WHO DECIDES HOW TO DECARBONIZE? ENVIRONMENTAL JUSTICE AND DEMOCRATIC DECISIONMAKING IN CALIFORNIA CLIMATE REGULATIONS

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INTRODUCTION

In many U.S. states, climate laws and regulations were designed using distinct policy ideologies from those used in traditional environmental laws: Whereas traditional environmental laws typically mandate specific technology changes and pollution reductions at individual facilities,[1] climate laws often rely on the private sector to identify solutions and establish "technology-neutral" incentives to innovate.[2] The quintessential example of the latter framework is a market-based regulatory regime that requires aggregate emission reductions but does not dictate where those reductions come from.[3] California is a recognized leader of such market-based approaches to climate regulation.[4] California's hallmark climate regulations, including the Cap-and-Invest Program (formerly known as Cap-and-Trade)[5] and the Low Carbon Fuel Standard,[6] first set greenhouse gas emission targets and then let the private sector decide which technology solutions to adopt and where to build them.[7]

Despite California's reputation as a climate leader, Environmental Justice (EJ) communities have argued that the state's market-based programs are not actually serving the EJ movement's fundamental goals of liberating communities from the wide-ranging harms of the fossil fuel–

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[1] *See* Richard B. Stewart, *A New Generation of Environmental Regulation?*, 29 CAP. U. L. REV. 21, 21 (2001).

[2] *See* Ann E. Carlson, *Designing Effective Climate Policy: Cap-and-Trade and Complementary Policies*, 49 HARV. J. ON LEGIS. 207, 213–14, 221–22 (2012).

[3] *See id.* at 221.

[4] *See* Nicholas Roy & Dallas Burtraw, *California's Cap-and-Trade Program and Improvements in Local Air Quality*, RESOURCES (Oct. 4, 2023), https://www.resources.org/archives/californias-cap-and-trade-program-and-improvements-in-local-air-quality [https://perma.cc/XXC5-4UND].

[5] *See Cap-and-Invest Program*, CAL. AIR RES. BD., https://ww2.arb.ca.gov/our-work/programs/cap-and-invest-program [https://perma.cc/Z3QL-MU4J]; CAL. AIR RES. BD., OVERVIEW OF ARB EMISSIONS TRADING PROGRAM 1 (2015), https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/guidance/cap_trade_overview.pdf [https://perma.cc/S6NK-PGGP].

[6] *See* CAL. AIR RES. BD., OVERVIEW OF THE LOW CARBON FUEL STANDARD 3 (2025), https://ww2.arb.ca.gov/sites/default/files/2025-11/LCFS%20Basics_post11-20-25_final.pdf [https://perma.cc/RXM7-7C7E].

[7] *See id.* at 41; CAL. AIR RES. BD., OVERVIEW OF ARB EMISSIONS TRADING PROGRAM, *supra* note 5, at 1.

reliant economy.[8] Although the legal and policy literature has engaged with EJ critiques of market-based climate regulation, most of that literature focuses on the distributional impacts of greenhouse gas emissions mitigation and on approaches for achieving more "equitable" pollution burdens.[9] This Essay, however, argues that market-based approaches to climate regulation, as embodied in California, are at odds with EJ for a more fundamental reason: their deprioritization of democratic decisionmaking processes.

This Essay posits that many policy questions decided in climate regulatory processes are questions that would benefit from robust community input, including questions about what types of new technologies to deploy and where to build them. Those questions are as value-laden as they are technical, and by placing them primarily in the hands of regulators and the private sector, California has missed opportunities to strengthen the legitimacy of its regulatory institutions and build climate solutions with community buy-in. The implications of this Essay's analysis are relevant not only to California but to all governments considering how to structure climate regulations.

This Essay draws lessons from the author's experience as a legal fellow at Communities for a Better Environment, a community-based organization that supports organizing and litigation to reduce environmental hazards in California EJ communities. Part I of the Essay introduces the EJ movement through the example of one EJ community — Richmond, California — home to one of the state's biggest oil refineries. Part II places the EJ movement's goals within the context of legal scholarship about regulatory law and describes the various ideals that administrative processes can be designed to serve, arguing that the democratic process ideal is important and undervalued. Part III describes the frameworks that the EJ movement has offered for addressing climate change, examines California's climate regulations, and argues that the values underpinning those regulations conflict with the EJ movement's vision of climate justice. Part IV looks closely at a recent regulatory proceeding for one of California's climate regulations,

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[8] *See, e.g.*, *Justice Deferred: A Break Down of California's Cap & Trade Bill from the Environmental Justice Perspective*, CAL. ENV'T JUST. ALL. (July 25, 2017), https://web.archive.org/web/20251118162109/https:/ceja.org/2017/07/justice-deferred-a-break-down-of-californias-cap-trade-bill-from-the-environmental-justice-perspective [https://perma.cc/DZH5-GQLM].

[9] *See, e.g.*, Jeff Todd, *Climate Cap and Trade and Pollution Hot Spots: An Economics Perspective*, 39 GA. ST. U. L. REV. 1003, 1006 (2023) ("Many environmental justice scholars and advocates, however, oppose cap and trade because of concerns over hot spots: they worry that firms will buy or trade for permits to concentrate their activities at the dirtiest plants, thus perpetuating, or even exacerbating, the release of harmful co-pollutants in disadvantaged communities."); Joseph Lam, *Coupling Environmental Justice with Carbon Trading*, SUSTAINABLE DEV. L. & POL'Y, Winter 2012, at 40, 40 (arguing for enhanced focus on EJ communities in cap-and-trade programs); Danae Hernandez-Cortes & Kyle C. Meng, *Do Environmental Markets Cause Environmental Injustice? Evidence from California's Carbon Market*, J. PUB. ECON., January 2023, art. 104786, at 1, 15 (examining effects of cap-and-trade on EJ communities).

illustrating what is lost when a regulation is designed to prioritize market-based decisionmaking rather than democratic decisionmaking.

