

Indonesia's Climate Crisis and the Limits of Environmental Legislation

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Abstract

Indonesia's accelerating climate crisis has exposed fundamental weaknesses in the country's environmental legislative framework. Although Indonesia has various sectoral regulations on environmental protection, mining, energy, and investment, their normative coherence and institutional effectiveness remain insufficient to address the multidimensional impacts of climate change. This research aims to examine the limits of Indonesia's environmental legislation in responding to the climate crisis, identify the root causes of regulatory inadequacy, and propose directions for legislative reform. This study uses a qualitative normative-juridical method through statutory, conceptual, and doctrinal approaches. The research evaluates primary legislation, secondary regulations, and legal doctrines relevant to climate governance. The findings reveal three major legal shortcomings. First, disharmonization persists between environmental protection norms and sectoral laws, creating normative conflicts that hinder climate-responsive governance. Second, Indonesia lacks a comprehensive Climate Change Act, resulting in regulatory gaps in mitigation, adaptation, emission targets, and state as well as corporate obligations. Third, enforcement mechanisms and accountability instruments remain weakly formulated. This study concludes that strengthening legal harmonization and institutional accountability is essential to build a coherent and science-based climate legislative framework.

Keywords: climate governance, climate change, climate crisis, environmental legislation, legal harmonization

Abstrak

Krisis iklim yang semakin meningkat di Indonesia menunjukkan adanya kelemahan mendasar dalam kerangka legislasi lingkungan hidup. Meskipun Indonesia telah memiliki berbagai peraturan sektoral di bidang perlindungan lingkungan, pertambangan, energi, dan investasi, koherensi norma dan efektivitas kelembagaannya masih belum memadai untuk menjawab dampak multidimensional perubahan iklim. Penelitian ini bertujuan untuk mengkaji batas-batas legislasi lingkungan hidup Indonesia dalam merespons krisis iklim, mengidentifikasi akar kelemahan regulasi, serta merumuskan arah reformasi legislasi yang lebih responsif terhadap perubahan iklim.

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Penelitian ini menggunakan metode yuridis normatif dengan pendekatan perundang-undangan, konseptual, dan doktrinal. Bahan hukum yang dianalisis meliputi peraturan perundang-undangan, regulasi sektoral, dan doktrin hukum yang relevan dengan tata kelola iklim. Hasil penelitian menunjukkan tiga kelemahan utama. Pertama, masih terdapat disharmonisasi antara norma perlindungan lingkungan hidup dan regulasi sektoral. Kedua, Indonesia belum memiliki undang-undang perubahan iklim yang komprehensif. Ketiga, mekanisme penegakan hukum dan instrumen akuntabilitas masih lemah. Penelitian ini menegaskan pentingnya harmonisasi hukum dan penguatan akuntabilitas kelembagaan dalam membangun legislasi iklim yang koheren dan berbasis ilmu pengetahuan.

Kata kunci: harmonisasi hukum, krisis iklim, legislasi lingkungan hidup, perubahan iklim, tata kelola iklim

1. INTRODUCTION

Indonesia faces an intensifying climate emergency that exposes the structural limits of its environmental legislation. Although Indonesia has established an extensive environmental regulatory framework, the country continues to experience ecological degradation, increasing greenhouse gas emissions, and heightened socio-ecological vulnerability. These conditions indicate that Indonesia's legal framework, while comprehensive in formal terms, has not been fully effective in translating normative commitments into concrete environmental governance. Weak enforcement mechanisms, fragmented institutional mandates, and policy orientations that continue to support extractive development hinder the ability of environmental law to respond effectively to climate risks.¹ Deforestation and land-use change remain central environmental problems, showing that the gap between legislative ambition and practical implementation continues to shape Indonesia's climate vulnerability.²

Existing literature shows that Indonesia's climate crisis persists not only because environmental laws are weakly implemented, but also because the existing legislative

¹ Meike Negawati Kesek, "Role of Environmental Law in Addressing Climate Change: An Analysis of Law Enforcement and Compliance in Indonesia," *International Journal of Business, Law, and Education* 6, no. 2 (July 30, 2025): 1269–74, <https://doi.org/10.56442/ijble.v6i2.1179>.

