Chapter 2 Integrating Equity and Justice into Climate Action Planning: Beyond Mere Symbolism



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Introduction

The terms "equity" and "justice" are rapidly emerging in new or updated local municipal climate action plans (CAP) throughout the USA and especially in California. Inclusivity and fairness are two guiding principles for city climate action planning (Tuts et al., 2015), and numerous guides to developing CAPs devote entire sections to participatory governance (Simpson, 2009; Tuts et al., 2015). While there is widespread attempt to integrate equity and justice parameters into climate action plans, it is unclear when this shift occurred and how, if at all, these plans will reshape communities and spaces to become more inclusive, just, and equitable. Climate governance concerns underscore the importance of academic discussions that uncover the complexities and challenges of cross-jurisdictional environmental planning. The fields of political ecology and geography have made substantial contributions to breaking down barriers between society, technology, science, nature, and politics (Woolgar & Latour, 1986; Harvey et al., 1996; Swyngedouw, 2009). Literature in these intersecting disciplines has opened exciting discourses around scalar and spatial dimensions of climate governance (Okereke et al., 2009; Bulkeley, 2005). Effective environmental policy instruments (Coglianese & Lazer, 2003; Driessen et al., 2012) have provided academics with powerful tools to explore and uncover often hidden power relationships, shifting policy tool choices and competing politics in cities where widespread adoption of CAPs is occurring.

The inadequacies of current climate action approaches, namely, numerically oriented; driven by efficiency, growth, and profits; and heavily reliant on technological fixes and infrastructural redesign, have triggered numerous academic discussions on how to proceed from a wide range of disciplines. Opponents to market-driven

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solutions have questioned the need for growth, usually on environmental grounds (Fainstein, 2014). Some critical geographers claim the impossibility of carbon reduction goals and climate justice within the current capitalist system (Harvey et al., 1996). Environmental economists have questioned the use of cost-benefit analysis, demonstrating the lack of ability to capture moral factors related to climate change (Caney, 2010). Urban planners are reimagining value systems within their decision-making (Houston et al., 2016; Steele et al., 2012). One gap that has been largely understudied, but is of central concern to global climate change, is justice within climate action planning. Scholars have begun to research why equity, democratic governance, and social implications have historically been left out of climate governance planning (Houston et al., 2016). Additional theoretical and place-based research on the coupling of justice and climate action plans is well-positioned to explore the complex relationships within local environmental governance and politics.

This chapter employs a critical theory framework aptly described and employed by Stuart et al. (2020). This framework attempts to understand the relationships between capitalism, the environment, and society while discovering emerging spaces, places, and practices within the existing order that offers alternatives to current irrational conditions and power relations. Assessing institutions as a collection of social and discursive relationships within capitalism has offered the basis for examining new forms of governance, especially ones that are more socially and ecologically just (Krueger & Agyeman, 2005). My aim is to recognize the unjust and problematic institutional structures at play while also allowing for the discovery of oppositional thinking and change within those contradictions and crises (see Stuart et al., 2020). Like others (Steele et al., 2012; Houston et al., 2016), I find emerging relationships are reshaping urban dimensions in novel and surprising ways. This three-part chapter uses historical and mixed social scientific methods to investigate issues of governance, justice, power, and scale relating to climate action planning in California's urban landscapes. The first section traces the history of climate action plans in an attempt to uncover scalar dimensions-geographical, institutional, and roles/issues-of climate action planning, particularly why cities predominantly bear the responsibility of climate action and how they fare. Employing a critical theory framework, the second part assesses the emergence of justice and equity in climate action planning and the unique spaces in which cities and their constituents have creatively embedded these elements across sectors, with unique government and nongovernment partnerships in spite of contradictory institutional structures. A final section concludes by exploring the materialization of justice-oriented alternative forms of governance emerging within and around the limitations of the existing economic and social order, offering openings for change.

The geographical focus of this chapter is on California and specifically the San Francisco Bay Area that is uniquely situated to provide a plethora of case studies on local climate action plans. Over 480 cities and 69 counties have climate action plans in California (CARB, 2020). Of those, 101 are cities and counties in the San Francisco Bay Area (delaminated by jurisdictional boundary of the Bay Area Air Quality Management District). This chapter is empirically informed by actors in

San Francisco Bay Area municipal governments and nonprofit and private sector institutions involved in local climate governance, as well as document review of climate action plans in the region. While California is often viewed as a model for environmental policymaking, much work is still needed to address striking environmental injustice issues. Environmental justice issues in the state include but are not limited to the disproportionate burden of air pollution, water pollution, and toxic siting in communities of color (Morello-Frosch et al., 2002; Huang & London, 2012).