I. RICHMOND, CALIFORNIA: A WINDOW INTO THE ENVIRONMENTAL JUSTICE MOVEMENT

Richmond, a working-class city in the eastern San Francisco Bay Area, holds a deep legacy of environmental injustice.[10] Richmond is one of the most diverse cities in the country, and its residents are predominantly people of color, including Black, Latinx, Asian, and Native American residents.[11] A large portion of Richmond's population is made up of foreign-born and working-class families.[12] It is also home to the Chevron Richmond oil refinery, a century-old refinery that is the second-largest emitter of greenhouse gases in California.[13] The refinery, which converts crude oil into products such as gasoline, diesel, and jet fuel,[14] provides a large share of the Bay Area's transportation fuels.[15] That refining process, which powers the area's transportation sector, also releases greenhouse gases and a variety of health-harming air pollutants.[16] The Chevron refinery is Richmond's single largest source of fine particulate matter ($PM_{2.5}$), a pollutant that contributes to cancer, stroke, heart attack, and respiratory diseases.[17] Overall, residents living

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[10] *See Richmond*, CMTYS. FOR BETTER ENV'T, https://www.cbecal.org/community-organizing/richmond [https://perma.cc/D8GR-ARG5]; Jacob Soiffer, *Emergence of Environmental Justice in Richmond*, FOUNDSF (2015), https://www.foundsf.org/Emergence_of_Environmental_Justice_in_Richmond [https://perma.cc/6NVT-XB6P].

[11] *See* Denis Perez-Bravo, *Richmond Ranked Most Diverse City in the U.S.*, CONTRA COSTA PULSE (Sep. 30, 2021, at 12:59 ET), https://ccpulse.org/2021/09/30/richmond-ranked-most-diverse-city-in-the-u-s [https://perma.cc/33KY-FEMD]; CITY OF RICHMOND CMTY. DEV. DEP'T, CITY FACTS, (July 18, 2025), https://www.ci.richmond.ca.us/DocumentCenter/View/8348/COR-Fact-Sheet [https://perma.cc/8DNS-ETUS].

[12] *See* CITY OF RICHMOND CMTY. DEV. DEP'T, *supra* note 11.

[13] *2023 Greenhouse Gas Emissions from Large Facilities*, EPA (Aug. 16, 2024), https://ghgdata.epa.gov/flight/?viewType=list [https://perma.cc/5LQP-THX7] (filter by "CA"; then sort descending by "Total Reported Emissions"); Soiffer, *supra* note 10.

[14] *The Refining Process*, CHEVRON, https://richmond.chevron.com/our-businesses/the-refining-process [https://perma.cc/3UNR-GBDX].

[15] *See* QUENTIN GEE, ARIA BERLINER & ALEXANDER WONG, CAL. ENERGY COMM'N, TRANSPORTATION FUELS ASSESSMENT 15 (2024), https://www.energy.ca.gov/publications/2024/transportation-fuels-assessment-policy-options-reliable-supply-affordable-and [https://perma.cc/UKN5-XHRH].

[16] *See* KAREN RIVELES & ALYSSA NAGAI, OFF. OF ENV'T HEALTH HAZARD ASSESSMENT & CAL. EPA, ANALYSIS OF REFINERY CHEMICAL EMISSIONS AND HEALTH EFFECTS 3–5, 8 (2019), https://oehha.ca.gov/sites/default/files/media/downloads/faqs/refinerychemicalsreport032019.pdf [https://perma.cc/VHG5-KWMV].

[17] *Fast Facts About Air Pollution*, BAY AREA AIR QUAL. MGMT. DIST., https://www.baaqmd.gov/~/media/files/ab617-community-health/richmond/richmond-ptca-cerp-plan/fast-facts-about-pollution-flyer-pdf.pdf [https://perma.cc/SV5A-HBBX].

near the Chevron refinery face some of the highest air pollution levels in the state[18] and fall in the highest state percentiles for asthma.[19]

In Richmond and the broader Bay Area, patterns of exposure to fossil fuel pollution are interwoven with the region's racial history. In the neighborhoods immediately downwind of the Richmond refinery, over ninety-five percent of residents are people of color.[20] As a result, people of color, particularly Black and Latinx households, disproportionately bear the pollution burden of the refinery.[21] Those inequities are the direct results of discriminatory government policies: During World War II, thousands of Black workers moved to the area to work at the Richmond shipyards,[22] and the federal government built segregated public housing for these workers, placing Black households in lower quality housing close to industrial sites like the refinery.[23] Segregationist housing policies that continued after the war further embedded patterns of higher pollution exposures in Black, Latinx, and Asian neighborhoods, which persist in the Bay Area today.[24]

Richmond's experience is mirrored in many EJ communities throughout California and the United States. Redlining and other forms of institutionalized racism have steered people of color into living close to polluting facilities,[25] and nationwide, people of color face higher exposure to air pollution than white people, a pattern that extends across income categories and geographic regions.[26] For as long as the country's

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[18] *Id.*

[19] *See CalEnviroScreen 4.0*, OFF. OF ENV'T HEALTH HAZARD ASSESSMENT, https://experience.arcgis.com/experience/11d2f52282a54ceebcac7428e6184203/page/CalEnviroScreen-4_0 [https://perma.cc/NQ4S-DYKG] (displaying information on two neighborhoods directly downwind of the refinery, North Richmond (census tract 6013365002) and Iron Triangle (census tracts 6013377000, 6013376000)).

[20] *See id.*

[21] Alfredo Angulo et al., *Taking Stock: Visioning Beyond the Refinery*, OTHERING & BELONGING INST. (Aug. 31, 2022), https://belonging.berkeley.edu/taking-stock-visioning-beyond-refinery [https://perma.cc/UT7J-WJTL]; Res. No. 18-21 (2021) (Council of the City of Richmond), at 1, https://www.ci.richmond.ca.us/ArchiveCenter/ViewFile/Item/10939 [https://perma.cc/JX7A-NKH5].