² Luca Tacconi, Rafael J. Rodrigues, and Ahmad Maryudi, "Law Enforcement and Deforestation: Lessons for Indonesia from Brazil," *Forest Policy and Economics* 108 (November 2019): 101943, <https://doi.org/10.1016/j.forpol.2019.05.029>.

framework contains normative gaps and regulatory disharmony. Indonesia has adopted various regulations on environmental protection, climate adaptation, land governance, mining, energy, and investment. However, these regulatory frameworks are often weakened by fragmented authority, weak enforcement, and policy orientations that prioritize economic development over environmental protection.³ Previous studies also indicate that climate mitigation and adaptation policies in Indonesia remain constrained by problems of multilevel governance, institutional coordination, and sectoral policy fragmentation.⁴ These findings suggest that Indonesia's climate vulnerability is inseparable from the systemic limitations of its environmental legislation and the absence of comprehensive legal instruments specifically designed to address climate change.

The problem becomes more complex because Indonesia has not yet enacted a comprehensive Climate Change Act that clearly regulates mitigation, adaptation, emission reduction targets, institutional coordination, corporate responsibility, and climate accountability. Sectoral regulations on mining, forestry, energy, spatial planning, and investment often operate separately and may create normative conflicts with environmental protection principles. In the energy sector, the absence of a comprehensive renewable energy legal framework also creates uncertainty in accelerating the transition toward low-carbon development.⁵ Environmental law enforcement also remains weak. An empirical study of 15 environmental cases in Bali from 2018 to 2023 found that 12 cases, or 80%, were resolved through administrative sanctions or mediation, while only 3 cases, or 20%, resulted in imprisonment.⁶ Although these findings are geographically limited and cannot be generalized to all environmental cases in Indonesia, they illustrate the predominance of administrative handling over criminal accountability in the cases

³ Ampuan Situmeang and Ninne Zahara Silviani, "Sustainable Development and Climate Resilience 2050: Evaluating Indonesia's Environmental Legal Landscape," *Nurani: Jurnal Kajian Syari'ah Dan Masyarakat* 24, no. 1 (June 27, 2024): 151–64, <https://doi.org/10.19109/nurani.v24i1.21878>.

⁴ Ali Muhammad et al., "Multilevel Governance and Indonesia's Strategy for Climate Change Mitigation and Adaptation," *Jurnal Hubungan Internasional* 13, no. 2 (March 20, 2025): 14–27, <https://doi.org/10.18196/jhi.v13i2.20999>.

⁵ Andika Sefatia Mendrofa et al., "Policy Diffusion on New and Renewable Energy in Indonesia," *Journal of Ecohumanism* 3, no. 8 (November 14, 2024): 580–85, <https://doi.org/10.62754/joe.v3i8.4752>.

⁶ Wayan Werasmana Sancaya and Komang Adi Kurniawan Saputra, "Criminal Law Policy on Environmental Crimes in Climate Change Issue," *Journal of Tourism Economics and Policy* 5, no. 2 (May 19, 2025): 287–97, <https://doi.org/10.38142/jtep.v5i2.1372>.

examined. This pattern, combined with limited institutional capacity and inconsistent enforcement, constrains the ability of environmental law to function as an effective instrument of climate governance.

The limitations of environmental legislation also affect the protection of vulnerable communities. Indigenous peoples and local communities often experience the direct consequences of environmental degradation, land-based development policies, and weak recognition of customary rights. Climate-related policies have not fully integrated Indigenous rights, local ecological knowledge, and meaningful participation into the legal framework of climate governance.⁷ Reports on the impacts of National Strategic Projects also show that development policies may create serious human rights concerns when land acquisition, environmental protection, and community participation are not properly guaranteed.⁸ Therefore, the climate crisis in Indonesia should not only be understood as an ecological issue, but also as a matter of legal protection, institutional accountability, and climate justice.

