



Green Growth, Dirty Justice: How Indonesia's Climate Policies Reproduce Social Inequality

Carmelo Nayla Coren* 
University of Warsaw, Warszawa, Poland
N.Y.Coren@uw.edu.pl

DOI: <https://doi.org/10.65815/hg5sxh87>

Submitted: 18-01-20256

Revised: 29-03-2026, 18-06-2026

Accepted: 22-07-2026

*Corresponding Author

Abstract

Indonesia's climate agenda has increasingly embraced the language of green growth, positioning environmental sustainability as compatible with economic expansion. While this framing dominates policy discourse, its social implications receive limited critical attention. This paper examines how green growth-oriented climate policies shape patterns of inequality within Indonesia's climate governance. Through qualitative analysis of policy documents and climate-related programs, the study traces how mitigation and adaptation initiatives redistribute environmental risks and economic benefits. The analysis suggests that climate interventions frequently prioritize investment certainty and technological solutions, while the experiences and capacities of marginalized communities remain peripheral. Rather than reducing vulnerability, such approaches may entrench existing social hierarchies. By reading climate policies through a justice-oriented lens, the paper highlights tensions between environmental ambition and social outcomes. The discussion underscores how technocratic climate governance can obscure questions of power, participation, and responsibility. These findings invite reconsideration of green growth narratives that assume alignment between sustainability and equity. The paper concludes by reflecting on the implications of justice-blind climate action for the legitimacy and durability of Indonesia's climate strategies.

[Agenda iklim Indonesia semakin mengadopsi bahasa pertumbuhan hijau, memposisikan keberlanjutan lingkungan sebagai hal yang kompatibel dengan ekspansi ekonomi. Meskipun kerangka ini mendominasi wacana kebijakan, implikasi sosialnya hanya mendapat perhatian kritis yang terbatas. Makalah ini mengkaji bagaimana kebijakan iklim yang berorientasi pada pertumbuhan hijau membentuk pola ketidaksetaraan dalam tata kelola iklim Indonesia. Melalui analisis kualitatif dokumen kebijakan dan program terkait iklim, studi ini menelusuri bagaimana inisiatif mitigasi dan adaptasi mendistribusikan kembali risiko lingkungan dan manfaat ekonomi. Analisis menunjukkan bahwa intervensi iklim seringkali memprioritaskan kepastian investasi dan solusi teknologi, sementara pengalaman dan kapasitas masyarakat yang



terpinggirkan tetap terabaikan. Alih-alih mengurangi kerentanan, pendekatan tersebut dapat memperkuat hierarki sosial yang ada. Dengan membaca kebijakan iklim melalui lensa yang berorientasi pada keadilan, makalah ini menyoroti ketegangan antara ambisi lingkungan dan hasil sosial. Diskusi ini menggarisbawahi bagaimana tata kelola iklim teknokratis dapat mengaburkan pertanyaan tentang kekuasaan, partisipasi, dan tanggung jawab. Temuan ini mengajak untuk mempertimbangkan kembali narasi pertumbuhan hijau yang mengasumsikan keselarasan antara keberlanjutan dan kesetaraan. Makalah ini diakhiri dengan merefleksikan implikasi dari aksi iklim yang mengabaikan keadilan terhadap legitimasi dan keberlanjutan strategi iklim Indonesia.]

Keywords: Climate justice, green growth, inequality, climate governance, Indonesia

Introduction

Climate change has increasingly become a central component of Indonesia's development strategy. The country's climate agenda is no longer framed exclusively around environmental protection but increasingly through the language of economic transformation, investment, technological modernization, and green growth. The policy logic is attractive: economic expansion is expected to continue while emissions are reduced through renewable energy, forest conservation, carbon markets, green infrastructure, and low-carbon technologies. Indonesia's *Low Carbon Development Indonesia* framework explicitly sought to integrate emissions reduction into national development planning rather than treating climate policy as a separate environmental agenda (Ministry of National Development Planning 2019). Yet the compatibility between economic growth and environmental sustainability cannot be assumed simply because both objectives appear within the same policy framework. As Bowen and Hepburn (2014) argue, green-growth strategies involve difficult questions about technological change, resource use, distribution, and the political conditions under which environmental objectives are pursued. The central issue is therefore not whether Indonesia is becoming "greener," but whose interests are advanced, whose risks are reduced, and whose costs are created through the transition.

The concept of green growth emerged partly as an attempt to reconcile environmental protection with continued economic expansion. Rather than rejecting growth, green-growth approaches generally seek to decouple economic activity from environmental degradation through technological innovation, efficiency improvements, renewable energy, ecosystem valuation, and new forms of investment (Hallegatte et al. 2012; OECD 2011). This approach has become influential because it offers governments a politically attractive alternative to more confrontational forms of ecological transformation. Climate action can be presented

as an opportunity for investment, industrial upgrading, employment creation, and competitiveness rather than as a constraint on economic development. Yet the political attractiveness of green growth can also become its analytical weakness. By presenting environmental protection and economic expansion as naturally complementary, green-growth discourse may obscure conflicts over land, labor, resources, technology, and political authority. Hickel and Kallis (2020), for example, question whether absolute decoupling at the scale and speed required to remain within ecological limits is realistically compatible with continued economic growth. The question for Indonesia is consequently whether green growth represents a genuine structural transformation or a new vocabulary through which established development priorities are re-legitimized.

Indonesia provides a particularly important case because climate governance is unfolding within an economy that remains strongly dependent on resource-intensive development. Fossil fuels, mining, plantations, forestry, infrastructure development, and industrial expansion continue to shape employment, public revenues, investment, and regional development. At the same time, these sectors are increasingly incorporated into climate policy through mechanisms intended to make economic activities more efficient or environmentally responsible. This produces an important contradiction: the same political-economic structures that contribute to environmental pressure may also become beneficiaries of green investment and climate-related policy incentives. A green-growth strategy can therefore modify the environmental language surrounding extraction without necessarily transforming the underlying distribution of economic and political power. Busch et al. (2019) demonstrate the importance of examining such political-economic tensions in Indonesia, where green-economy aspirations can coexist with resource-intensive development trajectories. The result is a policy landscape in which “green” and “extractive” development may not be mutually exclusive but can become institutionally intertwined.

This contradiction becomes particularly visible in Indonesia’s low-carbon energy transition. Renewable energy is frequently presented as the technological foundation of a cleaner and more inclusive development pathway. Yet the transition itself requires capital, infrastructure, land, minerals, electricity networks, and institutional capacity. Consequently, the transition may generate new forms of inequality even while reducing aggregate greenhouse-gas emissions. A transition that prioritizes investment certainty, large-scale infrastructure, and technological deployment may produce benefits for investors and urban consumers while imposing adjustment costs on workers, local communities, or regions economically dependent on fossil-fuel industries. Research on Indonesia’s energy transition shows that conflicting interests, inconsistent regulation, and weak implementation capacity can disproportionately disadvantage fossil-fuel-dependent regions, informal workers, and Indigenous and local communities (Setyowati 2023). This suggests that decarbonization cannot be evaluated exclusively through indicators

such as installed renewable capacity or emissions reduction. Its justice implications must also be examined.