Scalar and Power Dimensions of US Municipal Climate Action Planning

Despite the common framing that climate change policy is a matter of international governance, local actors using a wide range of policy tools have emerged as leaders in climate action. The evolution of climate change policy from national and international to local levels has a number of roots, one of the most prominent of which is the gap produced by federal inaction in the USA (Rabe, 2004). There was much hope that the Rio Earth Summit in 1992, the Kyoto Protocol in 1997, and the many other international climate agreements that followed would materialize into swift, collaborative global action. However, international and national response to climate change has been fragmented and slow (Houston et al., 2016). This failure has left state and local governments with much of the responsibility to act on climate change. Local municipal action has become increasingly important. The International Panel on Climate Change (IPCC) identified cities as most suitably positioned to act faster and more easily innovate (C40, 2018), as they offer a level of engagement that is unachievable at higher scales. City governments have the unique ability to inform, educate, and involve citizens as well as local industries. Because populations are more concentrated in urban areas than ever before, urban residents will experience some of the most severe impacts of climate change (Hobbie & Grimm, 2020). Consequently, cities face pressure from their constituents, forcing them to mitigate and adapt.

With several impetuses to act, cities do so with great limitations—cities are often understaffed and lack power, resources, and authority to make widespread change (Lake & Hanson, 2000). In most states, cities have little or no mandate to control greenhouse gas (GHG) emissions, making their efforts largely voluntary and unfunded. When deciding to adopt GHG reduction goals, local entities are limited to a small set of policy tools due to a complex set of pressures and conditions. Yet despite their constraints, city governments throughout the USA have begun to rapidly develop and implement their own response to climate change in the form of climate action plans, and many have surpassed federal government commitments. For example, in July 2020, the City of Menlo Park became the first city in the USA to set a goal of becoming carbon neutral by 2030. In 2019, the City of Berkeley leveraged its CAP with a landmark decision to ban natural gas hook-ups in all new construction. Many more cities in the state will follow if California is to achieve its goal of carbon neutrality and zero-carbon energy by 2045.

A dominant strategy employed by local governments is the use and implementation of a framework offered by ICLEI, formerly called the International Council for Local Environmental Initiatives and now known as Local Governments for Sustainability. ICLEI launched in 1990 when 200 municipal leaders converged at the United Nations in New York to take action on climate change. The organization is now widely regarded as the model for carrying out UN Local Agenda 21: global action plans for sustainable development in local communities. ICLEI provides a performance-based five-milestone model for climate action planning: (1) inventory greenhouse gas emissions; (2) establish a reduction target; (3) develop a plan; (4) implement policies and measures; and (5) monitor results (see Fig. 2.1). A similar five-milestone framework is offered for climate adaptation. ICLEI also provides resources, tools, and technical assistance to member governments. Many cities involved in ICLEI's Cities for Climate Protection Campaign have also joined other peer networks dedicated to climate action, including Climate Mayors, C40 Cities, and the Rockefeller's Foundation 100 Resilient Cities.

Such an easily accessible five-step model has been widely adopted by hundreds of local governments throughout the world, resulting in a proliferation of climate



Fig. 2.1 Five-milestone climate action plan. (Source: Adapted from ICLEI USA)

action plans. In 2020, ICLEI's network had over 1750 local government members in 84 countries (ICLEI, 2020). Additionally, over 500 universities and hundreds of businesses in the USA and throughout the world have developed and implemented their own CAPs with a very similar framework, establishing measured actions and strategies to reduce greenhouse gas emissions with targets and dates. While cities pick and choose from a variety of programs, infrastructure investments, and public education campaigns to best fit their priorities and capacity (Long & Rice, 2019), most fit into a few common strategies, including energy efficiency, transportation, and education (Betsill, 2001). The formulaic framework makes published climate action plans appear on the surface to be remarkably consistent in their climate responses (Houston et al., 2016), despite the vast diversity in cultural, political, and geographic contexts in which they are employed. However, a deeper exploration reveals substantial variance in GHG reduction emissions strategies and tacticssome CAPs focus on indirect strategies such as household replacement of LED lights, while others directly attempt to regulate carbon emissions (Andreen, 2008). As I discuss below, the same variance in use of strategies and level of commitment is seen in the integration of justice into municipal CAPs. Some add a paragraph or a few sentences describing the relationship between GHG reductions and equity issues, while others center their entire plan on racial justice, using a racial equity lens throughout the development and implementation process.