This study aims to critically examine the structural limitations of Indonesia's environmental legislation in addressing the climate crisis, with particular attention to legal effectiveness, normative coherence, and climate justice. The analysis focuses on three main issues: first, the weaknesses of environmental law enforcement and compliance; second, the normative gaps and disharmony between environmental protection norms and sectoral regulations; and third, the extent to which climate-related legislation protects vulnerable communities, including Indigenous peoples and local communities affected by climate-related development policies.⁹ Through this focus, the study seeks to provide a holistic assessment of Indonesia's legal preparedness for a climate-resilient future.

⁷ Ilham Dwi Rafiqi, "Recognition of Indigenous Peoples Values in Indonesia for Policy Addressing Climate Change," *Journal of Law and Legal Reform* 6, no. 1 (March 13, 2025): 1–40, <https://doi.org/10.15294/jllr.v6i1.11746>.

⁸ Komisi Nasional Hak Asasi Manusia Republik Indonesia, "Dampak Proyek Strategis Nasional Terhadap Hak Asasi Manusia" (Jakarta, 2024), https://dataham.komnasham.go.id/home/data_detail/b337e84de8752b27eda3504a12363109e80.

⁹ Setyani Dwi Lestari et al., "Comparison and Implementation of Environmental Law Policies in Handling Climate Change in ASEAN Countries: A Comparative Study of Indonesia, Malaysia, and Thailand," *International Journal of Energy Economics and Policy* 14, no. 2 (March 15, 2024): 687–700, <https://doi.org/10.32479/ijeeep.14998>.

Based on the above background, this article focuses on the structural and normative limitations of Indonesia's environmental legislation in responding to the climate crisis. Problems of law enforcement are examined insofar as they reflect weaknesses in legislative design, including unclear institutional mandates, inadequate accountability mechanisms, regulatory disharmony, and inconsistent sanctions. Accordingly, this study addresses the following research question: to what extent do normative gaps and disharmony within Indonesia's environmental legislation constrain climate-responsive governance, and what legislative reforms are required to strengthen legal coherence, institutional accountability, and the protection of vulnerable communities?

2. RESEARCH METHODS

This study employs a normative-juridical method. Socio-legal findings from previous empirical studies are used only as secondary supporting data. The research examines Indonesia's environmental legislative framework and its operationalization in administrative and policy domains. The main legal materials analyzed include Law No. 32 of 2009 on Environmental Protection and Management, its implementing regulations, carbon governance instruments, renewable energy policies, national development policies, and other relevant statutory and policy instruments concerning climate governance.

The legal materials used in this study consist of primary and secondary legal materials. Primary legal materials include statutory regulations and policy instruments related to environmental protection, climate governance, renewable energy, carbon governance, and environmental law enforcement. Secondary legal materials include journal articles, books, research reports, institutional publications, and reports issued by environmental and human rights institutions. These materials were collected through statutory review and document-based legal research using official legal databases, government publications, institutional reports, and scholarly literature.

The analysis was conducted using statutory, conceptual, and comparative approaches. The statutory approach was used to examine the structure, content, and coherence of relevant legal instruments. The conceptual approach was applied to analyze

key concepts such as climate governance, legal harmonization, environmental accountability, and climate justice. The comparative approach was used to identify similarities, differences, and potential conflicts among sectoral regulations affecting environmental protection and climate policy. The collected materials were analyzed qualitatively to identify normative gaps, regulatory disharmony, institutional fragmentation, enforcement weaknesses, and accountability limitations, particularly in relation to vulnerable communities and Indigenous peoples.

3. RESULTS AND DISCUSSION

3.1. Climate Crisis and Ecological Degradation in Indonesia

The findings confirm that Indonesia remains one of the world's largest contributors to greenhouse gas emissions, driven primarily by land-use change. Forestry activities, illegal logging, and rapid expansion of plantation economies continue to dominate land-use decisions, generating emissions that exceed national mitigation capacity. Deforestation remains a persistent structural problem, sustained by weak monitoring and regulatory fragmentation, placing Indonesia among the highest global emitters.¹⁰ These findings indicate that uncontrolled land-use emissions constitute one of the central ecological drivers of Indonesia's climate crisis. Consistent with previous analyses, Indonesia's deforestation continues to accelerate and remains the dominant driver of land-use emissions.