[22] Joe Purtell, *Tree by Tree, A Community Works to Reverse Its Racist Housing Legacy*, MOTHER JONES (Aug. 17, 2021), https://www.motherjones.com/environment/2021/08/redlined-city-striving-green-itself-groundwork-richmond-california-trees-environmental-justice-black-brown [https://perma.cc/YR6G-JWQK].

[23] *See id.*; Soiffer, *supra* note 10; Jane Kay & Cheryl Katz, *Pollution, Poverty, and People of Color: Factory on the Hill*, ENV'T HEALTH NEWS (June 4, 2012), https://www.ehn.org/pollution-poverty-richmond [https://perma.cc/ZB6E-SDZU].

[24] *See* Purtell, *supra* note 22; Angulo et al., *supra* note 21; *Richmond: Wartime Work and Unfair Housing*, HABITAT FOR HUMAN. EAST BAY/SILICON VALLEY (May 4, 2023), https://www.habitatebsv.org/blog/richmond-fair-housing-history [https://perma.cc/K7PB-CZUG].

[25] *See* Purtell, *supra* note 22.

[26] Christopher W. Tessum et al., *$PM_{2.5}$ Polluters Disproportionately and Systemically Affect People of Color in the United States*, SCI. ADVANCES, Apr. 30, 2021, art. eabf4491, at 1, 3.

economy has been powered by fossil fuels, communities of color have been forced to shoulder the pollution burden of fossil fuel infrastructure.[27]

EJ communities also face power disadvantages relative to the polluting industries impacting their health. Industrial facilities tend to locate near low-income and non-white neighborhoods where they expect to encounter less political resistance and scrutiny,[28] and they often use their economic and political resources to minimize regulatory obligations. Richmond is a textbook example of that dynamic: Taxes and fee payments from Chevron comprise nearly twenty-five percent of Richmond's General Fund, and many local jobs rely on the refinery.[29] The refinery's local economic significance and political influence have helped it avoid making costly changes to reduce and remediate pollution.[30]

The EJ movement developed in response to the disproportionate impacts of environmental pollution on communities of color and poor communities, and in recognition of the need for communities to build political power to protect themselves from pollution.[31] In Richmond, a longtime locus for EJ activism, several community-based organizations have worked since the 1980s to protect residents from harmful emissions from the refinery and other polluting sites nearby.[32] Among them are Communities for a Better Environment and the Asian Pacific Environmental Network, which are focused on holding the Chevron refinery accountable for its local and global pollution impacts and on building an economic future for Richmond beyond the refinery.[33]

EJ activism solidified into a nationwide movement in the 1980s and 1990s when grassroots advocates gathered at the People of Color Environmental Leadership Summit and elaborated a common vision and set of principles, known as the "Principles of Environmental Justice."[34] Although EJ advocates have built nationwide coalitions to advance shared goals, most EJ advocacy occurs through local, community-based

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[27] *See* Timothy Q. Donaghy et al., *Fossil Fuel Racism in the United States: How Phasing Out Coal, Oil, and Gas Can Protect Communities*, ENERGY RSCH. & SOC. SCI., June 2023, art. 103104, at 1.

[28] *See* Don Grant et al., *Bringing the Polluters Back In: Environmental Inequality and the Organization of Chemical Production*, 75 AM. SOCIO. REV. 479, 485 (2010).

[29] *See* Angulo et al., *supra* note 21.

[30] *See id.*

[31] *See* Esme G. Murdock, *A History of Environmental Justice: Foundations, Narratives, and Perspectives*, *in* ENVIRONMENTAL JUSTICE 6, 7–8 (Brendan Coolsaet ed., 2021).

[32] Soiffer, *supra* note 10.

[33] *See* Will McCarthy, *California City's $550m Deal with Chevron Could Be a National Model for Environmentalists*, POLITICO (Sep. 3, 2024, at 05:00 ET), https://www.politico.com/news/2024/09/03/richmond-california-chevron-oil-00176922 [https://perma.cc/T5AB-BGLE].

[34] *See The Principles of Environmental Justice*, Oct. 27, 1991, https://climatejusticealliance.org/ej-principles [https://perma.cc/B7HQ-6VMS]; *cf.* Richard Toshiyuki Drury et al., *Pollution Trading and Environmental Injustice: Los Angeles' Failed Experiment in Air Quality Policy*, 9 DUKE ENV'T L. & POL'Y F. 231, 271 (1999) (noting that the EJ movement was self-named in the 1980s, but that it came out of a longer tradition of disenfranchised groups organizing to redress hazardous living and working conditions).

organizations focused on local pollution.[35] The EJ movement, in contrast to the mainstream environmental movement, is largely rooted in local organizing against environmental hazards, with an underlying mission to secure liberation from institutions and power structures that have caused destruction to land and communities.[36] In California, EJ organizations have built significant political power at state and local levels and have formed strong coalitions that target the harmful impacts of the fossil fuel industry.[37]

II. THE NORMATIVE IDEALS OF REGULATORY LAW

As part of their efforts toward achieving greater power in decisionmaking, EJ organizations demand a deeper role for democratic participation in regulatory proceedings. The EJ movement's critiques of regulatory processes implicitly invoke normative views about how administrative law should be structured to address social problems. This Part places the participatory goals of the EJ movement in the context of scholarly debates about regulatory decisionmaking by describing a typology of normative ideals underlying debates about regulatory law. The EJ movement's critiques find resonance in the administrative law literature, where some scholars have argued that the democratic process ideal is important and underserved.

The modern administrative process is subject to perpetual concerns about its legitimacy.[38] Administrative processes have less built-in political accountability compared to legislative processes and are often complex, opaque, and difficult for members of the public to engage in.[39] As a result, administrative processes are criticized by observers across the political spectrum as illegitimately wielding "substantial public power"[40] and leading to potentially "unlawful, unsound, or undemocratic" decisions.[41] That legitimacy critique closely relates to EJ concerns that administrative decisionmaking tends to serve the interests of the most powerful and well-resourced private parties, including fossil fuel corporations, while deterring affected community members from participation.