Two defining characteristics of most plans across sectors and states are a narrow focus on GHG emissions and the limited number of policy tools: mostly voluntary, market-based instruments with little teeth. Aall et al. (2007) categorized these tools in three ways: policy redressing (old programs are renewed by linking them to climate policy), picking "low-hanging fruit" (measures that are uncontentious, easy to implement, and lucrative), and/or symbolic action. While there has been a proliferation of policy tools over the past half-century (Schneider & Ingram, 1990), several embedded forces restrict local institutions to utilize the full gamut of instruments available to them. Few cities dare to use tools that take on the onus of playing the role of policy actors beyond minimum standards for climate policy (Aall et al., 2007). However, there are emerging examples, such as Seattle's carbon tax (see Rice, 2010) and a few in the Bay Area that I describe below.

The Capitalism-Climate Contradiction and Limited Policy Tool Choice

A look at the urban planning structures and history that bore city climate action plans, as well as the economic and social systems with which they are tightly linked, offers insights into cities' limited tool choice. These same structures are the source of the climate crises—fossil fuel consumption and GHG emissions. Our economic system is one of deregulated capitalisms. Capitalism has a variety of roots, stages, and ideologies, which have been well-documented. The basic premise of a capitalist economy is to perpetually create profits. One of the more recent evolutions of American capitalism, neoliberalism, has left a legacy of several dialectically related structural challenges and constraints that pertain to climate action planning and justice. Neoliberal restructuring of our economy during the economic crisis of the late 1970s and 1980s emphasized rapid expansion of the economy through lowering trade barriers, privatizing state-operated services, reducing government interventions, as well as rolling back environmental laws, worker health and safety protections, and other regulatory measures seen as impinging on profits (Faber & McCarthy, 2012). Deregulated capitalism did and has continued to create wealth, albeit unequally and at the expense of the environment and the most vulnerable populations, namely, communities of color and low-income communities. Capitalism's unfettered market is heavily reliant on several unsustainable mechanisms, including the fossil fuel economy and the unequal distribution of benefits and hazards, both of which have resulted in their own set of paradoxes. Fossil fuels are the engine driving economic growth within our current capitalist system and are known to be the major source of GHG emissions and climate change (Malm, 2016). The interdependence of capitalism and fossil fuels has created self-destructive conditions or what has been coined the "capital-climate contradiction" (Stuart et al., 2020).

Privatization, deregulation, and market-driven growth based on a fossil fuel economy have trickled down to the most local levels of governance. The rise of dominant neoliberal schools of thought thrusts competitiveness and economic development as the primary objectives for urban planning, claiming growthpromoting cities result in the greatest good for the greatest number of people (Fainstein, 2014). The call to optimize conditions for efficiency and rapid capital accumulation became the focus of city governance and decision-making. As a result, a fixation on standards and measurable outcomes often coupled with technical solutions became conventional urban management. Urban policymakers employed the neoliberal framework to address environmental concerns, such as the use of "sustainable development" to revitalize downtown areas. This trend came to be known as sustainable urbanism—"a broad term that we employ as a catch-all for the various sustainable policy initiatives that popularized urban greening of the late 20th and early 21st centuries" (Long & Rice, 2019). The assumption was that once new "sustainable," "green," and "modern" buildings were constructed, capital growth would naturally accumulate. As we have seen in places like Oakland and San Francisco, these redevelopment projects force low-income families out, perpetuating inequalities, gentrification, and the growth-based system at the heart of the climate crises.

Until recently, climate action responses have largely followed suit. In the age of "climate urbanism" (Long & Rice, 2019), the almost exclusive goal of controlling greenhouse gasses (i.e., carbon or carbon dioxide equivalent " CO_2e ") appears logical. It could offer new paradigms, for example, the "territorialization" of carbon at the municipal level (Rice, 2010). The narrow focus on pulling down carbon has been employed at every level. Report after report from the leading international body on climate change, the International Panel on Climate Change (IPCC), focuses

on the simple equation of emissions discharged and emissions removed. Likewise, at the local level, the C40 Cities Climate Leadership Group and the US Conference of Mayors' Climate Protection Agreement identified emissions reductions as the principal tool for climate action. Although many end goals may be synergistic, carbon being the singular object of control has, until recently, overshadowed issues of justice and equity.