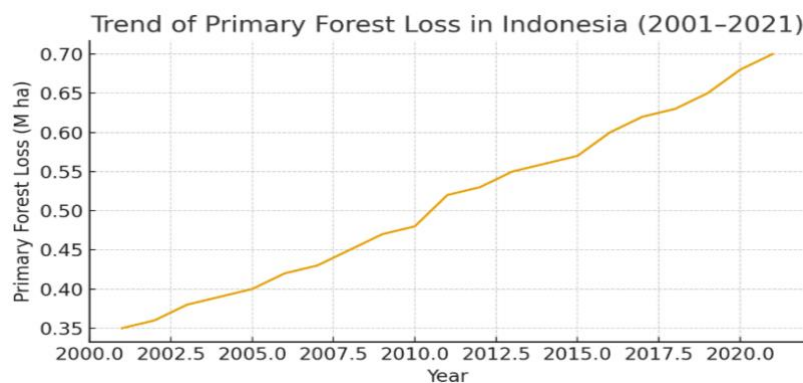


Figure 1. Trend of Primary Forest Loss in Indonesia, 2001–2021. Source: Adapted from Tacconi et al. (2019).

¹⁰ Tacconi, Rodrigues, and Maryudi, "Law Enforcement and Deforestation: Lessons for Indonesia from Brazil."

Indonesia's physical geography also amplifies climate-related risks, making the country highly vulnerable to extreme environmental impacts. As an archipelagic nation with densely populated coastal areas, Indonesia faces intensified hazards, including land subsidence, flooding, and sea-level rise. Jakarta serves as a critical case, exhibiting chronic air pollution and land subsidence severe enough to justify the relocation of the national capital. Projections indicate that roughly 2,000 small islands may be submerged by 2050, over 70% of which lie in Maluku.¹¹ These findings show that climate risks in Indonesia are not speculative but already materializing, requiring urgent legal and policy intervention.

Empirical indicators further show a consistent deterioration in Indonesia's climate governance performance. Weak mitigation measures, insufficient institutional coordination, and policy delays limit the country's ability to meet international climate goals. Indonesia fell to rank 36 out of 68 countries in the 2024 Climate Change Performance Index, scoring particularly low in emissions reduction and climate policy effectiveness. This decline signals systemic challenges in translating legal commitments into actionable climate strategies.

3.2. Legislative Limitations and Enforcement Failures

The limitations of Indonesia's environmental legislation do not arise from the complete absence of environmental assessment requirements, but from regulatory fragmentation, limited normative coherence, and the absence of an integrated climate-specific legislative framework. Government Regulation No. 22 of 2021 formally maintains environmental assessment as a preventive legal instrument. Article 3 paragraph (3) provides that Environmental Approval constitutes a prerequisite for the issuance of Business Licensing or Government Approval, while Article 3 paragraph (4) stipulates that Environmental Approval is obtained through an AMDAL assessment or the preparation and examination of a UKL-UPL. Furthermore, Article 4 requires businesses and/or activities affecting the environment to possess an AMDAL, UKL-UPL, or SPPL, whereas

¹¹ Rafiqi, "Recognition of Indigenous Peoples Values in Indonesia for Policy Addressing Climate Change."

Article 5 paragraph (1) requires an AMDAL for activities that may have significant environmental impacts.

These provisions demonstrate that environmental protection requirements have not been formally eliminated. Nevertheless, the integration of Environmental Approval into the business-licensing framework may create tension between environmental protection and investment facilitation. Environmental assessment should function as a substantive preventive mechanism for determining the environmental feasibility of a proposed business or activity. However, when it is positioned primarily as a prerequisite within the licensing process, there is a risk that compliance will be treated as an administrative formality rather than as a substantive evaluation of ecological risks. Accordingly, the legislative limitation lies not merely in the existence or absence of environmental assessment obligations, but in the capacity of the regulatory framework to guarantee independent scientific assessment, transparency, meaningful public participation, and effective environmental safeguards.