In sorting through the morass of critiques and proposals to reform administrative law, legal scholars have identified various ideals that

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[35] *See, e.g.*, CLIMATE JUST. ALL., https://climatejusticealliance.org [https://perma.cc/MD7T-TS3L].

[36] *See The Principles of Environmental Justice*, *supra* note 34.

[37] *See, e.g.*, Jonathan K. London, *Defying Gravity: Environmental Justice Rises in California's Capital City*, 27 INT'L J. JUST. & SUSTAINABILITY 554, 555 (2022); TRACY E. PERKINS, EVOLUTION OF A MOVEMENT: FOUR DECADES OF CALIFORNIA ENVIRONMENTAL JUSTICE ACTIVISM 161 (2022).

[38] David Arkush, Essay, *Democracy and Administrative Legitimacy*, 47 WAKE FOREST L. REV. 611, 611 (2012).

[39] *See id.* at 611–12.

[40] Thomas O. Sargentich, *The Reform of the American Administrative Process: The Contemporary Debate*, 1984 WIS. L. REV. 385, 393.

[41] Arkush, *supra* note 38, at 612.

could improve the legitimacy and effectiveness of administrative processes by modeling "how a well-regulated, legitimate, and rationally-functioning administrative process should operate."[42] The foundational typology comes from Professor Thomas Sargentich, who argues that debates about administrative law form are conceptually underpinned by three ideals: the public purposes ideal, the democratic process ideal, and the rule of law ideal.[43]

The public purposes ideal frames the administrative process's chief purpose as achieving "sound public policy,"[44] or, in other words, policy that effectively and efficiently achieves valued public ends.[45] The *expert agency model* is a powerful representation of this ideal. Under the expert agency model, agency discretion is justified by officials using their expertise to make sound public policy decisions, particularly when there is some objective or rational way to guide and evaluate those decisions, such as cost-benefit analysis.[46] The agency is a legitimate decisionmaker — despite its lack of political accountability — because of its capacity to determine the objectively correct or effective policy solution.

An alternative representation of the public purposes ideal is agency deference to the private market (the "market-based model"[47]). In Sargentich's telling, proponents of the public purposes ideal, who recognize the practical difficulties in achieving sound public policy through agency action alone, look to the private market to achieve the same purposes.[48] Under the market-based model, market forces motivate actors to make rational decisions, and (in the absence of market failures) those rational decisions aggregate together to embody the public interest.[49] Because the private market can achieve outcomes consistent with the public interest, the administrative process should harness rather than hinder that decisionmaking process.[50] Proponents of this viewpoint advocate for market-based approaches to regulating pollution, which correct for externalities (where polluters do not internalize the full social costs of their pollution), but otherwise look to private markets to determine how to reduce pollution.[51]

The democratic process ideal, by contrast, articulates the "chief function" of the administrative process as representing the "views of

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[42] Sargentich, *supra* note 40, at 393.

[43] *Id.* at 392–93; *see also* Gerald E. Frug, *The Ideology of Bureaucracy in American Law*, 97 HARV. L. REV. 1276, 1281–84 (1984). The rule of law ideal, which is associated with legal formalism, is not discussed here because it does not play an important role in the relevant debates about environmental regulation.

[44] Arkush, *supra* note 38, at 615.

[45] *See* Sargentich, *supra* note 40, at 411.

[46] *See* Arkush, *supra* note 38, at 616.

[47] Sargentich, *supra* note 40, at 420.

[48] *See id.* at 419.

[49] *See id.* at 419–20.

[50] *See id.* at 420.

[51] *See id.* at 420–21.

interested members of the public."[52] That function is achieved by decisionmaking processes with high levels of public participation, where officials are accountable for considering the views of affected groups.[53] Although the agency retains discretion, that discretion is legitimized by public accountability.[54]

The democratic process ideal has held increasing academic relevance in recent decades as scholars have directed attention to democratic decisionmaking within administrative processes.[55] Concepts such as "deliberative democracy," "administrative democracy," and "new governance" offer innovative ideas for broadening and enhancing public participation in government decisionmaking processes.[56] Meanwhile, scholars have argued that the democratic process ideal remains underserved in administrative law.[57] Professor David Arkush points to widespread perceptions that regulatory agencies are "captured" by the industries they regulate and that, even where agencies are not captured per se, regulated industries and their interests tend to dominate the regulatory process.[58] In Arkush's telling, redesigning administrative processes to account for the input of a wider range of interest groups could enhance their legitimacy.[59]

Additionally, Professor Mariano-Florentino Cuéllar argues that although "prevailing wisdom" prioritizes the role of technical experts in regulatory decisionmaking, empirical evidence suggests that there is value in broader public involvement.[60] He examines notice-and-comment submissions for a set of sample rulemakings and observes that comments from the "lay public" often comprise the vast majority of comments, that "laypeople nearly always raise concerns that are relevant to the agency's legal mandate," and that comments from more technically sophisticated interest groups do not always capture the "range of concerns" that members of the public raise.[61] He argues that laypeople have greater interest in rulemakings than scholars tend to assume, although their contributions are often discounted by agency staff who tend to look for sophistication in public comments.[62] These scholars thus articulate a basis for taking the democratic process ideal more seriously in the design of regulatory law.

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[52] *Id.* at 425–26.
[53] *Id.* at 425.
[54] *See* Arkush, *supra* note 38, at 620–21.
[55] *See* Shelley Welton, *Grasping for Energy Democracy*, 116 MICH. L. REV. 581, 623 (2018).
[56] *Id.* at 623–24.
[57] *See, e.g.*, Arkush, *supra* note 38, at 622.
[58] *Id.*
[59] *Id.* at 625.
[60] Mariano-Florentino Cuéllar, *Rethinking Regulatory Democracy*, 57 ADMIN. L. REV. 411, 415–16 (2005).
[61] *Id.* at 414–15.
[62] *See id.*

III. THE SHAPING OF CALIFORNIA CLIMATE REGULATIONS

A. Environmental Justice Frameworks to Address Climate Change

The democratic process ideal is resonant with the EJ movement's emphasis on enhancing public participation in administrative processes, both through the development of resources that help community members participate in administrative proceedings and through advocacy efforts that demand greater opportunities for participation and deeper consideration of public input in decisionmaking.