With GHG emissions as the primary unit of benchmarking coupled with costbenefit analysis as the primary means of comparing policy solutions, local decisionmakers in California are left with a small arsenal of tools from which to choose. Some have little or no cost to under-funded city governments nor to local businesses, and some rely on private-government partnerships, with tools that create rather than cut jobs and development projects and instruments that are easily measured in carbon reduction and supported by smart technology. This predetermined response is what has been called a "rigidity trap"-institutions and policy-decisions that are self-reinforcing and inflexible (Rogers, 2013). For example, in the implementation process of climate action plan in nearly every San Francisco Bay Area case study described below, meeting minutes describe the importance of not infringing on local business growth, not causing undue burdens to local economies while implementing greenhouse gas reductions. These same systems are giving rise to increasing disparity and the emergence of two unequal populations: "the urban elite-who have the political influence and financial stability to insulate themselves from climate change, and the urban and suburban poor-who will find themselves increasingly vulnerable" (Long & Rice, 2019). Inequality in California is especially wide despite that state being the nation's top economic performer. Income disparities there underscore that the income of families at the ninetieth percentile makes 12.3 times the income of those in the tenth percentiles (Bohn & Thorman, 2020). Such inequality is an inevitable product of capitalist activity (Muller, 2013). As a result, a burgeoning movement of environmental justice groups, concerned constituents, local scientists, and policymakers is coalescing in an attempt to infuse justice and equity into California Climate Action Plans, as well as in many overlapping sectors. The next section describes this phenomenon and illustrates how several cities in the San Francisco Bay Area are reshaping urban dimensions in innovative and surprising ways through the integration of justice and climate action.

Climate Action Plan's Equity Paradox: California as a Case Study

Cities are being reshaped by strategic selectivity of climate policy (While & Whitehead, 2013). Two related elements that have emerged in new city climate action plans over the past decade are justice and equity. To the extent that social, environmental, and political changes mutually shape one another, the rapid emergence of justice within climate governance may indicate a new era of urban

decision-making. Justice is not a new concept for cities. Much research has been devoted to exploring and assessing theoretical and place-based issues of justice within cities (Harvey, 2010; Mitchell, 2003; Fainstein, 2014; Brenner et al., 2012). Neither is justice a new topic in climate governance discussions. At national and international levels, questions of justice have been deeply ingrained in climate change concerns, such as "the relative responsibilities of different nation-states for reducing greenhouse gas emissions, how and by whom adaptation finance should be raised, and the extent to which different private and civil society actors should have a seat at the negotiating table" (Bulkeley et al., 2013). Focusing the climate justice conversation at the global and national scales, however, has left cities to embrace and integrate issues of equity and justice in unique and disparate ways.

In California, despite being the fifth largest economy in the world and nationally and internationally prominent for its environmental justice and climate policies (Liévanos, 2018), inequities abound and are ripe for study in the climate justice context. These inequalities will only become more pronounced as the climate changes. California is a nationally and internationally prominent site for advancing novel cumulative impact analyses (Huang & London, 2012) that are linked to the state's precedent-setting environmental justice and climate policies (London et al., 2008). California continues to face increasingly hotter and drier summers, as well as increasing severity and numbers of fires. As of this writing, the 2020 fire season has been the most destructive on record in terms of acreage burned, and Death Valley in California recorded a high of 130 °F, the hottest August temperature on record in the country. Additionally, increasing sea level rise, increasing droughts, and decreasing freshwater supplies threaten not only California's natural resources but also human health. Fires worsen air quality; water scarcity and saltwater intrusion exacerbate water pollution problems. The threats of this "new abnormal" (Brown, 2018) disproportionately impact the most vulnerable members of society-those with preexisting health conditions and/or no health coverage and those with the least amount of resources to adapt, move, or rebuild. The same communities that will be most impacted by climate change-communities of color and low-income communities—are also the ones that fare far worse than their white, affluent counterparts in nearly every area: housing, health, criminal justice, and employment. The most vulnerable populations are at risk to multiple hazards that create cumulative impacts (Liévanos, 2018).