The limitations of environmental legislation are also influenced by the political economy of lawmaking. Environmental regulations are formulated and implemented amid competing objectives, including environmental protection, economic growth, infrastructure development, and investment acceleration. When economic considerations dominate the regulatory process, environmental safeguards may be treated as procedural requirements that must be completed to facilitate business activities. This does not necessarily mean that every derivative regulation is inherently pro-business. Rather, it demonstrates the need to critically examine whether regulatory discretion, exemptions, institutional arrangements, and licensing procedures provide adequate protection for ecological interests (Sitorus et al., n.d.; Situmeang & Silviani, 2024).

Political commitment is therefore essential to the effectiveness of environmental legislation. The existence of environmental norms alone cannot guarantee climate-responsive governance when policymakers and implementing institutions lack a strong commitment to the precautionary principle, ecological sustainability, public participation, and corporate accountability. Legislative reform should consequently address not only technical inconsistencies among regulations, but also the policy orientation underlying

their formulation and implementation. Environmental sustainability and climate justice must be treated as substantive objectives of development rather than merely as administrative components of the investment process.

Enforcement problems further compound these legislative limitations. Institutional fragmentation, overlapping mandates, limited enforcement capacity, inadequate supervision, and low levels of corporate compliance reduce the deterrent effect of environmental law. However, normative and implementation problems must be distinguished analytically. Unclear institutional mandates, inconsistent sanctions, and fragmented accountability mechanisms reflect weaknesses in legislative and institutional design. In contrast, inadequate personnel, weak supervision, corruption, and non-compliance primarily concern implementation.¹² These two dimensions are closely connected because unclear legislation may obstruct enforcement, while ineffective enforcement may prevent formally adequate legal norms from producing meaningful environmental protection.

Environmental criminal law also faces limitations in producing an effective deterrent against serious ecological harm. Sancaya and Saputra¹³, in their study concerning environmental law enforcement in Bali, report that 20% of the environmental cases examined resulted in imprisonment, while 80% were handled through administrative measures. These findings suggest that criminal enforcement remained secondary to administrative enforcement in the cases examined. Nevertheless, because the study concerns a particular geographical context and a limited sample, the percentages should not be generalized as representing all environmental cases in Indonesia.

Administrative sanctions remain important for restoring compliance and preventing continued violations. However, they should not substitute for proportionate criminal accountability in cases involving deliberate conduct, repeated violations, extensive ecological damage, serious harm to affected communities, or corporate misconduct. Effective environmental enforcement therefore requires clear criteria for distinguishing

¹² Kesek, "Role of Environmental Law in Addressing Climate Change: An Analysis of Law Enforcement and Compliance in Indonesia."

¹³ Sancaya and Saputra, "Criminal Law Policy on Environmental Crimes in Climate Change Issue."

administrative violations from environmental crimes, as well as sanctions proportionate to the nature, scale, and consequences of the environmental harm. These enforcement outcomes are illustrated in Figure 2.