The EJ movement's proposed solutions to the climate crisis differ in important ways from the predominant policy approaches that have been implemented at national, state, and local levels. EJ coalitions such as the Climate Justice Alliance[63] and the Energy Democracy Project[64] have coalesced around several "framework[s] for change," which are broad but precisely described visions for how the transition away from a fossil fuel–reliant economy should happen.[65] These frameworks guide the specific climate advocacy work of many EJ organizations, including those in Richmond and across California that advocate for ending reliance on petroleum.

The first relevant framework is the "just transition" framework, a vision of transitioning away from extractive economic and energy systems toward a "regenerative economy" that "redistribute[s] resources and power to local communities."[66] The just transition framework calls for "strategies that democratize, decentralize, and diversify economic activity," so that communities and workers can gain greater control over the energy system that shapes their daily lives, instead of relying on climate solutions that reinforce the same power dynamics that created the existing energy system.[67] A second, interrelated framework is "energy democracy," which proffers that the transition off carbon-emitting energy sources cannot be a merely technological task; instead, it requires developing new models for producing and distributing energy that enhance the control of local communities (particularly low-income communities and communities of color) over clean energy generation and distribution.[68]

A fundamental component of those frameworks is community control over decisionmaking. In the just transition worldview, climate change is enabled by concentration of resources and power and by

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[63] CLIMATE JUST. ALL., *supra* note 35.

[64] ENERGY DEMOCRACY PROJECT, https://energydemocracy.us [https://perma.cc/YAB6-KUM8].

[65] *See Just Transition: A Framework for Change*, CLIMATE JUST. ALL., https://climatejusticealliance.org/just-transition-2 [https://perma.cc/94EX-LZP5].

[66] *Id.*

[67] *Just Transition*, MOVEMENT GENERATION, https://movementgeneration.org/justtransition [https://perma.cc/J2LJ-88GB] (emphasis omitted).

[68] *See, e.g.*, *About*, ENERGY DEMOCRACY PROJECT, https://energydemocracy.us/about [https://perma.cc/HU88-T6B3].

government structures that protect powerful entities at the expense of the broader public and the planet.[69] Expanding democratic decisionmaking is both a strategy and a goal of just transition: It is a mechanism for redistributing power, underpinned by the belief that decentralized decisionmaking will achieve a healthier and safer environment for communities and workers.[70] The just transition vision of democracy is expansive: The ideal governance approach is a "deep democracy," where "people are in control of the decisions that affect their daily lives; from where they work to how they collectively manage shared resources across scales."[71] EJ organizations put the frameworks into practice through a variety of strategies, and because environmental and climate problems are often managed through regulatory processes, promoting democratic participation in administrative proceedings is an important component of EJ work.[72]

B. California's Climate Approach

California's approach to regulating greenhouse gases, by contrast, has been shaped overwhelmingly by the public purposes ideal, whereby the primary goal has been to develop policies that most efficiently mitigate climate-warming emissions. As a result, it is not responsive to the values of the EJ movement, despite the steadfast involvement of EJ advocates in the development of California's climate laws and regulations. Importantly, the values of democratic decisionmaking have been deprioritized in debates about how to structure climate regulations.[73]

California climate law reflects the influence of market-based policy ideologies.[74] California's foundational climate statute is the 2006 Global Warming Solutions Act[75] (commonly referred to as "AB 32"), which has a broad, straightforward structure: It sets a target of reducing the state's

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[69] *See* MOVEMENT GENERATION, FROM BANKS AND TANKS TO COOPERATION AND CARING: A STRATEGIC FRAMEWORK FOR A JUST TRANSITION 7–8 (2017), https://movementgeneration.org/wp-content/uploads/2016/11/JT_booklet_Eng_printspreads.pdf [https://perma.cc/FB2A-7PUE].

[70] *See id.* at 16–17.

[71] *Id.* at 18.

[72] *See generally* Scott Kuhn, *Expanding Public Participation Is Essential to Environmental Justice and the Democratic Decisionmaking Process*, 25 ECOLOGY L.Q. 647 (1999) (discussing the importance of public participation for achieving EJ goals).

[73] Some early legal scholar proponents of market-based approaches to environmental regulation in fact argued that those approaches would increase democratic accountability because they would draw public attention to high-level policy questions such as what overall emissions caps should be. *See, e.g.*, Bruce A. Ackerman & Richard B. Stewart, *Reforming Environmental Law: The Democratic Case for Market Incentives*, 13 COLUM. J. ENV'T L. 171, 189 (1988). That theory, however, was critiqued by others as being untrue in practice. *See, e.g.*, Lisa Heinzerling, *Selling Pollution, Forcing Democracy*, 14 STAN. ENV'T L.J. 300, 311–12 (1995).

[74] *See, e.g.*, Lam, *supra* note 9, at 40; Alice Kaswan, *A Broader Vision for Climate Policy: Lessons from California*, 9 SAN DIEGO J. CLIMATE & ENERGY L. 83, 92 (2017–2018).

