Environmental Justice in the Anthropocene: Structural Inequality and the Political Economy of Climate Governance

Hardesh Kumar[1], Jyoti Dharmshaktu[2]
[12]Department of Political Science, Kumaun University, Nainital
Email ID: hardeshksharma@gmail.com, https://orcid.org/0000-0002-1589-2756

Abstract

Environmental justice (EJ) has moved from the margins of social mobilization to the center of environmental governance discourse. Yet despite its institutional adoption, distributive and procedural inequalities persist across climate and environmental policy regimes. This article argues that environmental injustice in the Anthropocene cannot be adequately explained as a failure of implementation or regulatory oversight. Rather, it is structurally embedded within the institutional design and political economy of contemporary environmental governance.

Drawing on interdisciplinary environmental justice scholarship and political economy analysis, the article traces the evolution of EJ from grassroots struggles against environmental racism to its incorporation into state bureaucracies and global climate frameworks. While institutionalization expanded the normative vocabulary of environmental politics, it also transformed a radical critique of structural inequality into technocratic policy language. Market-based instruments, carbon trading systems, risk assessment models, and voluntary corporate commitments, hallmarks of neoliberal environmentalism, prioritize efficiency and competitiveness, often reproducing socio-economic hierarchies through ostensibly neutral governance tools.

The article develops a multidimensional framework integrating distributive, procedural, and recognition justice with an institutional political economy perspective. This framework demonstrates how growth-dependent states, globalized production networks, and technocratic regulatory rationalities constrain transformative reform. In response, the article advances a structural reform agenda centered on redistributive fiscal mechanisms, democratic deepening, recognition-based co-governance, and transnational accountability.

By reframing environmental justice as a structural governance issue and a test of democratic legitimacy, the article contributes to debates within environmental politics by moving beyond policy instrument analysis toward institutional transformation. Justice-centered governance is shown to enhance legitimacy, policy durability, and social stability, positioning environmental justice not as a peripheral concern but as foundational to the future of climate governance.

Keywords: environmental justice; climate justice, environmental politics, governance, political economy, Anthropocene, distributive justice, recognition, global inequality

1. Introduction

Environmental politics has historically oscillated between regulatory reform and ecological modernization. While early environmentalism emphasized conservation and pollution control,

contemporary debates increasingly confront the political distribution of environmental harms and benefits. Environmental justice (EJ) sits at the center of this transformation.

Over four decades, EJ has moved from localized struggles against hazardous waste siting to a global framework linking race, class, colonial history, and climate vulnerability (Bullard, 1990; Schlosberg, 2007). Yet despite institutional recognition, particularly in the United States and within international climate negotiations, environmental inequality persists. This article addresses a central puzzle in environmental politics:

Why does environmental injustice persist despite formal institutional adoption of environmental justice frameworks?

I argue that persistence reflects structural characteristics of contemporary environmental governance. Regulatory systems are embedded within political-economic arrangements that prioritize economic growth, market efficiency, and state competitiveness. Justice considerations are often layered onto institutions designed for technocratic risk management rather than democratic redistribution. The article advances three core claims:

1. Environmental injustice is structurally embedded within governance institutions and the global political economy.
2. Technocratic environmental governance reproduces inequality through market-based instruments, cost-benefit analysis, and voluntary commitments.
3. Addressing injustice requires structural governance reform that integrates redistribution, participation, recognition, and transnational accountability.

By situating EJ within debates on governance, political economy, and democratic theory, this article contributes to environmental politics scholarship in three ways:

- It bridges normative justice theory and institutional political analysis.
- It reconceptualizes EJ as a structural governance problem.
- It proposes an integrated reform framework applicable across scales.

2. Environmental Justice and the Evolution of Environmental Politics
2.1 From Environmental Racism to Institutionalization

The emergence of environmental justice (EJ) as a central concern within environmental politics can be traced to struggles against environmental racism in the late twentieth century. A pivotal moment occurred during the 1982 protests in Warren County, where predominantly African American residents mobilized against the siting of a hazardous waste landfill in their community. Although the protests did not ultimately prevent the landfill's construction, they catalyzed national attention to the racialized distribution of environmental harms and marked a decisive shift from conservation-oriented environmentalism toward distributional politics (Bullard, 1990).

Subsequent empirical research substantiated activists' claims. A landmark report by the United Church of Christ's Commission for Racial Justice (United Church of Christ [UCC], 1987) documented strong correlations between hazardous waste facility siting and the racial composition of surrounding communities. These findings challenged prevailing assumptions that environmental risk distribution was economically or geographically neutral. Instead, they

demonstrated that race was a significant predictor of exposure to environmental hazards, thereby reframing environmental degradation as a civil rights issue.

The 1990s witnessed the formal institutionalization of environmental justice within federal governance. In 1994, President Bill Clinton issued Executive Order 12898, directing federal agencies to identify and address disproportionately high and adverse environmental and human health effects on minority and low-income populations. This order represented a milestone in recognizing environmental justice as a matter of public policy rather than solely grassroots advocacy.