The problem becomes clearer when climate policy is examined through the concept of energy justice. Energy justice scholarship emphasizes that energy systems distribute both benefits and burdens. The distribution of electricity access, energy prices, pollution, employment opportunities, infrastructure, and political authority is therefore inseparable from questions of justice (Jenkins et al. 2016). McCauley et al. (2013) similarly argue that energy justice requires attention to distributional, procedural, and recognition dimensions. These dimensions are highly relevant to Indonesia. A renewable-energy project may reduce emissions while still producing distributive injustice if local populations bear land or livelihood costs without receiving proportional benefits. A climate program may be formally participatory while remaining procedurally unjust if affected communities possess little capacity to influence final decisions. Likewise, a transition may be technologically inclusive but recognitionally unjust if Indigenous peoples, informal workers, women, or poor households are treated as passive beneficiaries rather than political subjects. Energy justice therefore provides a framework for examining the social architecture of Indonesia's climate transition rather than merely its technological performance.

The concept of just transition extends this argument by emphasizing that decarbonization necessarily produces winners and losers. McCauley and Heffron (2018) argue that a just transition must integrate distributional, procedural, and restorative dimensions rather than reducing justice to the creation of "green jobs." This is particularly significant for Indonesia because fossil-fuel-dependent regions cannot instantly replace existing employment, fiscal revenues, infrastructure, and local economic networks with renewable industries. The costs of transition can therefore be temporally and spatially concentrated. Workers may lose employment before alternative industries emerge; communities may experience declining local revenues; and regions dependent on coal or other extractive activities may face economic contraction. Heffron and McCauley (2018) further caution that the concept of transition itself must be connected to the question of what is being transformed and for whom. A transition that changes energy technologies while preserving existing hierarchies of ownership and decision-making may be low-carbon without being genuinely just.

Indonesia's forest and land-use policies reveal another dimension of this problem. Forest conservation, REDD+, carbon sequestration, ecosystem restoration, and carbon-market initiatives are increasingly incorporated into national climate strategies. These policies can create financial incentives for reducing deforestation and protecting carbon stocks, but they also raise difficult questions concerning tenure, benefit distribution, and local authority. Indonesia's experience demonstrates that the existence of climate-related financial mechanisms does not automatically produce equitable outcomes. Ituarte-Lima et al. (2014) found that Indonesian REDD+ legal frameworks addressed some procedural

dimensions of participation but remained weak regarding contextual questions such as forest tenure and the distribution of rights and obligations among forest-dependent communities. This is crucial because climate mitigation can reproduce inequality when communities are expected to protect ecosystems while lacking secure rights over the territories they manage. Climate policy may consequently shift from one form of resource governance to another without fundamentally redistributing authority.

The distribution of climate finance illustrates the same problem. Climate policies increasingly rely on financial mechanisms that reward emissions reduction, forest conservation, renewable-energy development, and other forms of climate action. In principle, these mechanisms can direct resources toward communities and regions that contribute to environmental protection. In practice, however, the distribution of climate finance depends upon institutional capacity, bureaucratic procedures, eligibility rules, measurement systems, and political authority. Recent research on jurisdictional REDD+ in Indonesia demonstrates that benefit-sharing mechanisms can differ substantially in effectiveness, efficiency, and equity, with direct distribution to beneficiaries potentially producing more equitable outcomes than heavily bureaucratic channels (Wahyudi et al. 2024). This finding is significant because it demonstrates that inequality can emerge inside climate policy instruments themselves. A policy may be environmentally ambitious while its financial architecture remains inaccessible to the communities whose land, labor, or livelihood practices make climate mitigation possible.

Carbon pricing presents a somewhat different but equally important distributional problem. Climate policy instruments such as carbon taxes can increase the price of carbon-intensive goods and services, potentially encouraging emissions reduction. Yet the distributive consequences depend upon how revenues are collected and recycled. Recent modelling of carbon taxation in Indonesia indicates that the distributional consequences are strongly influenced by the design of revenue recycling, with a substantial share of revenues potentially required to shield poorer households from inflationary pressures (2025). This finding complicates the assumption that market-based climate instruments are inherently neutral. The price signal may be environmentally efficient while still producing regressive consequences if compensatory mechanisms are inadequate. Climate justice therefore requires examining not merely whether a carbon price reduces emissions, but who pays, who benefits from the revenues, and who has the capacity to adjust their consumption or production patterns.

The politics of renewable energy provides a further example of how green policy can reproduce established economic structures. Research on Indonesia's renewable-energy sector has identified persistent institutional and fiscal barriers, including inconsistent incentives and policy uncertainty (Halimanjaya 2019). More recent political-economy research similarly indicates that fossil-fuel interests, institutional fragmentation, financing constraints, and regulatory structures continue to influence the pace and direction of Indonesia's energy transition

(Rahman, Dargusch, and Wadley 2021). Regional energy planning adds another layer of complexity because national ambitions interact with provincial political structures, civil-society organizations, and local political-economic interests. Muin and colleagues' analysis of regional energy planning shows that subnational actors can create opportunities for transition, but their capacity to do so is shaped by political leadership, civil-society engagement, and existing power relations.

These dynamics challenge the assumption that technological modernization automatically produces social progress. A solar plant, electric-vehicle ecosystem, carbon market, or forest-carbon project may reduce emissions while leaving questions of ownership, access, participation, and benefit distribution unresolved. Jenkins et al. (2016) therefore emphasize that energy justice should examine the entire energy system rather than isolated technologies. The same principle can be applied to climate governance more broadly. Climate policy should be evaluated across its full institutional chain: who designs the policy, who finances it, who implements it, who receives the benefits, who bears the risks, and who possesses the authority to challenge its outcomes. This approach also reveals why apparently progressive policies can generate contradictory effects. A policy can be environmentally successful according to aggregate indicators while simultaneously deepening inequality at the household, community, or regional level.

The central argument of this article is therefore that green growth should not be treated as socially neutral simply because it is environmentally oriented. Indonesia's climate policies can reproduce inequality when they prioritize aggregate emissions reduction, investment mobilization, technological efficiency, and economic competitiveness without simultaneously addressing distributional, procedural, and recognition inequalities. This does not imply that green growth is inherently unjust or that climate action should be abandoned. Rather, it suggests that the legitimacy of green growth depends upon the institutional arrangements through which it is implemented. Climate policy becomes potentially unjust when marginalized communities are expected to bear adjustment costs, surrender land or livelihood opportunities, or accept environmental risks while the economic benefits of the transition are captured elsewhere. The task is therefore to move from green growth as an economic strategy toward green transformation as a justice-oriented political project.

The article consequently asks three interrelated questions. First, how does Indonesia's green-growth-oriented climate governance distribute the economic and environmental benefits of climate action? Second, through which institutional mechanisms can climate policies reproduce existing inequalities even when their environmental objectives are progressive? Third, what would a more justice-oriented model of climate governance require in terms of participation, benefit distribution, recognition, and accountability? By addressing these questions, the article moves beyond the conventional opposition between economic growth and environmental protection. Its concern is not simply whether Indonesia can grow while reducing emissions, but whether the process of decarbonization can

transform the unequal political-economic relations that shape who benefits from development. The argument advanced here is that climate ambition without social redistribution risks producing a cleaner economy without producing a fairer society.