Dozens of environmental justice organizations are drawing attention to the inequality of climate-related threats. Some of these community-based groups, such as the United Farm Workers (founded in 1965), have a long history of organizing California's marginalized populations around health and the environment. Others are relatively new to the movement, like the California Environmental Justice Alliance that formed in 2001 to advocate for a variety of issue-based policies in communities across the state from energy, land use, and employment. Large organizations like these, and a host of smaller, more local grassroots environmental justice groups, highlight not only the distribution of environmental hazards across race and class but also the white middle-class nature of historic "environmentalist" organizations (Gibson-Wood & Wakefield, 2013). When juxtaposed with the quintessential

environmental nonprofits, such as the Sierra Club (founded in California in 1892) and The Nature Conservancy, these environmental justice organizations are more diverse, inclusive, and engaged in the intersection of ecological health, human health, equity, and access.

The terms equity and justice are being used across sectors with a variety of meanings. Equity can be measured both as an issue of distribution, channeling benefits and costs evenly, or redistribution, channeling benefits disproportionately to those who lack them (Salamon, 2002). Justice within the urban climate justice context also has several typologies. Two predominant conceptualizations of climate justice are procedural justice and redistributive justice (Paavola & Adger, 2006; Bulkeley et al., 2013). Regulators endeavoring to distribute or redistribute environmental benefits and hazards in an equitable and just fashion while also fostering inclusive participation, as California and cities across the state are attempting to do, are faced with a paradox: "Equal treatment may require unequal treatment" (Stone, 2013). For example, if environmental benefits and hazards were to be distributed or redistributed equally, those that pose the biggest threat to climate change, such as large fossil fuel emitting industries, could, under this approach, be penalized or regulated more heavily than those that do not. In the eyes of the biggest polluters, bearing more cleanup costs can and has been perceived as "unfair" and "unequal." Such an approach is consistent with the "polluter pays principle," which has received attention in prior environmental policy and environmental economic literature (Nash, 2000; Gaines, 1991; Shortle et al., 2012), including a rich discussion on the most straightforward redistributive mechanism—a carbon tax (Metcalf & Weisbach, 2009; Lin & Li, 2011; Callan et al., 2009). While these tools show much promise, the application of the principle has been variable (Shortle et al., 2012). Historically, such command-and-control policy tools are difficult to employ and enforce, especially at the municipal level, due to budgetary, staff, and jurisdictional limitations. However, cities are discovering novel ways to creatively circumnavigate such limitations by leveraging emerging frameworks of justice and social movements and, in California, employing new state tools and legislative mandates that offer cities newfound agency. The state of California has employed a patchwork of legal frameworks that, together, bring into being a loose set of statewide guidelines for local and regional climate action planning and enforceable mechanisms that instill local power and authority as well as infuse equity and justice. While formal CAPs are optional, greenhouse gas inventories and reductions, which are the building blocks of CAPs, are mandated. With a new (2018) ambitious executive order to swiftly reduce emissions, cities and counties will likely be held to not only implementing a reduction plan but achieving the goals outlined in those plans. It remains to be seen exactly how the California Legislature will enforce these reductions goals.

Reviewing each piece of legislation is beyond the scope of this paper; however a few key bills that guide CAP implementation process include SB 32, which extended and expanded upon its predecessor AB 32, establishing a comprehensive program to achieve technologically feasible and cost-effective GHG reductions—it allows flex-ibility in measures used to achieve reductions but does require local agencies to account for equity, health, and economic considerations; AB 1771, which

establishes the California Climate Registry to track GHG emissions and adopts standards for reporting and reducing emissions; and Executive Order B55-18 which sets a target of statewide carbon neutrality by 2045. California also enacted laws that enhanced AB 32 and SB 32, including the extension of a controversial cap-and-trade program (AB 398) through 2030. The state passed laws that are specific to environmental justice, including direct funding to environmental justice communities (SB 535 and AB 1550), a community air quality protection program (AB 617), and another that requires environmental justice to be addressed in local government planning (SB 1000). Additionally, the California Environmental Protection Agency and the Office of Environmental Health Hazard Assessment have developed an online tool, CalEnviroScreen, that identifies communities disproportionately burdened by multiple sources of pollution.

Case Studies

California's San Francisco Bay Area, a region rich in diversity with a long history of social justice and environmental movements, hosts dozens of climate action plan case studies.