However, institutionalization produced ambivalent consequences. While it expanded the formal scope of EJ considerations within regulatory processes, it also translated a movement grounded in oppositional mobilization into bureaucratic policy language. Scholars have observed that bureaucratic incorporation often narrows the radical potential of social movements by reframing structural critiques into administratively manageable categories (Pellow, 2007; Schlosberg, 2007). In this context, environmental justice risked becoming a procedural checklist, focused on consultation and impact assessment, rather than a transformative critique of systemic inequality.

This transformation generated enduring tensions between grassroots accountability and technocratic implementation. Community activists frequently criticized agencies for procedural compliance without substantive redistribution or enforcement. Thus, the institutionalization of EJ simultaneously expanded its policy reach and constrained its transformative capacity. Understanding this dual dynamic is essential for situating contemporary environmental politics within its historical trajectory.

2.2 Environmental Politics and Political Economy

Environmental justice cannot be fully understood without situating environmental governance within the broader dynamics of capitalist political economy. Regulatory agencies operate within growth-dependent states, where economic competitiveness, employment generation, and fiscal stability are central political priorities (Gough, 2017). In such contexts, environmental protection is often framed as compatible with, or subordinate to, economic growth objectives.

The rise of market-based instruments, including carbon trading schemes, emissions offsets, and voluntary corporate commitments, reflects the ascendancy of neoliberal governance logics in environmental policy (Heynen et al., 2007). These instruments aim to internalize environmental externalities through price signals and private-sector participation, emphasizing efficiency and flexibility over direct regulation (Stavins, 2008). While such tools may reduce aggregate emissions under certain conditions, they do not inherently address distributive injustice.

For example, carbon trading systems can allow polluters to purchase allowances rather than reduce emissions locally, potentially perpetuating pollution hotspots in marginalized communities (Bumpus & Liverman, 2008). Similarly, voluntary corporate sustainability commitments often lack enforceability and may function as reputational management strategies

rather than structural change (Dauvergne, 2018). In both cases, governance mechanisms prioritize market coordination and investor confidence over redistributive equity.

From a political economy perspective, these patterns reflect deeper structural constraints. States embedded in global capitalist systems compete for investment and revenue, which may discourage stringent regulatory action against powerful industries (Newell & Paterson, 2010). As a result, environmental justice persistence cannot be explained solely by implementation gaps or bureaucratic inefficiency. Rather, it reflects institutional design shaped by growth imperatives and asymmetries of economic power.

This analysis underscores a central claim: environmental injustice is not an accidental failure of otherwise neutral institutions. It is often reproduced through governance frameworks that privilege capital mobility, market rationality, and aggregate efficiency. Consequently, advancing environmental justice requires confronting the political-economic foundations of environmental governance rather than merely refining policy instruments.

3. Theoretical Framework: Justice and Governance

This article integrates three justice traditions with institutional political analysis.

3.1 Distributive Justice

Distributive injustice is empirically well documented:

- Race predicts proximity to hazardous facilities (Mohai et al., 2009).
- Racial minorities experience higher PM2.5 exposure (Tessum et al., 2019).
- Climate vulnerability correlates with poverty and colonial history (Roberts & Parks, 2007).

However, redistribution alone cannot explain why patterns persist across regulatory cycles.

3.2 Procedural Justice and Democratic Deficits

Procedural justice highlights exclusion from decision-making (Young, 1990). Environmental governance often relies on formal participation mechanisms that lack substantive power. Public hearings, for instance, rarely alter predetermined regulatory outcomes.

3.3 Recognition and Epistemic Politics

Recognition justice (Fraser, 2008; Schlosberg, 2007) emphasizes cultural respect and epistemic inclusion. Indigenous environmental conflicts reveal how governance frameworks marginalize non-Western knowledge systems (Whyte, 2017). Recognition deficits produce distributive and procedural inequality.

3.4 Institutional Embeddedness

The novel contribution of this article lies in integrating justice theory with institutional political economy. Environmental injustice persists because:

- Regulatory agencies prioritize growth.
- Market-based tools commodify environmental goods.
- International regimes rely on voluntary compliance.
- Corporate influence shapes policy design.

Justice language is incorporated without altering institutional logics.

4. Empirical Evidence Across Scales

4.1 United States: Environmental Racism and Federal Policy

Despite EJ screening tools, disparities remain. Federal policy identifies disadvantaged communities but lacks binding enforcement thresholds.

Executive Order 12898 institutionalized EJ discourse but did not mandate redistributive outcomes.

4.2 Climate Justice and the Global South

The Paris Agreement incorporates equity language but relies on nationally determined contributions (UNFCCC, 2015). Climate finance commitments remain insufficient relative to adaptation needs.

Historical emitters retain structural power in negotiations, limiting redistributive transformation.

4.3 Indigenous Sovereignty Conflicts

Pipeline disputes in North America and mining conflicts in Latin America demonstrate tensions between state-led development and Indigenous consent.

Free, Prior, and Informed Consent is frequently procedural rather than substantive.

4.4 Supply Chains and Green Transitions

Renewable energy transitions require mineral extraction (lithium, cobalt), often located in the Global South. Without governance reform, green transitions risk reproducing extractive injustice.