[75] California Global Warming Solutions Act of 2006, ch. 488, 2006 Cal. Stat. 3419 (codified as amended at CAL. HEALTH & SAFETY CODE §§ 38500–38599 (West 2006)).

greenhouse gas emissions down to 1990 levels by 2020 (later updated to forty percent below 1990 levels by 2030[76]) and directs the California Air Resources Board (CARB) to develop policy mechanisms to achieve that target.[77] AB 32 gives CARB authority to "adopt rules and regulations . . . to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions."[78] When AB 32 was enacted, the Governor and state legislature intended to create a pollution trading program for greenhouse gases, but that was not explicitly incorporated into the statute due to resistance from EJ groups.[79] Instead, AB 32 states that CARB "may" employ "market-based compliance mechanisms," so long as it considers their "potential for direct, indirect, and cumulative emission impacts . . . including localized impacts in communities that are already adversely impacted by air pollution."[80]

Pursuant to its authority under AB 32, CARB runs California's two largest and most consequential climate regulations: the Cap-and-Invest Program and the Low Carbon Fuel Standard (LCFS). Each takes a market-based approach to reducing greenhouse gas emissions. The Cap-and-Invest Program sets a statewide, declining cap on greenhouse gas emissions and issues emission credits commensurate with that cap.[81] It requires regulated sources (such as refineries, electricity generators, and industrial manufacturers) to procure credits equivalent to their emissions.[82] The LCFS, which applies specifically to fuels used in the transportation sector, sets a declining "carbon intensity" target for transportation fuels and requires fuel producers to procure credits to ensure that the overall carbon intensity of fuels used in California meets that target.[83] Both programs set statewide goals and incentivize polluters to reduce emissions, but allow the private sector to determine exactly how to reduce emissions.[84]

EJ advocates' opposition to market-based climate regulations has been a topic of scholarly and political debate since AB 32's enactment, but even that debate has existed primarily within the confines of the public purposes ideal. The main debate has been whether California's market-based regulations exacerbate the distributional inequities of

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[76] Act of Sep. 8, 2016, ch. 249, § 2, 2016 Cal. Stat. 2572, 2573 (codified at CAL. HEALTH & SAFETY CODE § 38566.

[77] CAL. HEALTH & SAFETY CODE §§ 38550, 38560.

[78] *Id.* § 38560.

[79] Kaswan, *supra* note 74, at 91–92.

[80] CAL. HEALTH & SAFETY CODE § 38570 (West 2006). AB 398, passed in 2017, explicitly authorizes a pollution trading program. Act of July 25, 2017, ch. 135, 2017 Cal. Stat. 1927.

[81] *Cap-and-Invest Program: About*, CAL. AIR RES. BD., https://ww2.arb.ca.gov/our-work/programs/cap-and-invest-program/about [https://perma.cc/T6WW-KCYT].

[82] *See California Cap and Trade*, CTR. FOR CLIMATE & ENERGY SOLS., https://www.c2es.org/content/california-cap-and-trade [https://perma.cc/8GA4-CH87].

[83] *See Low Carbon Fuel Standard: About*, CAL. AIR RES. BD., https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/about [https://perma.cc/JT53-YGJA].

[84] *Id.*; *Cap-and-Invest Program: About*, *supra* note 81.

pollution by incentivizing companies to concentrate emissions at their most polluting facilities (that are most expensive to clean up), thus causing pollution to increase in already-burdened communities.[85] That concern has led to the adoption of companion policies that work alongside market-based programs and target pollution mitigation in overburdened communities.[86] For example, when the Cap-and-Invest Program was authorized by statute in 2017,[87] a companion bill called AB 617 purported to address EJ concerns by requiring improved pollution monitoring and the establishment of plans to address cumulative pollution burdens in heavily polluted areas.[88] Additionally, a portion of the funds that the Cap-and-Invest Program raises through sales of pollution credits must be used to benefit "disadvantaged communities."[89]

The scholarly debate, however, has not accurately diagnosed EJ advocates' fundamental critiques of market-based regulation, and as a result, the solutions often miss their mark. Inequitable distributional impacts are only symptoms of a greater problem. More fundamentally, California's market-based regulatory regime is inapposite to the values and goals of the EJ movement, which are rooted in the need for community control over decisionmaking. California's market-based regulations, in contrast, look to the private sector to determine how and where to reduce emissions. The California EJ movement has thus largely regarded scholars' and policymakers' preferred solutions (including AB 617 and expenditure of Cap-and-Invest funds in disadvantaged communities) as inadequate.[90]

One feature of California's climate laws that does serve the democratic process ideal is AB 32's creation of an Environmental Justice Advisory Committee (EJAC), a group that consists of representatives from EJ communities across the state that provide input to CARB on rulemakings.[91] But, as the following Part explains, the EJAC's input is not always successfully incorporated into decisions about California's market-based programs.

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[85] *See* Todd, *supra* note 9, at 1014–21.

[86] *See* Lam, *supra* note 9, at 41.

[87] Act of July 25, 2017, ch. 135, 2017 Cal. Stat. 1927.

[88] Act of July 26, 2017, ch. 136, 2017 Cal. Stat. 1943.

[89] CAL. HEALTH & SAFETY CODE § 39711 (West 2025).

[90] *See, e.g.*, Naveena Sadasivam, *A California Law Gave the People Power to Cut Pollution. Why Isn't It Working?*, GRIST (Oct. 21, 2021), https://grist.org/equity/ab617-richmond-california-chevron-refinery-air-monitoring [https://perma.cc/BR8Q-FSUH].

[91] *Environmental Justice Advisory Committee*, CAL. AIR RES. BD., https://ww2.arb.ca.gov/environmental-justice-advisory-committee [https://perma.cc/57NR-PEB7].

IV. WHAT HAPPENS WHEN THE DEMOCRATIC PROCESS IDEAL IS IGNORED?

Although many EJ advocates have opposed California's market-based climate framework since its creation,[92] they nevertheless participate in state regulatory processes to try to influence agency decisionmaking.[93] This Part examines an important recent example of EJ advocacy in a state regulatory proceeding — the 2024 regulatory updates to the LCFS — as an experience that illustrates how California's reliance on market-based regulation leads to the marginalization of community voices in decisions that are well within the public's competence to weigh in on.[94]

The 2024 updates to the LCFS program generated significant public controversy and debate about the future of the transportation sector, and many EJ organizations asked for regulatory reform to ensure that the LCFS would incentivize sustainable technology solutions that would provide real benefits to overburdened communities.[95] A central topic of controversy in the regulatory proceeding was the role of biofuels in California's transportation sector.[96] Biofuels, made from renewable feedstocks such as corn and soybean oil, are liquid fuels that can be combusted in vehicle engines and can thus be substituted for their petroleum counterparts.[97] Because LCFS credits are based solely on fuels' carbon intensity, and because CARB generally considers biofuels to have lower carbon intensity than petroleum fuels,[98] the LCFS awards program credits to their producers and thereby incentivizes their use.[99] That incentive structure, combined with a cheap supply of biofuel

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[92] *See* Kaswan, *supra* note 74, at 90.