As racial justice and structural racism concern rise in the USA, cities are giving more consideration to how their policies and programs result in unequal distribution of benefits and burdens both locally, regionally, and beyond. In the Bay Area, over 96 cities and 7 counties have developed and implemented climate action plans (CARB, 2020). Many of these 103 municipalities mention "equity" or "justice" several times in their plan; however the mere mention says little about whether these plans will reshape communities and spaces to become more inclusive, just, and equitable. In Table 2.1, I briefly review key justice and equity features in seven Bay Area CAP case studies. These case studies were carefully selected to highlight variance in climate action plans throughout the region-variance city demographics, such as diversity, wealth, and CalEnviroScreen score, as well as the variance in justice and equity references in the CAP (from zero to 150+). I categorize a city's CAP into one of two groupings-those that are "symbolic" and those that explicitly center their plans around issues of equity and justice or "equity-centered" plans. I argue that even the CAPs that only symbolically integrate justice may give rise to surprising and innovative models. However, I highlight four Bay Area cities that go beyond the conventional framework in an attempt to reimagine climate action planning.

| City | Year CAP(s) adopted | Symbolic or equity- centered? | # "equity" + "justice" mentions | CalEnviroScreen score ^a | % white ^a | Median household income ^a |
|-------------------|---------------------------|--|---------------------------------------|------------------------------------|-------------------------|--|
| Oakland | 2010, 2020 | Equity- centered | 153 + 26 | 1–90% | 30 | \$68,442 |
| Berkeley | 2009, 2020 | Equity- centered | 2 + 3 | 1–90% | 59 | \$80,912 |
| Menlo Park | 2009, 2020 | Equity- centered | 4 + 1 | 1–10% | 70 | \$147,842 |
| Palo Alto | 2007, 2020 | N/A | 0 + 0 | 1–30% | 60 | \$157,120 |
| East Palo Alto | 2011 | Symbolic | 2+0 | 45-90% | 30 | \$64,794 |
| Moraga | 2012 | N/A | 0+0 | 1-5% | 74 | \$149,781 |
| Piedmont | 2010, 2018 | Symbolic | 2 + 3 | 1–5% | 70 | \$210,889 |

Table 2.1 San Francisco Bay Area case studies that incorporate equity into climate action plans

^aBased on 2018 US Census Data

Equity-Centered Climate Action Plans

Oakland

Northeast of Palo Alto and East Palo Alto is the city of Oakland, the eighth largest city in California and considered the most ethno-racially diverse in the Bay Area. Oakland's first climate action plan, implemented in 2010, had deeply embedded elements of justice. The next CAP, slated to launch in 2020, centers equity and justice at the heart of its planning and implementation. The infusion of equity in Oakland's first CAP can be partially, if not mostly, attributed to a strong crosssectoral coalition of 40 organizations called "The Green Oakland Climate Action Coalition" formed by the Ella Baker Center. In town council meetings after town council meetings where the climate action plan was on the agenda, members from this coalition packed meeting minutes stressing the importance of climate action not just in terms of emissions reductions but also affordable and equitable transportation alternatives, affordable housing, self-reliance including investment in urban agriculture, opportunities for local procurement of energy including Community Choice Aggregation, and more. In a 2010 city council subcommittee meeting on the development of the first CAP, a resident described the "climate change driven gentrification machine," referencing the phenomenon by which neighborhoods become more attractive and expensive given their geographic features that make them more resilient to climate-related threats (Keenan et al., 2018). The new 2020 Climate Action Plan 2.0 has been equally engaged by constituents and community organizations voicing concern for a just transition. For over a decade, the City of Oakland

has, and from what can be understood of the proposed CAP 2.0, will continue to be a leader in equitable city climate action planning.

Berkeley

Just east of Oakland and Piedmont is the City of Berkeley. Home to UC Berkeley and known for its politically progressive politics, it implemented its first CAP in 2009. The city's 187-page inaugural CAP was comprehensive, methodical, and farreaching, as were its planning and engagement efforts that brought it to bear. While the first plan was not centered on equity, the second plan proposed to launch in 2020 aims to "champion and demonstrate social and racial equity" and "be a global leader in addressing climate change, advancing environmental justice, and protecting the environment" (7). Even without equity being at the center of the 2009 CAP, the city was able to leverage the CAP to advance a number of equity-related measures in different sectors, including housing and transportation. For example, Berkeley endorsed a proposed "Reimagining Transportation for a Racially Just Future," citing greenhouse gas emissions and the climate action plan as motivations for pursuing the proposal. Additionally, in an effort to increase housing near transportation, namely, Bay Area Rapid Transit (BART) stations, in 2019 Berkeley became the first city in California to establish zoning standards for transit-oriented development near one of its BART station. In making its decision, it used the climate action plan and other relevant documents, including a commitment to affordable housing.