5. Technocratic Governance and the Reproduction of Inequality

Contemporary environmental governance is frequently characterized by technocratic policy instruments designed to enhance regulatory efficiency, economic rationality, and administrative manageability. These instruments include cost–benefit analysis, market-based emissions trading mechanisms, quantitative risk assessment models, and voluntary corporate sustainability pledges. While such tools are often presented as politically neutral and scientifically objective, critical scholarship in environmental politics demonstrates that they embed normative assumptions about acceptable risk, economic valuation, and distributive outcomes (Swyngedouw, 2010; Porter, 1995).

Technocratic governance frameworks tend to privilege calculability, quantification, and market rationality. In doing so, they frequently obscure the political nature of environmental decision-making. Rather than explicitly addressing structural inequality, technocratic tools translate environmental harms into economic metrics, thereby transforming distributive questions into technical optimization problems. This section argues that such instruments do not merely fail to address inequality; they actively reproduce it through their underlying institutional logics.

5.1 Cost–Benefit Analysis and the Politics of Valuation

Cost–benefit analysis (CBA) remains a central instrument in environmental regulatory policy, particularly in advanced industrial democracies. Regulatory agencies routinely employ CBA to determine whether environmental regulations generate net social benefits. However, as critics

have long observed, CBA embeds normative judgments regarding the valuation of life, health, and ecological integrity (Adler & Posner, 2006).

First, CBA typically relies on willingness-to-pay metrics, which reflect existing income distributions. Because wealthier populations possess greater purchasing power, their preferences are weighted more heavily in regulatory calculations. This produces distributive bias, as harms affecting low-income communities may appear less economically significant despite their severe social consequences (Hausman & McPherson, 2006).

Second, CBA frequently discounts future harms, particularly in climate policy. Discounting reduces the present value of long-term environmental damage, thereby minimizing regulatory urgency. This practice disproportionately affects marginalized communities and future generations, who are more vulnerable to cumulative environmental degradation (Caney, 2014).

Third, CBA struggles to incorporate non-market values, including cultural attachment to land, biodiversity preservation, and Indigenous spiritual relationships to ecosystems. These omissions reflect what Fraser (2008) terms "misrecognition," where certain forms of knowledge and value are rendered invisible within dominant institutional frameworks.

Thus, while CBA is defended as a rational policy tool, it structurally embeds inequalities by privileging market-based valuations and short-term economic efficiency over distributive justice.

5.2 Market-Based Instruments and the Spatial Concentration of Pollution

Market-based instruments (MBIs), including cap-and-trade systems and emissions offset mechanisms, have become central to climate governance. Proponents argue that MBIs achieve environmental objectives at lower economic cost by allowing firms flexibility in emissions reduction (Stavins, 2008). However, critical environmental justice scholarship demonstrates that such mechanisms may reproduce localized inequality.

Carbon trading systems permit firms to purchase allowances rather than reduce emissions directly. As a result, pollution may remain concentrated in specific communities, often low-income or racially marginalized, while overall emissions targets are met at aggregate levels (Faber & McCarthy, 2003). This phenomenon, sometimes referred to as "hot spot" formation, illustrates how aggregate efficiency can coexist with localized injustice.

Moreover, offset mechanisms often externalize mitigation activities to developing countries. While framed as global efficiency, such arrangements may reproduce extractive relationships, particularly when land-based carbon sequestration projects restrict Indigenous land use without meaningful consent (Bumpus & Liverman, 2008). In this sense, carbon markets may replicate colonial patterns of resource governance under a climate mitigation framework.

Market-based instruments thus reflect a neoliberal environmental governance model in which environmental goods are commodified and distributed through market exchange. While such instruments may reduce overall emissions, they do not inherently address and may exacerbate spatial and social inequalities.

5.3 Risk Assessment and the Normalization of Unequal Exposure

Risk assessment models quantify probabilities of harm to determine acceptable regulatory thresholds. These models are foundational in pollution regulation, toxic exposure standards,

and industrial siting decisions. However, risk-based governance operates within assumptions about acceptable levels of exposure rather than the elimination of harm.

Environmental justice scholarship has demonstrated that risk thresholds are often applied uniformly without accounting for cumulative burdens faced by marginalized communities (Mohai, Pellow, & Roberts, 2009). Communities already exposed to multiple sources of pollution may legally receive additional exposure so long as each facility complies with regulatory limits.

This regulatory fragmentation produces what scholars describe as cumulative inequality, where overlapping exposures create disproportionate health burdens (Brulle & Pellow, 2006). Standard risk models rarely integrate socioeconomic vulnerability or historical marginalization into their calculations. Consequently, risk assessment can normalize unequal exposure under the guise of scientific neutrality.

The epistemic authority granted to technical expertise may further marginalize community knowledge. Lay experiences of illness, contamination, and ecological loss are often discounted unless validated through formal scientific procedures. This dynamic reflects broader concerns about technocratic depoliticization in environmental governance (Swyngedouw, 2010).