Green Growth and the Political Economy of Indonesian Climate Governance

1. Green Growth as a Development Paradigm

Green growth has become an influential framework through which governments attempt to reconcile economic expansion with environmental sustainability. Rather than questioning the growth imperative itself, the green-growth paradigm assumes that technological innovation, resource efficiency, renewable energy, ecological investment, and improved governance can reduce the environmental intensity of economic production. The OECD (2011) and World Bank (2012) have promoted this approach as a pathway through which environmental objectives can become compatible with competitiveness and development. Yet this compatibility is not automatic. Green growth is fundamentally a political-economic project because it determines which technologies receive investment, which sectors are protected or transformed, and which actors control the resources generated through environmental policy. Schmalensee (2012) notes that debates over green growth cannot be separated from questions concerning incentives and institutional design, while Hickel and Kallis (2020) challenge the assumption that economic growth can be sufficiently decoupled from ecological pressures. The Indonesian case therefore requires attention not only to the environmental efficiency of green policies but also to the social and political relations through which “green” development is produced.

Indonesia's adoption of green-growth discourse must be understood within a broader development model that has historically relied on natural-resource extraction, infrastructure expansion, and integration into global commodity markets. The country's climate strategy increasingly seeks to reframe economic development around low-carbon investment, renewable energy, sustainable forestry, electric mobility, and carbon-related markets. This does not necessarily represent a complete departure from the earlier development model. Instead, it may constitute a process of green reconfiguration, in which existing investment structures are reorganized around new environmental objectives. Hill, Khan, and Zhuang (2012) emphasize the importance of institutional and structural transformation for inclusive and green growth in Indonesia, while Loiseau et al. (2016) demonstrate that the green economy encompasses multiple competing interpretations of the relationship between economic activity and ecological limits. Consequently, the critical question is whether Indonesia's green transition transforms the distribution of economic power or merely changes the environmental justification attached to existing development strategies.

The Indonesian debate is particularly important because climate policy is being implemented while resource-intensive sectors remain economically and politically significant. Coal, minerals, plantations, forestry, and large-scale infrastructure

continue to generate employment, export revenues, investment, and regional fiscal resources. This creates a structural tension between decarbonization and economic dependence on sectors that have historically shaped Indonesia's political economy. Elliott and Setyowati (2020) argue that Indonesia's low-carbon transition must confront precisely this tension because climate policy can reproduce social inequalities if transition costs and benefits are unevenly distributed. Setyowati (2022) similarly demonstrates that environmental harm associated with extractive industries cannot be separated from broader questions of social and economic inequality. Green growth can therefore become problematic when environmental modernization leaves underlying ownership structures, labor relations, and territorial inequalities largely untouched. A reduction in carbon intensity may occur without a corresponding redistribution of economic power.

This tension is also visible in Indonesia's energy transition. Decarbonization requires replacing or reducing dependence on fossil fuels, but the transition creates economic consequences for regions and workers embedded within the fossil-fuel economy. Indonesia's coal-producing regions provide an especially important example. The Indonesian Climate Justice Review's analysis by Masruhan and Malik (2024) finds that the country's post-coal transition faces policy fragmentation, weak institutional capacity, and the risk that large-scale renewable-energy projects reproduce some of the displacement and exclusion associated with extractive development. This observation complicates the common narrative that renewable energy is inherently socially progressive. Renewable energy can reduce emissions while still producing distributive injustice when land, infrastructure, investment, and decision-making remain concentrated in powerful institutions. The central issue is therefore not whether an energy source is classified as "green," but whether the institutions governing its deployment redistribute benefits and reduce vulnerability.

2. From Environmental Modernization to Political Economy

The green-growth paradigm is closely related to the broader tradition of ecological modernization, which emphasizes technological innovation, institutional reform, and efficiency improvements as mechanisms for reconciling economic development with environmental protection (Mol and Sonnenfeld 2000). This approach has influenced contemporary climate governance because it provides a politically feasible alternative to policies that would directly challenge consumption or economic growth. Renewable energy, carbon markets, energy efficiency, electric vehicles, and green finance can all be incorporated into existing markets rather than requiring a fundamental transformation of the economic system. Yet ecological modernization becomes problematic when technological solutions are treated as politically neutral. Technologies are embedded in systems of ownership, regulation, infrastructure, labor, and finance. Their social consequences therefore depend upon who controls them and who benefits from their deployment.

This is why the political economy of climate policy matters. Climate governance allocates resources and creates incentives. Public subsidies, tax incentives, carbon markets, infrastructure investments, concessional finance, and regulatory reforms determine which sectors expand and which actors gain economic opportunities. The transition is therefore not simply a process of replacing high-carbon technologies with low-carbon alternatives. It is also a process of reallocating capital and political authority. Anderson et al. (2016), in their analysis of green-growth rhetoric in Indonesia, demonstrate the importance of examining the gap between the language of green growth and the actual structural transformation occurring within the economy. Their argument is particularly relevant because it suggests that green-growth discourse can obscure persistent tensions between economic expansion and environmental limits. A policy may become rhetorically “green” without substantially altering the underlying political economy that generates environmental inequality.

The problem becomes particularly pronounced when climate policy is linked to investment promotion. Large-scale green projects require significant capital and often depend on state guarantees, land access, infrastructure, and regulatory certainty. From the perspective of investment policy, these conditions may be necessary for attracting capital. From the perspective of climate justice, however, they raise questions concerning who has the authority to determine where projects are located and how benefits are distributed. Fadhil et al. (2025), writing in the *Indonesian Climate Justice Review*, identify precisely this tension between Indonesia's green-economy agenda and Indigenous rights. Their analysis of the Investment Law argues that large-scale green investments can intersect with Indigenous territories and livelihoods while consultation, compensation, and recognition remain inadequate. The significance of this argument is that investment certainty can become institutionally prioritized over social legitimacy, producing a form of climate governance in which green development remains dependent on unequal relations of territorial power.

This problem should not be interpreted as an argument against renewable energy or climate investment. Rather, it demonstrates that the environmental classification of a project cannot determine its justice automatically. A renewable-energy project can have a low carbon footprint while producing land conflicts, livelihood disruption, or unequal benefit distribution. Conversely, policies that initially appear economically less efficient may generate greater social legitimacy and long-term resilience if they provide communities with meaningful decision-making authority. Climate governance should therefore be evaluated through multiple dimensions rather than a single metric of emissions reduction. Distribution, participation, recognition, accountability, and long-term adaptive capacity should be treated as integral components of climate policy evaluation.

3. Climate Governance and the Production of Inequality

Climate change itself is socially differentiated, and climate policy can either reduce or reproduce this differentiation. Vulnerability is shaped by income, infrastructure, geography, institutional capacity, access to healthcare, social protection, and political representation. Consequently, adaptation policies that distribute resources according to administrative efficiency rather than vulnerability may unintentionally privilege communities that are already better positioned to access public programs. The Indonesian Climate Justice Review study by Nuruddin and Saputra (2024) identifies a relationship between climate disasters and poverty traps in Indonesia, emphasizing how environmental shocks can disproportionately affect communities with limited economic and institutional capacity. This finding is important for green-growth analysis because it demonstrates that climate policy cannot be separated from pre-existing socioeconomic inequality. The ability to benefit from climate investments or adapt to climate risks is itself unequally distributed.