Menlo Park

As of the writing of this chapter, the most recently legislated CAP in the San Francisco Bay Area is that of the City of Menlo Park, a largely white (70%), affluent community (\$147,842 median household income) located in the South Bay. The city approved its third iteration of a climate action plan on July 14, 2020, and became one of the first cities in the USA to commit to becoming zero-carbon by 2030. The plan prioritizes racial justice, driven at least partially by the city's involvement in the Government Alliance on Race and Equity (GARE). Menlo Park's CAP includes measures to phase out fossil fuel use in homes and buildings throughout the city. Given the demographics of Menlo Park and while the city's rigorous goals are notable, what is most surprising is its lens toward equity. In other >70% white, >\$130,000 median household income cities in the Bay Area, equity did not become enough of a concern to make it into the climate action plan, let alone become a central concern. As noted in Menlo Park's CAP, the timing of its implementation and the COVID-19 pandemic heightened concerns about equity:

The COVID crises has shed a light on the shocking inequity in health outcomes for people of color, some of which can be attributed to well documented racial disparities in exposure to air pollution from fossil fuels. Menlo Park must ask itself whether it wishes to continue contributing to this global and local inequity or whether it can strongly prioritize leadership in solving these interconnected problems. (14)

"Symbolic" Climate Action Plans

East of Palo Alto

Just East of Palo Alto is a much smaller city of around 30,000 that is majority Hispanic, the City of East Palo Alto, East Palo Alto adopted its first CAP in 2011. which outlines "23 steps to actions to addressing our changing climate" (1). The CAP is largely representative of CAPs written during this era-outlining baseline GHG emissions and emissions reductions measures by sector. In this budgetstrapped city, the cost of implementation for various measures was clearly listed as a factor in project implementation. Each program and action had an associated cost and savings section that not only addressed city budgets but also those of their residents and local businesses. While the term "equity" is only referenced twice, a close examination shows deeply embedded thought and consideration to elements of equal access in terms of project implementation. To make climate action recommendations accessible and affordable to everyone in the community, a heavy emphasis was placed on providing information about rebate and incentive programs for which residents might qualify, for example, low-income weatherization rebates from PG&E (36), low-income youth professional development experiences in the sustainable energy sector (38), as well as Multifamily Affordable Solar Housing or "MASH" (41). While a CAP 2.0 has not been implemented yet, the city has had a continued dialogue on issues of climate action through several unique partnerships, including with Stanford University's (n.d.) Future Bay Initiative and associated yearlong class (URBANST 164: Sustainable Cities). The Future Bay Initiative is a research, education, and practice partnership that aims to form new collaborative methods of assessment, problem-solving, and co-production of knowledge alongside cities and communities. The class has collaborated with various government and community organizations within East Palo Alto on issues of climate change and climate action. For example, a 2019 yearlong class project conducted a survey on residents' awareness and knowledge of issues of climate change, with the primary purpose of:

help[ing] the Climate Change Community Team make important decisions on how to best guide their climate adaptation and resilience work in East Palo Alto and further empower the East Palo Alto community with information in an effort to foster equitable environmental justice. (Kohl et al., 2019, 4)

Piedmont

Oakland's climate action plan is juxtaposed to a city that is surrounded on all sides by Oakland—the City of Piedmont. The city is mostly white (70%) and affluent (median household income \$210,889) and passed its first CAP the same year as Oakland's and its second in 2018. The City of Piedmont follows a more traditional framework for GHG reduction goals and strategies. Out of two mentions of "equity" in the 2018 CAP, the second mentions:

Therefore, while manufacturing of goods does not occur within Piedmont's borders, residents have the opportunity to address issues of equity and environmental justice by taking action to reduce consumption based emissions. Along the same lines, actions such as air travel, which contribute significantly to GHG emissions but seem difficult to address individually, can still be addressed through strategies such as purchasing carbon offsets for trips taken. (54)

The reference offers some perspective on how the City of Piedmont perceives its place in environmental and climate justice-in particular through the lens of consumption practices. First, the city has a sense that environmental injustice does not occur within its boundaries and that consequently the most effective means for "taking action" is through purchases. The example of reducing one's carbon footprint through the purchase of carbon offsets when traveling is illustrative of this marketoriented approach. It is a solution catered to high-income individuals that can afford to add an extra expenditure to air travel purchases while not changing the behavior causing emissions. It represents what Takacs (2009, 524) describes as an attempt to "assuage guilty consciences over profligate lifestyles while corporations mine profits from a scheme supposedly meant to save the planet, but actually sustaining hydrocarbon-based capitalism as usual." The complex impacts of carbon offsets on social equity are well-documented (Wittman & Caron, 2009). Such approaches, while well-intentioned, leave many academics, environmentalists, and others skeptical that a just transition is possible within the context of current cultural and political economic circumstances.