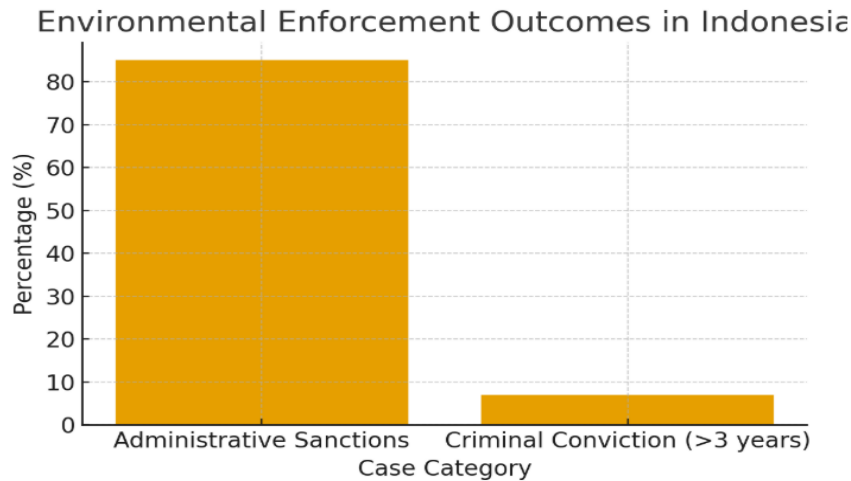


Figure 2. Environmental Enforcement Outcomes Reported in the Bali Case Study
Source: Adapted from Sancaya and Saputra (2025).

Figure 2 shows that 80% of the environmental cases examined in the cited study were handled through administrative measures, while 20% resulted in imprisonment. The figure represents only the findings of the Bali case study and should not be interpreted as a national representation of environmental law-enforcement outcomes in Indonesia.

Overall, Indonesia's environmental legal framework remains extensive but fragmented across environmental protection, forestry, mining, energy, spatial planning, investment, and carbon-governance regulations. This fragmentation limits horizontal coherence among sectors and vertical coordination between national and regional institutions.¹⁴ The problem is intensified by political-economic incentives that may favor environmentally harmful activities and by inadequate mechanisms for ensuring institutional accountability.

The combined effect of regulatory fragmentation, climate-specific normative gaps, limited institutional coordination, and inconsistent enforcement constrains Indonesia's ability to implement coherent and ambitious climate mitigation and adaptation policies.

¹⁴ Kesek, "Role of Environmental Law in Addressing Climate Change: An Analysis of Law Enforcement and Compliance in Indonesia."

Therefore, legislative reform must be accompanied by stronger institutional arrangements, clearer allocation of authority, proportionate sanctions, transparent supervision, and effective accountability mechanisms. Without these reforms, the gap between formal legal commitments and actual environmental governance will persist.

3.3. Climate Justice, Indigenous Peoples, and Litigation Barriers

The constitutional recognition of Indigenous peoples, referred to in the Indonesian constitutional framework as customary law communities, is primarily grounded in Article 18B paragraph (2) of the 1945 Constitution of the Republic of Indonesia. This provision recognizes and respects customary law communities and their traditional rights insofar as they remain in existence, are consistent with societal development and the principles of the Unitary State of the Republic of Indonesia, and are regulated by law. Article 28I paragraph (3) further provides that cultural identities and the rights of traditional communities shall be respected in accordance with the development of times and civilizations. These constitutional provisions establish Indigenous peoples as rights-bearing communities with a distinct legal status rather than merely as ordinary local stakeholders.

The constitutional recognition of Indigenous peoples has significant implications for environmental and climate governance. Climate-related policies should recognize and protect customary territories, traditional rights, cultural identities, local ecological knowledge, and meaningful participation in decision-making. Nevertheless, constitutional recognition has not always been consistently translated into effective protection under sectoral legislation and administrative practices. Differences in recognition requirements and the dependence on formal recognition by state or regional authorities may create legal uncertainty, particularly for communities whose status and territories have not yet been formally acknowledged.

Climate governance deficiencies therefore disproportionately affect Indigenous peoples and other vulnerable communities. Development policies, including National Strategic Projects, may create conflicts when infrastructure and investment objectives overlap with customary territories. The Aliansi Masyarakat Adat Nusantara reported that

approximately 2,578,073 hectares of customary territories were taken or controlled for investment, business, and infrastructure-development interests in 2023. The reported incidents were also associated with criminalization and violence against members of Indigenous communities.¹⁵ Because these figures originate from an Indigenous rights organization, they should be understood as documented findings from that organization rather than as judicially established data.

Existing climate and environmental regulations also do not always adequately recognize the distinct legal status and collective rights of Indigenous peoples. Rafiqi¹⁶ argues that certain climate policies and carbon-governance instruments tend to position Indigenous peoples within the broader category of local communities or stakeholders. Such an approach may recognize the cultural value of local wisdom without necessarily guaranteeing legal authority over customary territories, secure land tenure, or meaningful participation in climate-related decision-making.¹⁷ This gap between constitutional recognition and sectoral implementation contributes to structural inequality in climate governance.