[93] *See, e.g.*, Blanca Begert, *Growing Tensions with Air Regulator Lead Top California Environmental Justice Advisor to Resign*, INSIDE CLIMATE NEWS (Nov. 21, 2025), https://insideclimatenews.org/news/21112025/california-air-resources-board-environmental-justice-resignation [https://perma.cc/5E98-58SR].

[94] This is just one of many regulatory climate proceedings in which EJ advocates have perceived that community contributions are devalued. *See, e.g.*, *id.*; DEBORAH BEHLES ET AL., CAL. ENV'T JUST. ALL., LESSONS FROM CALIFORNIA'S COMMUNITY EMISSIONS REDUCTION PLANS: AB 617'S FLAWED IMPLEMENTATION MUST NOT BE REPEATED 13 (2021), https://web.archive.org/web/20251015232033/https://ceja.org/wp-content/uploads/2021/05/CEJA_AB617_r4-2.pdf [https://perma.cc/2AGX-EUNH].

[95] Env't Just., Env't & Cmty.-Based Advocs., Comment Letter on Proposed Low Carbon Fuel Standard Amendments 3–5 (Feb. 20, 2024), https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/7072-lcfs2024-BmVTOl0uVHUBYglq.pdf [https://perma.cc/R2S4-CPA8] [hereinafter EJ Advocate Comments].

[96] *See* Alejandro Lazo, *California Enacts New Climate Rules — Which Could Boost Gas Prices*, CALMATTERS (Nov. 8, 2024), https://calmatters.org/environment/climate-change/2024/11/california-fuels-standard-gas-prices-climate-change [https://perma.cc/GLW7-NQYR].

[97] Ayhan Demirbas, *Biofuels Sources, Biofuel Policy, Biofuel Economy and Global Biofuel Projections*, 49 ENERGY CONVERSION & MGMT. 2106, 2106 (2008).

[98] *See LCFS Pathway Certified Carbon Intensities*, CAL. AIR RES. BD., https://web.archive.org/web/20260104110446/https://ww2.arb.ca.gov/resources/documents/lcfs-pathway-certified-carbon-intensities [https://perma.cc/L9AX-34UC].

[99] *See* CAL. AIR RES. BD., *supra* note 6, at 27.

feedstocks, has created a rapidly growing biofuel market in California's transportation sector, and biofuels already outpace petroleum diesel as the main fuel source for trucks and trains.[100] Increased reliance on biofuels benefits feedstock producers as well as California oil refineries, which can earn LCFS credits for refining biofuel feedstocks instead of petroleum.[101]

California's growing reliance on biofuels, however, creates problems. First, increased cultivation of biofuel crops like soybeans causes deforestation and threatens food systems.[102] Second, biofuels create a new revenue stream for oil refineries, which may extend their lives and delay the phasedown of refinery pollution in overburdened communities like Richmond.[103] Third, a relatively cheap supply of biofuels can crowd out incentives to invest in more durable climate solutions, including electric vehicles and other clean transit technologies.[104] The LCFS, which merely sets carbon intensity standards and then allows the private sector to figure out what fuels to produce, does not naturally account for or address those problems. As a result, the LCFS does not provide the public an opportunity to weigh in on the amounts of biofuels that are desirable in the transition away from fossil fuels.

EJ organizations, concerned about the harmful local and global impacts of biofuels, have advocated for limits on the use of biofuels in California and redirection of LCFS incentives to zero-emission transit technologies.[105] Richmond-based advocates, and advocates in refinery communities across California, have been particularly vocal about the drawbacks of incentivizing biofuels because increased biofuel processing at oil refineries threatens to exacerbate air pollution in those

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[100] Aaron Smith, *Petroleum Diesel Is Disappearing from California*, ENERGY INST. AT HAAS: ENERGY INST. BLOG (Oct. 2, 2023), https://energyathaas.wordpress.com/2023/10/02/petroleum-diesel-is-disappearing-from-california [https://perma.cc/DY7R-FC59].

[101] Jeremy Martin, *Everything You Wanted to Know About Biodiesel and Renewable Diesel. Charts and Graphs Included*, UNION OF CONCERNED SCIENTISTS: THE EQUATION (Jan. 10, 2024, at 10:27 ET), https://blog.ucsusa.org/jeremy-martin/all-about-biodiesel-and-renewable-diesel [https://perma.cc/R4CX-PHXW].

[102] Colin Murphy & Daniel Sperling, Opinion, *How a California Climate Win Could End Up Destroying Rainforests — And What to Do About It*, L.A. TIMES (Mar. 14, 2024, at 03:00 PT), https://www.latimes.com/opinion/story/2024-03-14/california-climate-change-environment-diesel-biomass-low-carbon-fuel-standard [https://perma.cc/BAQ4-HYGA].

[103] *See* Cmtys. for a Better Env't, Comment Letter on Proposed Low Carbon Fuel Standard Amendments 4 (Feb. 20, 2024), https://www.cbecal.org/wp-content/uploads/2024/03/CBE-LCFS-Comments.pdf [https://perma.cc/9EBL-5NCB] [hereinafter Communities for a Better Environment Comments].