Neither Symbolic Nor Equity-Centered Climate Action Plans

The City of Palo Alto

In 2007, the City of Palo Alto became one of the first to adopt a climate action plan in the state. In 2013 and 2017, respectively, Palo Alto was one of the first to offer carbon neutral natural gas and carbon neutral electricity. The proposed 2020 Plan, while ambitious in its GHG reduction goals, does not mention equity or justice even once. The CAP takes a more traditional approach of focusing on key areas, such as energy, mobility, electric vehicles, water, climate adaptation, and outlines associated with strategies and actions in each area. The reduction of overall greenhouse gas emissions could reduce health and other burdens on vulnerable communities, but the Plan itself makes little attempt to link these relationships. On the Plan's website, there is one reference to equity, listed as a co-benefit, along with health and cost of living co-benefits.

Moraga (and Lamorinda Towns)

East of Berkeley are three small suburban towns, Lafayette, Moraga, and Orinda, or "Lamorinda." These three towns are predominately white (80%, 74%, and 72%, respectively) and affluent (\$157,453, \$149,781, \$210,288 median household income, respectively). Only one, Moraga, has implemented a climate action plan. Lafayette has an environmental action plan that was adopted in 2006 and updated in 2011. Orinda conducted a greenhouse gas emissions inventory in 2009 based on 2005 data. However, the city never implemented a CAP. Orinda published a 2017 Hazard Mitigation Plan that states that "The City does not currently have a Climate Action Plan so it is unlikely that Climate Change would be integrated into other sections of the municipal code" (6). The Moraga CAP does not mention equity or justice, and the emissions reductions strategies are largely focused on municipal operations, and not residential or businesses.

Conclusion: New Pathways

Cities and local municipalities across the world are bearing the brunt of responsibility for greenhouse gas reduction and climate action. Their ability to innovate and engage with local stakeholders and issues gives them unique strengths to do so. The proliferation of climate action plans in cities, counties, states, universities, and businesses is itself something of a revolution (Rice, 2010). In California, over 480 cities and 69 counties have implemented climate action plans. Within this revolution is an emergent paradigm shift—a fundamental change in urban climate governance distinguished by the infusion or sometimes even the centering of justice and equity.

My study suggests that the emerging trend of coupling equity and climate action planning offers new pathways for city decision-making and more rapid advancement of carbon reduction goals as well as co-benefits. The transforming of conventional, predetermined responses and practices based on profits and technology to base them on justice instead is being expressed in both subtle and explicit ways. Elements that show potential for challenging the current paradigm may show up subtly: a partnership with a university class (e.g., East Palo Alto) or a planning commission meeting to rezone transit areas so they can be developed into housing (e.g., Berkeley). The case of Berkeley's first climate action plan shows that assessing notions of justice in urban climate action may require a finer grained analysis. The type of analysis that was previously employed in sustainability studies to discover "actually existing sustainability" policies and practices might not explicitly link to the goals of sustainable development, or in this newer case to climate action goals, but has the capacity to fulfill them (see Krueger & Agyeman, 2005). Discovering the actualization of justice in and related to CAPs necessitates a deeper investigation across sectors and beyond the prescribed five-milestone framework. Equity and justice in climate action plans also present themselves much more explicitly, as seen in Oakland, Berkeley, and Menlo Park (as well as San Francisco and Richmond, which were not explored in this chapter). These cities are developing an entirely new model of climate action plans that attempts to center equity throughout planning and implementation.

What is strikingly clear is that a shift to focus more on justice is occurring despite existing irrational conditions and power dynamics. Unsurprisingly, historic "environmental justice" communities, communities most impacted by environmental harms and risks, and, in California, those that score higher on the CalEnviroScreen tool have been and continue to more intentionally integrate equity concerns into their action planning. However, one surprising finding in my study is that even white, affluent cities, such as Menlo Park, with the lowest possible CalEnviroScreen score (1-10%), center their climate action plan on racial justice. As racial justice and structural racism concerns rise in every sector and at every scale, and as laws, such as SB 1000, are employed in California to ensure equal distribution of environmental benefits and hazards, this could indicate a promising shift.

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