5.4 Voluntary Corporate Governance and Accountability Gaps

In recent decades, environmental governance has increasingly incorporated voluntary corporate pledges, sustainability reporting, and ESG (Environmental, Social, and Governance) frameworks. While such initiatives signal growing private-sector engagement, they often lack binding enforcement mechanisms.

Voluntary commitments are typically self-monitored and selectively reported. Without regulatory compulsion, firms retain discretion over disclosure practices and implementation timelines (Pellow, 2018). Furthermore, corporate sustainability strategies may emphasize reputational gains rather than substantive redistribution of environmental burdens.

The reliance on voluntary governance reflects a broader shift toward privatized environmental regulation. While collaboration between state and market actors may enhance flexibility, it can also dilute democratic accountability. Communities disproportionately affected by pollution often lack direct leverage over multinational corporations operating across jurisdictions.

Thus, voluntary corporate pledges, absent binding oversight, risk entrenching governance asymmetries rather than correcting them.

5.5 Technocratic Rationality and Structural Reproduction of Inequality

Taken together, these instruments illustrate how technocratic governance frameworks translate political conflicts into technical calculations. By framing environmental problems as matters of efficiency optimization rather than distributive justice, governance institutions may inadvertently reproduce structural inequality.

This does not imply that technocratic tools are inherently illegitimate. Rather, their deployment within growth-oriented political economies shapes distributive outcomes. When regulatory design prioritizes aggregate efficiency, market flexibility, and cost minimization, justice concerns become secondary.

As Schlosberg (2007) argues, environmental justice requires not only improved distribution but the transformation of institutional structures that generate inequality. Technocratic tools, if left unmodified, operate within institutional logics that privilege capital mobility, economic growth, and state competitiveness.

Therefore, addressing environmental injustice requires moving beyond technocratic rationality toward governance models that explicitly incorporate distributive equity, procedural inclusion, and recognition of marginalized knowledge systems. Without such structural reform, inequality is reproduced within the very rationalities designed to manage environmental risk.

6.1 Redistributive Fiscal Reform

Redistributive climate policy is essential to counteract the regressive tendencies of carbon-intensive political economies. Fiscal reform must not only internalize environmental externalities but also explicitly redress socio-economic inequalities exacerbated by decarbonization transitions (Gough, 2017).

Progressive Carbon Pricing with Dividends

Carbon pricing mechanisms, whether taxes or cap-and-trade systems, have been widely endorsed for their efficiency properties (Stavins, 2008). However, absent redistributive design, such instruments can disproportionately burden low-income households, who spend a higher share of income on energy and transport (Büchs et al., 2011). A progressive carbon pricing model, where revenues are returned to citizens through dividends or targeted rebates, can mitigate regressive effects while strengthening political legitimacy.

Empirical assessments of revenue recycling demonstrate that lump-sum dividends or progressive transfers can render carbon pricing distributionally neutral or even progressive (Klenert et al., 2018). Beyond distributive fairness, dividend models can enhance democratic accountability by linking climate taxation to visible social benefits. Thus, progressive carbon pricing should be conceptualized not merely as a corrective market instrument but as a fiscal justice mechanism.

Targeted Adaptation Finance

Climate impacts disproportionately affect communities with limited adaptive capacity, often due to legacies of racialized urban planning, extractive development, or colonial dispossession (Schlosberg, 2013). Targeted adaptation finance, directed toward infrastructure, health systems, and resilience planning in vulnerable areas, can correct historically entrenched disparities.

Research in urban climate governance shows that adaptation investments frequently prioritize economically valuable districts over marginalized neighborhoods (Shi et al., 2016). Redirecting funds toward overburdened communities operationalizes distributive justice by aligning resource allocation with vulnerability rather than property values.

Binding Climate Finance Commitments

At the global level, redistributive reform requires enforceable climate finance commitments from high-emitting states. The principle of common but differentiated responsibilities (CBDR), embedded in the Paris Agreement, recognizes asymmetries in historical emissions and capacity.

Yet pledges often fall short of stated goals, and finance remains unpredictable (Roberts & Weikmans, 2017).

Transforming voluntary pledges into binding obligations would strengthen trust and enable long-term planning in developing countries. Binding commitments could include assessed contributions, automatic scaling mechanisms, or sanctions for non-compliance. Such reforms move climate finance from diplomatic goodwill to institutionalized redistribution.

Investment in Overburdened Communities

Domestic environmental justice frameworks increasingly emphasize cumulative burden mapping to identify communities facing intersecting exposures to pollution, poverty, and health risks. Investment in these communities, through green infrastructure, clean energy access, and workforce development, supports both decarbonization and socio-economic revitalization (Bullard, 2000).

Redistributive investment recognizes that climate transitions can generate new inequalities if green development clusters in already prosperous regions. Ensuring equitable allocation of public funds helps prevent a "green gentrification" dynamic that displaces vulnerable residents (Checker, 2011).

Collectively, redistributive fiscal reforms reorient climate governance toward equity-centered public finance, embedding justice in the architecture of transition policy.