The lack of secure recognition of customary territories may expose Indigenous communities to land acquisition, forestry concessions, mining activities, infrastructure development, renewable-energy projects, and carbon-market initiatives. Climate policies that are intended to promote mitigation or low-carbon development may consequently produce new forms of injustice when they are implemented without adequate social safeguards. Climate-responsive governance must therefore ensure that environmental objectives are not pursued at the expense of the constitutional rights, livelihoods, and cultural identities of Indigenous peoples.

¹⁵ Aliansi Masyarakat Adat Nusantara, "Catatan Tahun 2023 Aliansi Masyarakat Adat Nusantara: Masyarakat Adat Di Tahun Politik: Di Tengah Hukum Represif Dan Cengkeraman Oligarki" (Jakarta, 2023), <https://www.aman.or.id/publication-documentation/239>.

¹⁶ Rafiqi, "Recognition of Indigenous Peoples Values in Indonesia for Policy Addressing Climate Change."

¹⁷ Azlan Abas, Azmi Aziz, and Azahan Awang, "A Systematic Review on the Local Wisdom of Indigenous People in Nature Conservation," *Sustainability* 14, no. 6 (March 15, 2022): 3415, <https://doi.org/10.3390/su14063415>.

The trajectory of climate-related litigation in Indonesia also remains constrained by procedural and institutional limitations. Sulistiawati¹⁸ identified 112 climate change-related cases brought before Indonesian courts between 2010 and 2020. Most of these cases were criminal cases relating to forestry or forest fires, while climate change generally appeared incidentally in claims, evidence, expert testimony, indictments, or judicial reasoning rather than as the principal legal issue. Accordingly, these cases are more accurately characterized as incidental climate change litigation than as direct challenges to climate policy.

Although such litigation has contributed to the introduction of climate-related arguments into Indonesian courts, its transformative capacity remains limited. Courts do not always examine climate-specific harm, causal relationships, long-term ecological effects, or state obligations concerning mitigation and adaptation in a comprehensive manner. Procedural barriers, including legal-standing requirements, difficulties in proving causation, limited access to scientific evidence, and the costs of litigation, may further restrict access to climate justice for affected communities.

The weaknesses of environmental legislation, limited protection of Indigenous peoples, and barriers to climate litigation demonstrate that Indonesia's climate crisis is not merely an ecological problem. It is also a problem of constitutional rights, legal recognition, institutional accountability, and access to justice. Climate governance that disregards the rights and participation of Indigenous peoples may reproduce structural inequality even when it is formally directed toward environmental protection or emission reduction.

Therefore, climate-responsive legislative reform must explicitly recognize Indigenous peoples as constitutional rights holders. The legal framework should guarantee effective recognition and protection of customary territories, access to environmental information, meaningful participation in decision-making, protection

¹⁸ Linda Yanti Sulistiawati, "Climate Change Related Litigation in Indonesia," *Communications Earth & Environment* 5, no. 1 (September 19, 2024): 522, <https://doi.org/10.1038/s43247-024-01684-1>.

against criminalization, and effective remedies for violations of Indigenous rights.¹⁹ Climate-related policies, including carbon trading, forest conservation, renewable-energy development, and National Strategic Projects, should incorporate adequate safeguards to ensure that climate mitigation and economic development do not undermine the rights and resilience of Indigenous communities.

3.4. Toward Climate-Responsive Legislative Reform

Even when Indonesia adopts modern climate instruments, such as carbon trading and Carbon Economic Value, their effectiveness is hampered by regulatory ambiguity. Market-based mechanisms require robust legal architecture, institutional clarity, and verifiable monitoring systems, all of which remain underdeveloped in Indonesia.²⁰ Studies show significant MRV or Monitoring, Reporting, and Verification inconsistencies and unclear jurisdictional authority within Carbon Economic Value implementation frameworks, undermining their credibility and limiting their contribution to achieving national climate targets.²¹ Without substantial legal and institutional strengthening, Indonesia's shift toward market-driven climate governance will remain largely symbolic rather than transformative.