Spatial inequality further complicates this relationship. Indonesia's geographical diversity means that climate impacts intersect with substantial differences in infrastructure, income, governance capacity, and access to public services. Ariska and Simbolon (2024) demonstrate this problem in their analysis of Eastern Indonesia, where communities facing weaker infrastructure and lower adaptive capacity experience greater climate burdens despite contributing relatively little to global emissions. Such disparities challenge policy frameworks that treat the national population as a homogeneous beneficiary of climate action. A nationally successful climate program can nevertheless produce unequal outcomes if resources are disproportionately concentrated in regions with stronger institutions, greater investment potential, or higher political visibility. Climate justice therefore requires attention to where climate benefits and burdens are geographically produced.

The relocation of Indonesia's capital provides another illustration of this spatial dimension. Climate-resilience narratives can justify major infrastructure projects by emphasizing adaptation, urban efficiency, and long-term sustainability. Yet the geographical relocation of environmental pressures can generate new forms of injustice. Rochman, Prasetyo, and Damayanti (2024) argue that the relocation of Indonesia's capital to East Kalimantan raises climate-justice concerns because environmental and development benefits may be accompanied by land-use transformation, ecological pressures, and risks to Indigenous and rural communities. The case illustrates a broader principle: climate adaptation does not necessarily reduce vulnerability if it transfers environmental pressures from one population to another. A project can therefore be climate-resilient at the scale of infrastructure while remaining socially unjust at the scale of affected communities.

4. Technocracy, Participation, and the Depoliticization of Climate Action

Another important characteristic of contemporary climate governance is its reliance on technical expertise. Emissions inventories, carbon accounting, climate modelling, energy scenarios, green-finance taxonomies, and cost-benefit analysis have become central instruments of climate policy. These tools are necessary for effective governance, but their authority can also depoliticize climate decisions by presenting contested choices as technical necessities. When policy is framed primarily through numerical targets—such as emissions reductions, renewable-energy capacity, or carbon prices—questions concerning power and distribution may become secondary. A technically efficient policy can therefore remain socially contested because affected communities may disagree not about the existence of climate change but about who should bear the costs of addressing it.

This is particularly important for Indonesia because many climate policies operate through large-scale programs that require coordination among central government agencies, provincial governments, investors, financial institutions, and local communities. Participation can become procedural rather than substantive when consultation occurs after fundamental decisions have already been made. Fadhil et al. (2025) highlight the limited consultation experienced by Indigenous communities in some green-investment contexts, demonstrating how formal sustainability commitments can coexist with weak participatory mechanisms. The resulting governance structure can be described as technocratic inclusion without effective political redistribution: communities are invited to participate in policy processes but do not necessarily gain greater authority over land, investment, or resource allocation.

This distinction is central to climate justice. Participation is not simply a mechanism for collecting local information; it concerns the political status of those affected by climate decisions. If communities possess no meaningful ability to reject, modify, or renegotiate projects, participation may legitimize decisions rather than democratize them. The challenge is therefore to move from consultation toward institutional arrangements that give affected groups meaningful influence over project design, benefit-sharing, monitoring, and grievance mechanisms. Such arrangements are especially important where climate projects affect land rights or livelihood systems. Climate governance that excludes these dimensions risks reproducing precisely the inequalities that climate policy claims to address.

The central implication is that Indonesia's green-growth agenda should be understood as a contested political project rather than a neutral environmental modernization program. Green growth can generate genuine environmental benefits, stimulate technological innovation, and mobilize investment for decarbonization. However, its social outcomes depend on the institutions through which benefits and burdens are allocated. The emerging Indonesian climate-justice literature reinforces this conclusion: green investment can conflict with Indigenous rights; energy transition can reproduce inequalities in coal-dependent regions; climate disasters can deepen poverty; and adaptation-oriented development can

transfer risks across geographical boundaries (Fadhil et al. 2025; Masruhan and Malik 2024; Nuruddin and Saputra 2024; Rochman, Prasetyo, and Damayanti 2024). The analytical task, therefore, is not to reject green growth categorically but to ask under what political and institutional conditions it can become socially transformative. Without mechanisms for redistribution, recognition, participation, and accountability, green growth risks becoming “dirty justice”: environmentally progressive in aggregate, yet socially unequal in practice.

Where the Burden Falls: Inequality across Energy, Land, and Climate Finance

1. Coal Dependence and the Unequal Geography of Energy Transition

Indonesia's energy transition cannot be understood simply as a national movement from fossil fuels toward renewable energy. The consequences of decarbonization are geographically uneven because coal has become deeply embedded in particular regional economies, labor markets, infrastructure systems, and fiscal structures. Coal-producing provinces such as East Kalimantan and South Sumatra have accumulated economic relationships around extraction that cannot be dismantled merely through national emissions targets. Coal mining generates employment, business activity, transportation demand, local revenues, and infrastructure, while communities often become economically dependent on extractive industries even when they simultaneously experience environmental degradation. This creates a paradox at the heart of Indonesia's climate policy: the regions most closely associated with carbon-intensive development may also be among those most exposed to the socioeconomic consequences of decarbonization. Recent research on Indonesia's coal transition demonstrates substantial spatial variation in vulnerability and emphasizes that women, Indigenous peoples, youth, and informal workers can experience transition risks that are obscured by aggregate regional indicators (Canpolat and Cole 2026).

The distributional problem becomes more pronounced when coal phase-down is approached primarily as an energy-sector problem rather than a regional-development problem. Closing mines or retiring coal-fired power plants may reduce emissions, but the immediate economic consequences can include employment losses, declining demand for local services, reduced fiscal revenues, and stranded infrastructure. A technically successful phase-out can therefore become socially destabilizing if alternative economic opportunities are not developed before extraction declines. BuYner and Fauzi (2023) argue that economic diversification is central to a just coal transition in Indonesia, particularly because coal-dependent regions cannot simply replace extractive employment with renewable-energy jobs without institutional preparation, investment, skills development, and coordination between national and local governments. The implication is important: a just transition requires changing regional economic structures, not merely changing the energy source.

The political economy of coal further complicates this process. Coal is not sustained solely by market demand; it is embedded within regulatory arrangements,

infrastructure investments, industrial policies, and political interests. Ordonez et al. (2021) demonstrate how coal, political power, and state-business relationships have become intertwined in Indonesia, helping explain why coal dependency can persist even when decarbonization commitments become stronger. This creates institutional inertia. Policies may simultaneously encourage renewable energy and preserve mechanisms that sustain coal production or consumption. Consequently, climate governance can become internally contradictory: the state seeks to reduce emissions while maintaining economic structures that make rapid decarbonization politically costly. A justice-oriented transition must therefore confront the political structures that reproduce carbon dependence rather than assuming that technological substitution will automatically overcome them.

2. The JETP and the Financialization of Climate Justice

The Just Energy Transition Partnership (JETP) represents one of the most significant attempts to mobilize international climate finance for Indonesia's energy transition. Announced in 2022, the partnership was designed to support Indonesia's efforts to reduce coal dependence while accelerating renewable-energy development. At first glance, such an arrangement appears to embody climate justice: industrialized countries and international financial institutions provide resources to support decarbonization in a developing country whose historical contribution to global emissions is considerably smaller than that of many industrialized economies. Yet the institutional design of climate finance raises a crucial question: does financial support actually reach the communities that experience the social costs of transition?