6.2 Democratic Deepening

Procedural justice demands that those most affected by environmental decisions possess meaningful opportunities to shape them (Schlosberg, 2007). Democratic deepening expands participation beyond consultative exercises toward binding decision-making authority.

Binding Community Consent Mechanisms

Free, prior, and informed consent (FPIC), originally articulated in Indigenous rights frameworks, offers a model for binding community consent in environmental decision-making (United Nations, 2007). Institutionalizing consent mechanisms within national regulatory systems would shift power from extractive industries to frontline communities.

Comparative research shows that participatory rights lacking veto or binding authority often function symbolically rather than substantively (Fung, 2015). Embedding enforceable consent provisions counters the technocratic tendency to treat participation as a procedural formality.

Participatory Environmental Budgeting

Participatory budgeting, first institutionalized in Porto Alegre, demonstrates how citizens can directly shape public expenditure priorities (Wampler, 2007). Extending this model to environmental and climate budgets allows communities to deliberate over adaptation investments, green infrastructure, and pollution mitigation.

Participatory environmental budgeting enhances transparency and redistributes agenda-setting power. Empirical studies suggest that such processes can increase spending in low-income districts and strengthen civic engagement (Baiocchi et al., 2011). By integrating fiscal and deliberative democracy, participatory budgeting addresses both distributive and procedural dimensions of environmental justice.

Legal Standing for Affected Populations

Expanding legal standing enables marginalized groups to challenge harmful projects and enforce environmental protections. Landmark climate litigation cases, such as Urgenda Foundation v. State of the Netherlands, demonstrate how courts can compel governments to strengthen mitigation commitments.

Granting standing to affected populations and civil society organizations democratizes access to environmental governance. It transforms rights from abstract principles into actionable claims. Litigation, while not a substitute for legislative reform, serves as a critical accountability mechanism within multi-level governance systems (Peel & Osofsky, 2015). Democratic deepening thus entails institutional redesign that shifts environmental governance from elite negotiation toward participatory and rights-based decision-making.

6.3 Recognition and Co-Governance

Justice requires not only redistribution and participation but also recognition of diverse identities, epistemologies, and governance systems (Fraser, 2008). Recognition addresses the marginalization of Indigenous peoples and local knowledge systems within dominant regulatory frameworks.

Indigenous Co-Management Regimes

Co-management arrangements between states and Indigenous communities institutionalize shared authority over land and resources. In countries such as Canada and New Zealand, co-governance models have expanded in fisheries, forestry, and protected area management.

Evidence suggests that Indigenous-managed territories often demonstrate superior biodiversity outcomes, reflecting long-standing stewardship practices (Artelle et al., 2019). Co-management thus integrates ecological effectiveness with normative commitments to self-determination**.**

Legal Pluralism

Legal pluralism recognizes the coexistence of multiple normative orders within a single political space. Incorporating Indigenous legal traditions alongside statutory law challenges the hegemony of state-centric governance (Tully, 2000).

Pluralist frameworks can mitigate conflicts arising from extractive development by acknowledging alternative conceptions of land, responsibility, and intergenerational stewardship. Rather than assimilating Indigenous claims into dominant property regimes, legal pluralism affirms epistemic diversity as a governance asset.

Integration of Traditional Ecological Knowledge

Traditional ecological knowledge (TEK) offers context-specific insights into ecosystem dynamics and climate variability (Whyte, 2013). Integrating TEK into environmental assessment processes enhances adaptive capacity and broadens epistemological foundations.

However, integration must avoid extractive appropriation of Indigenous knowledge without corresponding authority or benefit-sharing. Recognition requires institutional safeguards that protect intellectual sovereignty and ensure equitable collaboration.

Recognition and co-governance reforms thus confront the cultural and epistemic dimensions of inequality embedded within technocratic environmental policy.

6.4 Transnational Accountability

Global supply chains and transnational corporations play central roles in shaping environmental outcomes. National reforms alone are insufficient without mechanisms that extend accountability across borders (Newell, 2008).

Mandatory Corporate Due Diligence

Mandatory human rights and environmental due diligence laws require firms to assess and mitigate impacts throughout their supply chains. Emerging European frameworks signal a shift from voluntary corporate social responsibility toward enforceable obligations (Young, 2018).

Due diligence legislation enhances transparency and reduces the governance gap created by fragmented global production networks. By imposing liability for overseas harms, such laws disrupt the externalization of environmental costs onto vulnerable populations.

Climate Liability Frameworks

Climate liability frameworks seek to hold major emitters financially responsible for damages associated with climate change. Attribution science increasingly enables causal links between corporate emissions and specific harms (Heede, 2014).

Legal actions against fossil fuel companies in jurisdictions including the United States illustrate the growing salience of climate liability claims. While outcomes remain uncertain, litigation can reshape risk calculations and incentivize decarbonization.

Supply Chain Transparency Laws

Transparency laws mandate disclosure of environmental and social risks embedded in production processes. By illuminating hidden externalities, such legislation empowers consumers, investors, and regulators to exert pressure on firms (Dauvergne, 2018).