Overall, Indonesia's climate governance suffers from a disconnect between ambitious international commitments and domestic institutional readiness. While Indonesia participates actively in global climate regimes and formally adopts a multilevel governance model, domestic coordination failures and entrenched economic interests undercut implementation. Research shows that climate adaptation and mitigation strategies lack vertical coordination between national and regional governments and horizontal coherence among sectors, resulting in policy fragmentation and inefficiency.²²

¹⁹ Arifin Maruf, "Legal Aspects of Environment in Indonesia: An Efforts to Prevent Environmental Damage and Pollution," *Journal of Human Rights, Culture and Legal System* 1, no. 1 (March 30, 2021), <https://doi.org/10.53955/jhcls.v1i1.4>.

²⁰ Nurpanca Sitorus et al., "Environmental Management Law Policy in Indonesia Towards People's Prosperity," 2022, <https://doi.org/10.2991/assehr.k.220204.013>.

²¹ Diah Ayu Rahmawati et al., "The Role of Carbon Trading in Climate Change Mitigation: A Juridical Analysis of Policies and Regulations in Environmental Law in Indonesia," *The Easta Journal Law and Human Rights* 3, no. 01 (October 31, 2024): 38–48, <https://doi.org/10.58812/eslhr.v3i01.356>.

²² Muhammad et al., "Multilevel Governance and Indonesia's Strategy for Climate Change Mitigation and Adaptation."

These governance failures explain why Indonesia continues to rank poorly in global assessments despite extensive legislative activity.

Based on these findings, Indonesia needs climate-responsive legislative reform that strengthens legal coherence, institutional accountability, and climate justice. The reform agenda should include the enactment of a comprehensive Climate Act, the development of a dedicated Renewable Energy Law, harmonization between environmental protection norms and sectoral regulations, stronger sanctions for environmental crimes, and explicit protection for Indigenous peoples and vulnerable communities. To bridge the gap between legal commitments and practical implementation, Indonesia must align its legal, institutional, and political systems with its international climate commitments and domestic climate resilience needs.

CONCLUSION AND SUGGESTION

This study concludes that Indonesia's climate crisis is exacerbated by structural limitations in its environmental legislation. Although Indonesia has enacted Law No. 32 of 2009 on Environmental Protection and Management and various sectoral regulations related to mining, forestry, energy, investment, and spatial planning, these regulations have not yet formed a coherent and effective legal framework for climate governance. The findings show that the main problems lie in weak law enforcement, normative disharmony, fragmented institutional authority, and the absence of a comprehensive Climate Change Act. These limitations reduce the capacity of environmental law to respond effectively to climate mitigation, adaptation, emission reduction, corporate responsibility, and climate accountability.

The study also finds that the limitations of environmental legislation have significant implications for climate justice. Vulnerable communities, particularly Indigenous peoples and local communities, remain insufficiently protected in climate-related regulations and development policies. Weak recognition of customary territories, limited participation in decision-making, and the absence of climate-specific litigation mechanisms show that Indonesia's legal framework has not fully integrated justice, rights protection, and community resilience into climate governance. Therefore, Indonesia's

climate crisis should not be understood merely as an ecological problem, but also as a legal and institutional governance problem.

Based on these conclusions, this study recommends that Indonesia formulate a comprehensive Climate Change Act to regulate mitigation, adaptation, emission targets, institutional coordination, public participation, corporate obligations, and accountability mechanisms. Environmental legislation should also be harmonized with sectoral regulations to ensure that development policies do not weaken environmental protection. In addition, law enforcement mechanisms must be strengthened through more effective sanctions, clearer corporate liability, and stronger institutional coordination. Future research is recommended to examine the implementation of climate governance at the regional level and to explore the lived experiences of Indigenous peoples and vulnerable communities affected by climate-related policies

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