This question is important because climate finance is not politically neutral. Financial mechanisms determine which projects are considered investable, which institutions qualify for funding, and which outcomes can be measured and reported. The result can be a preference for projects that offer predictable financial returns, measurable emissions reductions, and clear institutional counterparts. Communities facing livelihood insecurity, informal employment, or weak administrative capacity may consequently find it more difficult to access climate finance directly. Muslim and Hastuti's analysis of Indonesia's JETP highlights the role of climate finance in the country's transition while emphasizing the institutional significance of the partnership as a mechanism for reducing coal dependence. The justice question, however, requires moving beyond the volume of finance mobilized toward examining its distribution, accessibility, and social outcomes.

Recent critical scholarship goes further by questioning whether the financialization of just transition can depoliticize justice. A major study of Indonesia's JETP argues that justice has increasingly been translated into financial and investment terms, with the partnership emphasizing energy as an investment opportunity for international funders and the Indonesian state. This process can distance climate justice from the community-based struggles over land, water,

labor, and environmental resources from which the concept historically emerged. The danger is that “justice” becomes an institutional label attached to financial transactions rather than a political principle concerning redistribution of power. Under this model, communities may be described as beneficiaries of transition without becoming decision-makers within it.

The distinction between finance for transition and finance as justice is therefore critical. Financing a renewable-energy project does not necessarily compensate communities for historical environmental damage, provide alternative livelihoods for displaced workers, or strengthen local decision-making. Nor does a large international financing package automatically ensure equitable distribution. A genuinely just climate-finance architecture would need explicit social criteria, transparent allocation mechanisms, community-level monitoring, accessible grievance systems, and measurable distributional outcomes. Climate finance should not be judged solely by how much capital it mobilizes but by whether it changes the socioeconomic conditions that make certain groups disproportionately vulnerable to transition.

3. Renewable Energy and the Risk of Reproducing Extractive Development

The expansion of renewable energy is often treated as evidence that economic growth is becoming environmentally sustainable. Yet renewable-energy infrastructure is not immaterial. Solar panels, batteries, transmission networks, geothermal plants, hydropower facilities, and electric vehicles require land, minerals, infrastructure, and capital. Consequently, the transition away from fossil fuels can produce new forms of extraction. This is particularly relevant to Indonesia because the country has become a major site of nickel extraction and processing associated with the global electric-vehicle transition. The environmental and social consequences of nickel development therefore complicate the assumption that low-carbon technologies are inherently compatible with environmental justice.

Astuti, Raman, and Yeremia (2025) demonstrate this tension through their analysis of Indonesia's nickel sector. Their work argues that the energy-extractives nexus represents a significant blind spot in conventional just-transition discourse because resource extraction in the Global South can generate environmental burdens in order to support low-carbon transitions elsewhere. This produces a geographical displacement of environmental costs: consumers and industries in wealthier economies benefit from clean-energy technologies while extraction-related impacts remain concentrated in producing regions. The transition can therefore become “green” at the point of consumption while remaining environmentally destructive at the point of mineral production.

This dynamic is particularly important for Indonesia's green-industrial strategy. Nickel downstreaming has been framed as a pathway toward industrial upgrading, economic value creation, and participation in the global electric-vehicle supply chain. From a conventional growth perspective, this strategy can appear highly successful because it combines industrialization with a global low-carbon market.

Yet from a climate-justice perspective, the question is whether the benefits of downstreaming are distributed proportionately to the communities that experience its environmental consequences. If land conversion, pollution, water stress, or livelihood disruption are concentrated locally while industrial profits and strategic value accrue elsewhere, the green economy risks reproducing the same center-periphery relationship associated with older extractive industries.

The emergence of what might be called green extractivism demonstrates why carbon intensity alone is insufficient as a measure of justice. An industrial project can contribute to global decarbonization while simultaneously intensifying local ecological pressures. This does not mean that critical minerals should not be produced. Rather, it means that the transition requires a broader accounting of environmental and social costs. Questions of land rights, community consent, environmental restoration, occupational safety, local value capture, and long-term ecological impacts must be integrated into transition policy. Otherwise, Indonesia risks becoming an extraction frontier for the global green economy rather than a site of genuinely inclusive green transformation.

4. Gender, Participation, and Invisible Transition Costs

Climate policy also distributes benefits and burdens through gender relations. Energy systems are not gender-neutral because women and men often occupy different positions within households, labor markets, community institutions, and decision-making structures. Renewable-energy policies that measure success primarily through infrastructure deployment may therefore overlook gendered differences in access to employment, finance, training, political participation, and energy services. Research on renewable energy in Indonesia by Antasya and Kersana (2024) shows that women's marginalization is connected not to a lack of interest or competence but to limited participation and institutional structures that fail to adequately incorporate women's interests.

This finding has significant implications for the concept of green growth. If new green industries reproduce male-dominated employment structures, then the transition may increase aggregate economic activity without reducing gender inequality. The problem is particularly serious in rural areas where women may depend on natural resources for household provisioning, informal economic activities, and community-based livelihoods. A transition that changes land use or resource access can therefore impose costs on women that remain invisible in conventional economic indicators. Gender-sensitive climate governance requires attention to these differentiated livelihood systems rather than assuming that households experience climate policies as unified economic units.

Participation is equally important. Women's inclusion in climate governance cannot be reduced to numerical representation in consultation meetings. Meaningful participation requires access to information, decision-making authority, financial resources, and institutional mechanisms through which women's preferences can influence outcomes. Without such mechanisms, participation can

become symbolic. The same principle applies to Indigenous communities, informal workers, and poor households. The recurring problem is that climate governance tends to define marginalized groups as vulnerable populations rather than as political actors capable of shaping climate policy.

This distinction has broader consequences for climate legitimacy. A climate transition that repeatedly excludes affected communities may encounter resistance not because communities reject environmental protection but because they reject the unequal terms under which environmental transformation is imposed. The legitimacy of climate action therefore depends partly on whether communities perceive transition policies as fair, transparent, and responsive. Climate justice is consequently not an obstacle to ambitious climate policy. On the contrary, it can provide the political conditions necessary for durable implementation.

5. Adaptation and the Unequal Capacity to Benefit from Climate Policy

The distributive consequences of climate governance extend beyond mitigation and energy transition. Adaptation policies also distribute resources according to assumptions about vulnerability, infrastructure, and economic value. Communities with stronger administrative institutions may be better positioned to obtain adaptation funding, develop proposals, and meet bureaucratic requirements. Poorer regions may face the paradox of being more vulnerable while having weaker institutional capacity to secure resources. This creates a capacity paradox in which those most in need of climate assistance can be least capable of accessing it.

Nuruddin and Saputra's analysis of climate disasters and poverty in Indonesia is particularly relevant because it demonstrates how environmental shocks can interact with socioeconomic deprivation to create persistent poverty traps. Climate adaptation that fails to address these structural conditions can therefore become a temporary intervention rather than a mechanism for reducing vulnerability. Building physical infrastructure without improving livelihoods, healthcare, social protection, and political access may protect assets while leaving households vulnerable.

The same problem occurs at the regional level. Climate vulnerability is not simply a function of exposure to floods, droughts, sea-level rise, or extreme weather. It also depends upon infrastructure, public services, income, governance quality, and social networks. Research on Eastern Indonesia emphasizes the unequal distribution of climate impacts and adaptive capacity across regions. Such findings challenge national climate strategies that rely heavily on aggregate indicators. A national adaptation target can be achieved while significant inequalities persist at the local level.