Transparency, however, must be coupled with enforcement mechanisms to avoid symbolic compliance. Effective regulation combines reporting requirements with penalties for misrepresentation and incentives for substantive change.

Transnational accountability reforms confront the structural drivers of environmental degradation embedded within global capitalism. They extend governance beyond territorial boundaries and recalibrate corporate-state relations.

7. Implications for Environmental Politics

The preceding analysis has significant implications for the field of environmental politics. Rather than treating environmental justice (EJ) as a peripheral normative concern or a discrete policy domain, this perspective positions EJ as central to the structure, legitimacy, and political economy of environmental governance. Three major theoretical and analytical reorientations follow: (1) reframing environmental justice as a structural governance issue; (2) interrogating neoliberal environmentalism as a dominant paradigm; and (3) evaluating climate governance as a test of democratic legitimacy. Together, these shifts call for a move beyond narrow policy instrument analysis toward a deeper engagement with institutional political economy and power.

7.1 Environmental Justice as a Structural Governance Issue

Environmental justice scholarship has historically focused on distributive inequalities in exposure to pollution and environmental hazards (Bullard, 2000). While this distributive lens

remains essential, contemporary governance arrangements demonstrate that inequality is not merely an outcome but is embedded within institutional design, regulatory rationalities, and fiscal architectures (Schlosberg, 2007).

Environmental harms disproportionately affect marginalized communities not solely because of market failures, but because of zoning regimes, infrastructure investment patterns, fiscal federalism arrangements, and regulatory enforcement disparities (Pulido, 2016). In this sense, environmental injustice is structurally produced. It is reproduced through technocratic decision-making processes that privilege aggregate efficiency over distributive equity and through institutional arrangements that concentrate political influence among economic elites (Newell & Paterson, 2010).

Reframing EJ as structural governance shifts analytical attention from isolated policy failures to systemic institutional dynamics. It demands examination of how state capacities, fiscal regimes, property relations, and global production networks generate patterned vulnerability. For environmental politics scholarship, this implies closer engagement with comparative political economy, public finance, and regulatory theory.

7.2 A Challenge to Neoliberal Environmentalism

The dominance of market-based instruments, such as carbon trading, offsets, and voluntary corporate disclosure, reflects the broader ascendancy of neoliberal governance rationalities in environmental policy (Heynen et al., 2007). Neoliberal environmentalism emphasizes cost-effectiveness, privatization, and the mobilization of market incentives to achieve ecological goals. While these tools may produce measurable emissions reductions under certain conditions, they often sideline distributive concerns and depoliticize structural power asymmetries (Fletcher, 2010).

By centering justice, this analysis challenges the assumption that environmental protection and market expansion are inherently compatible. Carbon markets, for example, may reduce aggregate emissions while permitting localized pollution hotspots that disproportionately burden low-income communities (Bumpus & Liverman, 2008). Voluntary corporate pledges, while symbolically powerful, are often unenforceable and may obscure ongoing extractive practices (Dauvergne, 2018).

Environmental politics must therefore critically interrogate the ideological underpinnings of neoliberal environmentalism. Rather than evaluating instruments solely on efficiency grounds, scholars should assess how governance arrangements redistribute risk, authority, and economic opportunity. This shift aligns with calls to conceptualize climate change as a crisis of political economy rather than merely a problem of market coordination (Gough, 2017).

7.3 Climate Governance as a Test of Democratic Legitimacy

Climate governance increasingly functions as a litmus test for democratic legitimacy. As decarbonization policies reshape labor markets, energy systems, and land use, public consent and perceived fairness become central to political durability (Lockwood, 2018). Policies perceived as technocratic impositions risk triggering backlash, particularly when costs are unevenly distributed.

The emergence of climate litigation and youth mobilization movements illustrates growing demands for intergenerational accountability and procedural inclusion (Peel & Osofsky, 2015). Moreover, global frameworks such as the Paris Agreement rely heavily on nationally determined contributions, placing pressure on domestic political institutions to translate international commitments into legitimate policy.

Justice-centered governance enhances democratic legitimacy in several ways. First, distributive equity increases perceived fairness, reducing resistance to ambitious mitigation measures (Klenert et al., 2018). Second, participatory mechanisms strengthen procedural legitimacy by incorporating diverse stakeholders into decision-making processes (Fung, 2015). Third, recognition of marginalized knowledge systems fosters trust and social cohesion (Schlosberg, 2013).

In this respect, environmental justice is not an ancillary moral concern but a condition of stable and effective climate governance. Policies that ignore structural inequality risk eroding public support, while justice-oriented approaches can enhance policy durability and long-term social stability.

7.4 Moving Beyond Instrumentalism: Toward Institutional Political Economy

A central implication for environmental politics scholarship is the need to transcend narrow analyses of discrete policy instruments. While evaluating carbon taxes, emissions trading systems, or renewable subsidies remains important, such analyses often abstract from the institutional and political-economic contexts in which these tools operate (Meckling et al., 2015).

An institutional political economy approach situates environmental governance within broader configurations of capitalism, state capacity, labor relations, and transnational production networks. It examines how vested interests shape regulatory design, how fiscal systems allocate transition costs, and how global inequalities constrain policy options in the Global South (Newell, 2008).

