This is at the same time that the State is increasing its focus on renewable energy with questionable results as to the transformative equitable change.

Will the State Let Arvin Lead?

Arvin, California is a town of nearly 20,000 people in Kern County 20 miles southwest of Bakersfield. Since 1933, Arvin has been an oil town, with jobs dependent on the oil and gas industry. Similar to many extractive-based economies, the oil and gas industry has created dependence and cycles of poverty in Arvin. Arvin has some of the highest poverty and unemployment rates in the state, with median household incomes at half of the rest of California. The Environmental Protection Agency also ranks Arvin as having the worst air quality in the country. Tied to oil and gas for its economic growth, yet overburdened by its pollution, Arvin reflects the paradox facing many extractive economies across the world. If a city such as Arvin, where oil and gas is so deeply entrenched politically and economically, can convert to 100% renewable energy, it can serve as a model for transitioning cities facing poverty and pollution across the globe.

CRPE has worked with organized residents (Committee for A Better Arvin) and elected officials in Arvin to both decrease the amount of pollution impacting residents and increase renewable energy investments for over a decade. Together, Committee for a Better Arvin and CRPE defeated new fossil fuel proposals, introduced a local ordinance to ban oil fracking and continue to work together to develop a City ordinance protecting residents from health impacts of oil drilling. The leadership of and election of 23-year-old Jose Gurrola shows the power of local air districts from regulating any carbon dioxide from stationary sources within the cap and trade program. The bill also provides a tax cut for facilities producing or storing energy.

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89 For example, Students attending school within 1 mile of oil and gas wells are predominantly non-white (79.6%), and 60.3% are Hispanic. See FracTracker, HYDRAULIC FRACTURING, STIMULATIONS, & OIL & GAS DRILLING UNJUSTLY BURDEN HISPANIC & NON-WHITE STUDENTS https://www.fractracker.org/2014/11/caschooldemos_stimswells_ej/; Romo vs. Brown (2015) Cal. Superior Court (a legal challenge to oil and gas well stimulation regulations for discriminating against public school students of color).

90 City Data, Arvin California http://www.city-data.com/city/Arvin-California.html


92 Deal Kuipers, Small California Towns are Facing off Against oil Companies — and Winning, GRIST, April 7, 2017, http://grist.org/article/small-california-towns-are-facing-off-against-oil-companies-and-winning/.
community organizing in a formerly oil dependent town. Gurrola introduced the fracking ban as city council member and ran for mayor on the campaign promise of climate justice in Arvin. The City of Arvin just submitted a letter of support for Assembly Bill 523 to require California invest and locate clean energy projects in communities theirs. CRPE has also been building a relationship with the Farmworker Institute for Education and Leadership Development (FIELD) which trains farmworkers to work in the solar industry in Arvin. We are talking with FIELD to create opportunities to retrain oil field workers in the renewable energy field. Arvin is leading the Just Transition by creating local solutions lead by local leaders that simultaneously redress the negative impacts of fossil fuels on communities and promote localized renewable energy innovation and economic opportunities through private and public partnerships.

Conclusion

When we think about adaptation, innovation, climate change, energy efficiency and energy production—are we thinking about living with all of those things as your next-door neighbor? Are we creating policies, programs and science that considers what it would be like to live with this stuff, go to school surrounded by it, go to worship or work in the middle of it? Or are we considering “community impacts” as an afterthought. Once programs are in place, budgets are set, and goals are already established. California’s climate journey teaches us we must root climate policy in the communities most impacted by the fossil fuel status quo. These policies must be crafted by communities and their implementation must be community-centered. The inevitable shift from fossil fuels to renewable energy presents communities across the world an opportunity to decrease pollution, improve public health, mitigate climate change, and to create living-wage jobs. This opportunity will only become a reality if the communities most impacted by fossil fuels lead the way. Change is certain. Justice is not. Together, we must continue to build the just transition.