Consequently, climate policy needs a territorial justice dimension. Resources should be allocated not merely according to project readiness or investment potential but also according to vulnerability and historical disadvantage. This would require differentiated financing mechanisms, stronger local-government capacity, community-based adaptation, and direct support for marginalized groups.

Otherwise, climate governance may unintentionally reward administrative capacity rather than vulnerability reduction.

6. The Central Contradiction: Green Development without Redistribution

Taken together, these cases reveal a recurring pattern. Indonesia's climate policies can produce environmental improvements while simultaneously reproducing unequal socioeconomic relations. Coal transition can reduce emissions while threatening workers and regions dependent on fossil fuels. Renewable-energy expansion can create clean electricity while generating land and mineral pressures. Climate finance can mobilize substantial capital while remaining institutionally distant from affected communities. Adaptation programs can improve infrastructure while leaving structural poverty untouched. Green industrialization can increase national economic value while concentrating environmental burdens in resource-producing regions.

This is the central contradiction of green growth. The environmental objective may be progressive while the political economy through which that objective is pursued remains unequal. The problem is not therefore the idea of climate action itself but the assumption that environmental benefits will automatically translate into social benefits. They will not. Distribution depends on institutions, ownership, labor relations, territorial governance, and political participation.

Indonesia's climate governance consequently requires a shift from measuring only the quantity of transition—megawatts of renewable capacity, tonnes of emissions reduced, dollars of climate finance mobilized—to measuring the quality of transition. Quality should include who receives economic benefits, who bears adjustment costs, whose territories are affected, who participates in decisions, and whether historically marginalized communities acquire greater political and economic capacity. The transition should be considered successful only when decarbonization and social transformation advance together. This argument provides the foundation for the next section, which will examine how Indonesia could move from green growth toward just climate governance. The crucial question is no longer whether climate policies should be ambitious, but what institutional reforms are necessary to ensure that climate ambition does not reproduce the inequalities it is supposed to overcome.

From Green Growth to Just Climate Governance

The preceding analysis demonstrates that the central problem of Indonesia's climate policy is not a lack of environmental ambition but the distributional structure through which climate ambition is implemented. Indonesia has progressively incorporated climate objectives into national development planning and international commitments, including its Enhanced Nationally Determined Contribution (NDC). The Enhanced NDC is formally registered under the UNFCCC and represents an important institutionalization of Indonesia's mitigation commitments. Yet national emissions targets alone cannot determine whether

climate governance is socially just. A justice-oriented assessment must examine the institutional pathways through which mitigation and adaptation resources are allocated, the social groups affected by transition policies, and the degree to which affected communities participate in decision-making. Basith and Malhotra (2025) similarly find that Indonesia has increasingly incorporated climate-justice language into national policy while implementation at the local level remains uneven because of political, economic, and institutional constraints. The challenge, therefore, is to transform climate justice from a normative aspiration into an operational principle governing investment, energy, land, finance, and development decisions.

A first requirement is to move from aggregate climate efficiency toward distributive climate governance. Conventional policy evaluation tends to prioritize national emissions reductions, investment volumes, renewable-energy capacity, or economic returns. These indicators remain important, but they cannot reveal whether climate policies impose disproportionate burdens on particular populations. A solar project may increase renewable capacity while restricting access to agricultural land; a coal-plant retirement may reduce emissions while threatening regional employment; and a carbon-pricing mechanism may generate fiscal revenue while increasing household costs. The justice question therefore concerns the distribution of both benefits and burdens before, during, and after policy implementation. Nurhidayah et al. (2024) emphasize that Indonesia's just energy transition requires policymakers to address unemployment, ecological degradation, transparency, and equitable opportunities alongside decarbonization. A similar logic applies to climate policy more broadly: a climate intervention should not be considered successful merely because its aggregate environmental indicator improves if its social costs become more concentrated among already disadvantaged groups.

Second, Indonesia requires a stronger framework for just transition planning at the regional level. The decline of coal cannot be managed exclusively through national energy targets because coal-dependent regions possess distinct economic structures and labor markets. A national phase-down strategy should therefore be accompanied by regional transition plans identifying affected workers, businesses, local governments, and communities before economic contraction occurs. Masruhan and Malik (2024) demonstrate that Indonesia's post-coal transition faces policy fragmentation, weak institutional capacity, and the risk that renewable projects reproduce extractive patterns when local participation is insufficient. The legal dimension is equally important. Research on Indonesian energy governance argues that the concept of just transition should be incorporated more explicitly into energy policy while strengthening public participation in decision-making (Nurhidayah et al. 2024; see also the normative analysis in *Journal of World Energy Law & Business*). Thus, transition planning should include employment guarantees where feasible, retraining, social protection, regional economic diversification, and

participatory mechanisms rather than assuming that new green industries will automatically absorb workers displaced from fossil-fuel sectors.

Third, public participation must become a substantive component of climate governance rather than a procedural formality. Participation is frequently mentioned in environmental and climate policies, but its effectiveness depends upon whether communities can actually influence decisions. A consultation process that takes place after project design, financing, and land allocation have effectively been settled provides information but not meaningful political power. This distinction is particularly important for large-scale renewable-energy and green-industrial projects. Research on Indonesia's energy-transition legislation identifies fragmented regulation and weaknesses in participatory governance as significant obstacles to equitable energy transformation (Pratama and Sani 2025). Likewise, Harris, Wahyuni, and Prihatiningtyas (2023) show that debates surrounding Indonesia's proposed renewable-energy legislation involve not only decarbonization but also questions of state control and institutional authority. The implication is that climate governance must democratize not only environmental information but also decisions concerning investment, land, infrastructure, pricing, and resource allocation.

Fourth, justice requires a rights-based approach to green investment. Indonesia's green-growth agenda increasingly depends upon private capital, foreign investment, blended finance, and large-scale infrastructure. Investment can accelerate decarbonization, but investment certainty should not automatically override community rights. The tension is particularly acute where renewable-energy infrastructure, mineral extraction, plantations, forest-carbon projects, or climate-resilient infrastructure intersect with Indigenous and local territories. Fadhil et al. (2025) explicitly identify tensions between green-economy investment and Indigenous rights in Indonesia, arguing that climate-oriented investment can reproduce inequalities when legal and institutional safeguards for Indigenous communities remain inadequate. The issue is not whether investment is desirable, but under what conditions investment becomes socially legitimate. A rights-based green-growth framework should therefore require meaningful consultation, accessible grievance mechanisms, transparent benefit-sharing, protection of customary tenure, and independent environmental and social assessment before major climate-related investments proceed. In this model, social safeguards are not obstacles to green investment; they are conditions of legitimate green investment.

Fifth, Indonesia needs to strengthen the legal architecture of climate justice. Existing environmental legislation provides important foundations, but climate governance remains distributed across environmental, energy, forestry, investment, spatial-planning, and development regulations. This fragmentation can generate contradictory policy signals. Islam and Farizki (2025), for example, argue that Law No. 32 of 2009 provides an important environmental framework but that enforcement and integration of climate-justice principles remain inadequate. Similarly, legal scholarship on Indonesia's renewable-energy framework identifies

fragmentation and regulatory uncertainty as obstacles to coherent energy transition policy (Wahyudi et al. 2023; Harris, Wahyuni, and Prihatiningtyas 2023). The solution should not simply be to produce more regulations. What is needed is policy coherence: climate objectives, environmental rights, land rights, labor protections, investment rules, and energy policy should operate according to mutually reinforcing principles of sustainability and justice.