This reorientation encourages interdisciplinary dialogue with political economy, development studies, and critical legal scholarship. It also foregrounds questions of power: Who benefits from decarbonization pathways? Who bears transitional costs? Whose knowledge counts in regulatory processes?

By embedding environmental politics within institutional analysis, scholars can better explain variation in climate ambition, identify sources of policy resilience or fragility, and illuminate pathways toward more equitable governance arrangements.

7.5 Justice, Legitimacy, and Social Stability

Justice-centered governance is not merely normatively desirable; it has instrumental significance for policy effectiveness. Empirical research suggests that policies perceived as fair are more likely to gain compliance and endure political contestation (Lockwood et al., 2010). Conversely, distributionally regressive measures may trigger social unrest or electoral backlash, undermining climate ambition.

Moreover, socio-economic inequality exacerbates vulnerability to climate impacts, increasing the likelihood of conflict and instability (Gough, 2017). By redistributing resources, deepening

329

democratic participation, and strengthening accountability mechanisms, justice-oriented reforms can enhance social cohesion and reduce conflict risks.

In this way, environmental justice functions simultaneously as a normative framework and a pragmatic strategy for sustaining long-term environmental governance. It aligns ecological transition with social inclusion, thereby reinforcing democratic legitimacy and institutional resilience.

8. Conclusion

Environmental justice in the Anthropocene demands far more than rhetorical commitment or symbolic inclusion within policy frameworks. While justice language has increasingly permeated international agreements, national climate strategies, and municipal sustainability plans, institutional adoption alone does not guarantee structural change. Without substantive reform of fiscal systems, regulatory architectures, and decision-making processes, inequalities in exposure, vulnerability, and political voice remain intact (Schlosberg, 2007; Pulido, 2016). The incorporation of justice discourse into existing governance paradigms can, in some cases, serve to legitimize rather than transform entrenched power relations.

This article has argued that environmental injustice is not merely an unintended byproduct of environmental policy but is structurally embedded within contemporary governance systems. Technocratic instruments, market-based mechanisms, and voluntary regulatory approaches often rest upon political-economic assumptions that privilege efficiency and growth over equity (Newell & Paterson, 2010). These institutional designs shape the distribution of environmental risks and benefits, frequently reproducing socio-economic hierarchies across local, national, and transnational scales.

By integrating distributive, procedural, recognition, and political economy perspectives, this analysis advances a multidimensional understanding of environmental justice. Distributive justice highlights inequities in material exposure and resource allocation (Bullard, 2000). Procedural justice underscores the importance of inclusive and binding participation in environmental decision-making (Fung, 2015). Recognition justice emphasizes the need to respect diverse identities, epistemologies, and governance traditions, particularly those of Indigenous and marginalized communities (Fraser, 2008; Schlosberg, 2013). Finally, a political economy lens situates environmental governance within broader systems of capitalism, state capacity, and global production networks, revealing how structural inequalities shape policy outcomes (Gough, 2017).

Taken together, these perspectives demonstrate that environmental justice cannot be addressed through incremental policy adjustments alone. Transformative reform- redistributive, democratic, and transnational in scope is essential for sustainable and legitimate environmental governance. Redistributive fiscal mechanisms, participatory institutional design, recognition-based co-governance, and enforceable corporate accountability frameworks collectively move beyond technocratic correction toward systemic restructuring. Such reforms align environmental objectives with social equity, strengthening public trust and enhancing the durability of climate and sustainability policies.

In this context, environmental justice should not be treated as a peripheral subfield within environmental politics. Rather, it constitutes a foundational axis around which future governance must be organized. As climate change intensifies and ecological limits become increasingly apparent, the legitimacy of environmental policy will hinge on its capacity to address historical injustices and prevent new forms of inequality. Justice-centered governance is therefore not only normatively imperative but politically pragmatic: it enhances democratic legitimacy, fosters social stability, and increases the likelihood of enduring environmental transition.

The future of environmental politics depends on recognizing that ecological sustainability and social justice are inseparable. In the Anthropocene, equitable governance is not an optional supplement to environmental policy- it is its precondition.

References

Artelle, K. A., Stephenson, J., Bragg, C., et al. (2019). Values-led management: The guidance of place-based values in environmental governance. *Ecology and Society, 24*(3), 19.

Baiocchi, G., Heller, P., & Silva, M. (2011). *Bootstrapping democracy: Transforming local governance and civil society in Brazil*. Stanford University Press.

Brulle, R. J., & Pellow, D. N. (2006). Environmental justice: Human health and environmental inequalities. Annual Review of Public Health, 27, 103–124.

Büchs, M., Bardsley, N., & Duwe, S. (2011). Who bears the brunt? Distributional effects of climate change mitigation policies. *Energy Policy, 39*(5), 2857–2866.

Bulkeley, H., Edwards, G., & Fuller, S. (2014). Contesting climate justice in the city. *Global Environmental Change, 27*, 31–41

Bullard, R. D. (1990). Dumping in Dixie: Race, class, and environmental quality. Westview Press.