[104] *See* Jeremy Martin, *A Cap on Vegetable Oil-Based Fuels Will Stabilize and Strengthen California's Low Carbon Fuel Standard*, UNION OF CONCERNED SCIENTISTS: THE EQUATION (Jan. 30, 2024, at 08:30 ET), https://blog.ucs.org/jeremy-martin/a-cap-on-vegetable-oil-based-fuels-will-stabilize-and-strengthen-californias-low-carbon-fuel-standard [https://perma.cc/UG6L-8F9C].

[105] *See, e.g.*, #FIXLCFS, https://www.fixlcfs.com [https://perma.cc/ZY3X-ZNZV] (asking CARB to fix the LCFS "to prioritize zero-emission, electric technologies" with backing from a dozen EJ groups); EJ Advocate Comments, *supra* note 95, at 2.

communities.[106] Throughout the 2024 LCFS rulemaking proceeding, EJ advocates as well as the EJAC asked CARB to place limits on the volume of biofuels that can earn LCFS credits.[107] They argued that the environmental and economic modeling that CARB relied on in setting the parameters of the LCFS crediting program failed to account for the harmful local impacts of biofuel refining, as well as the global emissions impacts from deforestation associated with biofuel production.[108]

Throughout the regulatory proceeding, however, CARB resisted modifying the LCFS program to address the drawbacks of biofuels, relying instead on its modeling that purportedly showed that limits on biofuels would lead to higher carbon emissions and local pollution.[109] Moreover, CARB focused its public engagements on technical topics such as emissions modeling scenarios rather than on the broad concerns raised by EJ advocates and the EJAC.[110] CARB's lack of responsiveness spurred widespread frustration about the public engagement process and led a coalition of advocacy groups to organize an independent public workshop for residents and technical experts to discuss their concerns about the program and ideas for reform.[111] Ultimately, CARB made only minor changes to how the LCFS program treats biofuels, and EJ and other environmental groups have since filed lawsuits challenging the final rule.[112]

The history of the LCFS program illustrates how market-based regulatory frameworks can create systemic obstacles against effective participation by EJ communities and the broader public in decisions about how to transition the economy away from fossil fuels. Determining the

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[106] *See, e.g.*, Sophie Austin, *Environmental Groups Sue Over California Support for Polluting Biofuels*, AP NEWS (Dec. 19, 2024, at 17:37 ET), https://apnews.com/article/california-climate-fuel-environment-lawsuit-pollution-a6f724eff2852b46ec2f5b8059aecc7b [https://perma.cc/2ZW6-E8K9]; Cmtys. for a Better Env't, Comment Letter on Proposed Low Carbon Fuel Standard Amendments 2 (Aug. 27, 2024), https://www.arb.ca.gov/lists/com-attach/7576-lcfs2024-VzRRNQBkVlpVPwZl.pdf [https://perma.cc/Z2MB-JC77].

[107] *See* EJ Advocate Comments, *supra* note 95, at 4; Env't Just. Advisory Comm., Draft Recommendations to the California Air Resources Board (CARB) on the Low Carbon Fuel Standard Regulation Updates 2 (2023), https://ww2.arb.ca.gov/sites/default/files/2023-08/EJAC%20Low%20Carbon%20Fuel%20Standard%20Recommendations%20Version%201%20082423.pdf [https://perma.cc/CXA4-VDF2].

[108] *See* Communities for a Better Environment Comments, *supra* note 103, at 9.

[109] *See* Cal. Air Res. Bd., Staff Report: Initial Statement of Reasons 116 (2023), https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/lcfs2024/isor.pdf [https://perma.cc/9K3B-9Q2Q]. EJ advocates disputed the accuracy of CARB's modeling results. *See* Communities for a Better Environment Comments, *supra* note 103, at 9–11.

[110] *See, e.g.*, Cal. Air Res. Bd., Public Workshop Materials 15 (Apr. 10, 2024), https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/lcfs2024/15day_attd.pdf [https://perma.cc/5Y68-QVHU].

[111] *The People's Workshop*, #FIXLCFS, https://www.fixlcfs.com/the-peoples-workshop [https://perma.cc/VJ75-D9MM].

[112] *Environmental Justice Group Sues California Agency Over Flawed Low Carbon Fuel Standard Changes*, EARTHJUSTICE (Dec. 18, 2024), https://earthjustice.org/press/2024/environmental-justice-group-sues-california-agency-over-flawed-low-carbon-fuel-standard-changes [https://perma.cc/2QNR-CQ34].

role of biofuels in the climate transition is a challenging problem, and not for mere technical reasons: It requires weighing conflicting values to determine whether and to what extent biofuels should be subsidized to help ease the transition away from petroleum fuels, and to what extent refinery communities should shoulder the burden of that transition. By default, the LCFS program deferred to the private market to make those determinations. CARB's regulatory framework made it difficult for the public to engage in a fundamental, values-based discussion about the role of biofuels in the climate transition. Instead, the types of questions and the types of arguments that were valued in the regulatory process were highly technical questions about, for example, whether CARB modeled air quality emissions correctly.[113] The type of participatory decisionmaking that the EJ movement asks for, in which input from community members — like those in Richmond who live alongside oil refineries and other fossil fuel infrastructure — has as much weight as the input of technical experts and industry participants, is unachievable if the regulatory framework is not designed to serve the democratic process ideal.

CONCLUSION

California's climate regulations, and the debates and values that informed their design, are largely shaped by the public purposes ideal, which views expert regulators and the private market as providing sound policy that legitimizes the administrative decisionmaking process. That ideal is deeply at odds with the philosophy of the EJ movement, which instead views community-grounded decisionmaking as the fundamental source of sound policy solutions. The recent LCFS rulemaking process provides one illustration of how California's market-based regulatory framework deprioritizes democratic decisionmaking and thus loses opportunities to solicit and incorporate valuable public input. The types of policy questions that are wrapped up in regulatory decisionmaking are often questions that can and should be posed to communities and the interested public rather than decided solely by regulators and industry.

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[113] *See* Cal. Air Res. Bd., *supra* note 110, at 20–21.