Sixth, climate finance should be evaluated through distribution rather than mobilization alone. The current policy discourse often treats the volume of capital mobilized as evidence of climate-policy success. Yet a large financing package can have limited justice value if communities cannot access its benefits. Climate finance tends to favor projects with measurable emissions reductions, bankable structures, established institutional counterparts, and relatively predictable returns. Communities with limited administrative capacity may therefore remain peripheral. Indonesia's JETP illustrates this dilemma. International financial support can accelerate coal retirement and renewable-energy development, but the justice dimension depends upon whether affected workers and communities participate in determining how transition resources are allocated. Climate finance should consequently include explicit distributional criteria: how much funding reaches affected workers, how much supports regional diversification, whether community-based projects are eligible, and whether vulnerable groups have accessible mechanisms for contesting decisions. The concept of "just finance" should therefore be operationalized through measurable social outcomes rather than treated as a rhetorical component of investment documents.

Seventh, gender justice must be integrated into climate governance rather than treated as an additional policy category. Women can experience energy transitions differently because of unequal access to employment, property, finance, political representation, and technical training. Antasya and Kersana (2024), applying a feminist climate-justice perspective to Indonesia, demonstrate that women's marginalization in renewable energy is associated with inadequate participation rather than a lack of interest or competence. This finding has direct implications for green-growth policy. If new renewable-energy industries reproduce male-dominated labor structures, then a transition can expand "green employment" without significantly improving gender equality. Gender-sensitive climate governance should therefore incorporate gender-disaggregated employment data, targeted training, equal access to finance, representation in energy institutions, and participation of women in community-level decisions. Such measures should be embedded into project design rather than added after social impacts have already emerged.

Eighth, territorial and Indigenous rights should become central to climate policy. Climate mitigation increasingly depends upon forests, land, minerals, and ecosystems, meaning that climate governance inevitably intersects with territorial governance. Carbon sequestration, forest conservation, renewable-energy infrastructure, and mineral extraction all involve decisions about who controls land

and who is entitled to benefit from its use. The Indonesian Climate Justice Review literature highlights the continuing tension between environmental policy and land rights, including concerns regarding Indigenous territories, forest governance, plantation expansion, and climate adaptation. This suggests that climate governance cannot remain separated from agrarian and Indigenous-rights policy. Protecting forests for carbon purposes while weakening community tenure would simply replace one form of territorial control with another. A justice-oriented climate policy must therefore recognize secure tenure and community authority as instruments of climate resilience rather than treating them as external social concerns.

Ninth, climate justice should incorporate intergenerational accountability. Green-growth strategies frequently justify present investment by promising future environmental benefits, but the costs of transition are often immediate and socially concentrated. A community may lose land today in exchange for an anticipated reduction in emissions decades later; a worker may lose employment before a new industry is established; and public funds may prioritize technological infrastructure while basic adaptation needs remain unmet. Ateneo, Faruki, and Situmorang (2024) argue that Indonesian climate policy contains significant rhetorical commitments to intergenerational justice while implementation remains constrained by short-term economic and political priorities. Intergenerational justice therefore requires more than setting long-term net-zero targets. It requires institutions capable of preventing present policies from transferring ecological, financial, and social liabilities to future generations. Long-term climate planning should consequently include ecological restoration, public investment in resilience, sustainable fiscal strategies, and legally enforceable environmental safeguards.

Finally, Indonesia should redefine green growth as green transformation with redistribution. This does not require abandoning economic development or technological innovation. Rather, it requires changing the criteria through which development success is defined. Economic growth should be considered genuinely green only when environmental improvements are accompanied by reduced inequality, stronger rights, meaningful participation, and increased resilience among vulnerable groups. This is consistent with the emerging Indonesian climate-justice literature, which repeatedly identifies the gap between national climate commitments and local implementation. Basith and Malhotra (2025) describe this as an uneven translation of global climate-justice principles into domestic practice, while Zhu, Fernández Silva, and Ahmed (2025) similarly identify gaps between sustainable-development discourse and the practical protection of Indigenous peoples, rural populations, and women. The policy objective should therefore shift from “How much green investment can Indonesia attract?” to “What kind of social and ecological transformation does green investment produce?” That shift would place justice at the center of climate governance rather than treating it as a secondary safeguard attached to an otherwise predetermined growth strategy.

The broader argument is that green growth becomes legitimate only when its benefits, risks, and decision-making authority are redistributed fairly. Indonesia does not face a choice between climate action and social justice; it faces a choice between different forms of climate action. One pathway prioritizes investment speed, technological deployment, aggregate emissions targets, and market efficiency. Another treats decarbonization as a democratic transformation requiring social protection, territorial rights, gender equality, worker participation, accountable climate finance, and institutional redistribution. The latter is more demanding because it confronts the political structures that determine who benefits from economic transformation. Yet it is also more likely to produce durable climate policy. Climate action that repeatedly generates displacement, exclusion, or livelihood insecurity risks losing social legitimacy, whereas policies that allow affected communities to participate in shaping transition pathways can strengthen both legitimacy and implementation. Indonesia's challenge is therefore not simply to make its economy greener, but to ensure that the process of becoming greener does not reproduce the inequalities embedded in the economy it seeks to transform.

Conclusion

Indonesia's green-growth agenda demonstrates an important contradiction at the heart of contemporary climate governance: policies designed to accelerate decarbonization can simultaneously reproduce existing patterns of social and environmental inequality. The expansion of renewable energy, green investment, critical-mineral industries, climate finance, and energy-transition programs can generate substantial environmental benefits, but these benefits are not automatically distributed fairly. Coal-dependent workers and regions may bear the socioeconomic costs of decarbonization, Indigenous and local communities may face pressure on land and natural resources, and marginalized groups may remain excluded from decisions concerning climate investment. The problem, therefore, is not that Indonesia has adopted climate action too aggressively, but that climate action remains embedded in institutional structures that prioritize investment, economic growth, and technological efficiency more readily than redistribution, recognition, and participation. As the emerging Indonesian climate-justice literature demonstrates, climate vulnerability, poverty, territorial inequality, and weak political representation frequently reinforce one another (Nuruddin and Saputra 2024; Ariska and Simbolon 2024; Fadhil et al. 2025).

The analysis further demonstrates that climate justice requires a transformation in how policy success is defined. Emissions reductions, renewable-energy capacity, climate-finance mobilization, and green investment remain necessary indicators, but they are insufficient for evaluating whether a transition is socially just. A just climate policy must also ask who receives economic benefits, who bears transition costs, whose territories are transformed, whose livelihoods are protected, and whose voices influence decisions. This requires stronger regional just-transition planning, meaningful participation, protection of Indigenous and customary rights,

gender-responsive policies, accessible climate finance, and stronger integration between environmental law, energy regulation, investment policy, and social protection. Indonesia's climate governance should consequently move from a model of green growth with social safeguards toward green transformation grounded in justice. In this framework, justice is not an additional condition imposed on climate policy but a central criterion through which climate policy itself is evaluated.