Bullard, R. D. (2000). Dumping in Dixie: Race, class, and environmental quality (3rd ed.). Westview Press.

Bumpus, A. G., & Liverman, D. M. (2008). Accumulation by decarbonization and the governance of carbon offsets. Economic Geography, 84(2), 127–155.

Checker, M. (2011). Wiped out by the "greenwave": Environmental gentrification and the paradoxical politics of urban sustainability. *City & Society, 23*(2), 210–229.

Clinton, W. J. (1994). Executive Order 12898: Federal actions to address environmental justice in minority populations and low-income populations. Federal Register, 59(32), 7629–7633.

Dauvergne, P. (2018). *Will big business destroy our planet?* Polity Press.

Fletcher, R. (2010). Neoliberal environmentality: Towards a poststructuralist political ecology of the conservation debate. Conservation and Society, 8(3), 171–181.

Fraser, N. (2008). Scales of justice: Reimagining political space in a globalizing world. Columbia University Press.

Fung, A. (2015). Putting the public back into governance. *Public Administration Review, 75*(4), 513–522.

Gough, I. (2017). *Heat, greed and human need: Climate change, capitalism and sustainable wellbeing*. Edward Elgar.

Heede, R. (2014). Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel producers. *Climatic Change, 122*(1–2), 229–241.

Heynen, N., McCarthy, J., Prudham, S., & Robbins, P. (Eds.). (2007). Neoliberal environments: False promises and unnatural consequences. Routledge.

Klenert, D., Mattauch, L., Combet, E., et al. (2018). Making carbon pricing work for citizens. *Nature Climate Change, 8*, 669–677.

Lockwood, M. (2018). Right-wing populism and the climate change agenda. Environmental Politics, 27(4), 712–732.

Meckling, J., Kelsey, N., Biber, E., & Zysman, J. (2015). Winning coalitions for climate policy. Science, 349(6253), 1170–1171.

Mohai, P., Pellow, D., & Roberts, J. T. (2009). Environmental justice. Annual Review of Environment and Resources, 34, 405–430.

Newell, P., & Paterson, M. (2010). Climate capitalism: Global warming and the transformation of the global economy. Cambridge University Press.

Peel, J., & Osofsky, H. (2015). Climate change litigation. Cambridge University Press.

Pellow, D. N. (2007). *Resisting global toxics: Transnational movements for environmental justice*. MIT Press.

Pellow, D. N. (2018). What is critical environmental justice? Polity Press.

Pulido, L. (2016). Flint, environmental racism, and racial capitalism. Capitalism Nature Socialism, 27(3), 1–16.

Rawls, J. (1971). A theory of justice. Harvard University Press.

Roberts, J. T., & Parks, B. C. (2007). A climate of injustice: Global inequality, North–South politics, and climate policy. MIT Press.

Roberts, J. T., & Weikmans, R. (2017). Postface: Fragmentation, failing trust and enduring tensions over what counts as climate finance. *International Environmental Agreements, 17*, 129–137.

Schlosberg, D. (2007). Defining environmental justice: Theories, movements, and nature. Oxford University Press.

Schlosberg, D. (2013). Theorising environmental justice: The expanding sphere of a discourse. Environmental Politics, 22(1), 37–55.

Shi, L., Chu, E., Anguelovski, I., et al. (2016). Roadmap towards justice in urban climate adaptation research. *Nature Climate Change, 6*, 131–137.

Stavins, R. N. (2008). A meaningful U.S. cap-and-trade system to address climate change. *Harvard Environmental Law Review, 32*, 293–371.

Tessum, C. W., Apte, J. S., Goodkind, A. L., et al. (2019). Inequity in consumption of goods and services adds to racial–ethnic disparities in air pollution exposure. Proceedings of the National Academy of Sciences, 116(13), 6001–6006.

Tully, J. (2000). The struggles of Indigenous peoples for and of freedom. In D. Ivison et al. (Eds.), *Political theory and the rights of Indigenous peoples* (pp. 36–59). Cambridge University Press.

United Church of Christ. (1987). *Toxic wastes and race in the United States: A national report on the racial and socio-economic characteristics of communities with hazardous waste sites*. Commission for Racial Justice.

United Nations Framework Convention on Climate Change (UNFCCC). (2015). Paris Agreement.

United Nations. (2007). *United Nations Declaration on the Rights of Indigenous Peoples*.

United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development.

Wampler, B. (2007). *Participatory budgeting in Brazil: Contestation, cooperation, and accountability*. Penn State University Press.

Whyte, K. (2013). On the role of traditional ecological knowledge as a collaborative concept. *Ecological Processes, 2*(7), 1–12.

Whyte, K. (2017). Indigenous climate change studies: Indigenizing futures, decolonizing the Anthropocene. English Language Notes, 55(1–2), 153–162.

Young, I. M. (1990). Justice and the politics of difference. Princeton University Press.

Young, S. B. (2018). Responsible sourcing of minerals and metals. *One Earth, 1*(4), 409–411.