Ultimately, Indonesia's climate transition will be politically and socially durable only if environmental ambition is accompanied by institutional redistribution. Green development cannot be considered successful when the benefits of decarbonization are nationally or globally distributed while its immediate ecological and socioeconomic costs remain concentrated among workers, rural communities, Indigenous peoples, women, and other groups with limited political power. The challenge is therefore to ensure that climate policies transform not only energy systems and production technologies but also the unequal relationships through which environmental resources and risks are governed. A genuinely just transition would recognize affected communities as rights-bearing political actors rather than passive beneficiaries, while treating ecological protection and social protection as mutually reinforcing objectives. Indonesia consequently does not need to choose between economic development and climate justice; it needs a development model in which decarbonization, ecological sustainability, and social equality are pursued as interconnected dimensions of the same transformation.

References

- Anderson, Zachary R., Koen Kusters, John McCarthy, and Krystof Obidzinski. 2016. "Green Growth Rhetoric versus Reality: Insights from Indonesia." *Global Environmental Change* 38: 30–40. <https://doi.org/10.1016/j.gloenvcha.2016.02.008>.
- Ariska, Nugrah Putri, and Johan Simbolon. 2024. "Climate Crisis, Social Crisis: Measuring Inequality in Climate Impact across Eastern Indonesia." *Indonesian Climate Justice Review* 1 (1). <https://doi.org/10.65815/rv2brk86>.
- Astuti, Rini, Sujatha Raman, and Ardhitya Eduard Yeremia. 2025. "Putting Community-Centric Justice into Just Transitions from the Global South: The Case of Indonesia's Nickel Sector." *Environmental Research Letters* 20 (5): 054020. <https://doi.org/10.1088/1748-9326/adcc1c>.
- Ateneo, Husein Ahmad Zulfikar, Rahman Al Faruki, and Andini Putri Situmorang. 2024. "Intergenerational Justice in Indonesian Climate Policy: Rhetoric or Real Action?" *Indonesian Climate Justice Review* 1 (3). <https://doi.org/10.65815/wkvfj813>.

- Basith, Abdul, and Karan Malhotra. 2025. "From Global to Local: Translating Climate Justice Principles into National Policy." *Indonesian Climate Justice Review* 2 (1). <https://doi.org/10.65815/x1rdx443>.
- Elliott, Lorraine, and Abidah B. Setyowati. 2020. "Toward a Socially Just Transition to Low Carbon Development: The Case of Indonesia." *Asian Affairs* 51 (4): 875–894. <https://doi.org/10.1080/03068374.2020.1835000>.
- Fadhil, Muhammad, Siti Nur Aisyah, Chong Wei Jin, Hassan Ali, and Raudhah Ariffin. 2025. "The Green Economy vs. Indigenous Rights: A Study of the Indonesian Investment Law and Its Impact on Climate Justice." *Indonesian Climate Justice Review* 2 (4). <https://doi.org/10.65815/s2pmr124>.
- Fathoni, Hilman S., Abidah B. Setyowati, and James Prest. 2021. "Is Community Renewable Energy Always Just? Examining Energy Injustices and Inequalities in Rural Indonesia." *Energy Research & Social Science* 71: 101825. <https://doi.org/10.1016/j.erss.2020.101825>.
- Hickel, Jason, and Giorgos Kallis. 2020. "Is Green Growth Possible?" *New Political Economy* 25 (4): 469–486. <https://doi.org/10.1080/13563467.2019.1598964>.
- Hill, Hal, Muhammad Ehsan Khan, and Juzhong Zhuang, eds. 2012. *Diagnosing the Indonesian Economy: Toward Inclusive and Green Growth*. London: Anthem Press.
- Islam, Md. Shariful, and Muhammad Adam Farizki. 2025. "Climate Change and the Law: Assessing Indonesia's 2009 Environmental Protection and Management Law in Promoting Climate Justice." *Indonesian Climate Justice Review* 2 (2). <https://doi.org/10.65815/44w15v63>.
- Loiseau, Eleonore, Laura Saikku, Riina Antikainen, Nils Droste, Bernd Hansjürgens, Kati Pitkanen, Pekka Leskinen, Peter Kuikman, and Marianne Thomsen. 2016. "Green Economy and Related Concepts: An Overview." *Journal of Cleaner Production* 139: 361–371. <https://doi.org/10.1016/j.jclepro.2016.08.024>.
- Masruhan, Wawan, and Shafiyya Malik. 2024. "A Just Energy Transition? Opportunities and Challenges for Post-Coal Indonesia." *Indonesian Climate Justice Review* 1 (1). <https://doi.org/10.65815/3zvxt515>.
- Mol, Arthur P. J., and Gert Spaargaren. 2000. "Ecological Modernisation Theory in Debate: A Review." *Environmental Politics* 9 (1): 17–49.
- Nuruddin, Muhammad Zaki, and Adrianus Julian Saputra. 2024. "Climate Risk, Poverty Trap: Linking Climate Disasters and Inequality in Indonesia." *Indonesian Climate Justice Review* 1 (3). <https://doi.org/10.65815/nbn8bq97>.
- Ordonez, Jose Antonio, Michael Jakob, Jan Christoph Steckel, and Anna Fønfgeld. 2021. "Coal, Power and Coal-Powered Politics in Indonesia." *Environmental Science & Policy* 123: 44–57. <https://doi.org/10.1016/j.envsci.2021.05.007>.
- Organisation for Economic Co-operation and Development (OECD). 2011. *Towards Green Growth*. Paris: OECD Publishing. <https://doi.org/10.1787/9789264111318-en>.

- Rochman, Auliya, Maulana Prasetyo, and Fitria Damayanti. 2024. "New Capital, New Threats? Climate Justice Perspectives on Indonesia's Capital Relocation." *Indonesian Climate Justice Review* 1 (4). <https://doi.org/10.65815/h78yrk75>.
- Schlosberg, David. 2012. "Climate Justice and Capabilities: A Framework for Adaptation Policy." *Ethics & International Affairs* 26 (4): 445–461. <https://doi.org/10.1017/S0892679412000615>.
- Schlosberg, David, and Lisette B. Collins. 2014. "From Environmental to Climate Justice: Climate Change and the Discourse of Environmental Justice." *WIREs Climate Change* 5 (3): 359–374. <https://doi.org/10.1002/wcc.275>.
- Setyawati, Dinita. 2022. "Injustice and Environmental Harm in Extractive Industries and Solar Energy Policies in Indonesia." *International Journal for Crime, Justice and Social Democracy* 11 (1): 14–27. <https://doi.org/10.5204/ijcjsd.1975>.
- World Bank. 2012. *Inclusive Green Growth: The Pathway to Sustainable Development*. Washington, DC: World Bank.
- Zhu, Rong, Maria Jos   Fern  ndez Silva, and Mohammad Rafique Ahmed. 2025. "Assessing Climate Justice within Indonesia's Sustainable Development Framework." *Indonesian Climate Justice Review* 2 (1). <https://doi.org/10.65815/2f4nyj25>.

Acknowledgment

None

Funding Information

None

Conflicting Interest Statement

The authors state that there is no conflict of interest in the publication of this article.

Publishing Ethical and Originality Statement

All authors declared that this work is original and has never been published in any form and in any media, nor is it under consideration for publication in any journal, and all sources cited in this work refer to the basic standards of scientific citation.

Generative AI Statement

The authors used generative AI tools to assist with language editing, including correcting minor writing errors, improving sentence clarity, and formatting references. The editor also used generative AI as an editorial aid to identify and correct minor writing and formatting issues. All AI-assisted changes were reviewed by the author and editor, who remain responsible for the accuracy, originality, and final content of the manuscript.