



## Natural Resource Policy and Indigenous Peoples' Rights in the Era of Decarbonisation

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### ABSTRACT

Amidst the global euphoria surrounding the transition to a low-carbon economy, decarbonisation is in fact ushering in a new chapter in the politics of natural resources. This study aims to analyse the relationship between the global decarbonisation agenda and the politics of natural resource management in Indonesia, with a particular focus on its implications for the rights of indigenous peoples. This study employs a qualitative, critical case study design, given that the phenomenon is complex, contextual, and involves power relations that a purely quantitative approach cannot adequately explain. The findings confirm that decarbonisation not only brings about an energy transition but also creates new political arenas in the struggle for authority over territories and natural resources, where the state, the global market, and the carbon regime form a configuration of power that risks reproducing the logic of extractivism in a greener guise. The energy transition, which is normatively promoted as a solution to the climate crisis, risks creating an ecological-political paradox as strategic mineral projects, green industrial zones, and market-based carbon economies expand institutional control over forests and indigenous territories that have long served as the foundation for ecosystem sustainability. The conflict between climate mitigation and the sovereignty of indigenous communities is not an anomaly but a structural consequence of integrating nature into the logic of the carbon market and the industrialisation of clean energy.

## **A. Introduction**

In Indonesia, the issue of indigenous peoples' rights has become an increasingly prominent topic in both academic discourse and public policy. The Indonesian Constitution formally recognises the existence of indigenous communities and their traditional rights, yet the implementation of this recognition frequently faces various structural, administrative, and political obstacles (Karso, 2025). Many indigenous territories have, in practice, been managed by local communities for centuries, yet are still legally classified as state forest areas or concession areas granted to companies (Fahmi et al., 2024). This discrepancy between normative recognition and resource management practices creates a space for prolonged conflict between indigenous communities, the state, and the private sector. In the context of decarbonisation, these tensions are likely to intensify as the economic and strategic value of resources linked to the global energy transition agenda increases.

The literature on natural resource politics in Indonesia has developed significantly over the past few decades. Several classic studies highlight how natural resource management in Indonesia is often dominated by a centralised state approach that leaves ample scope for exploitation by the industrial sector, particularly during periods of resource-extraction-based economic development (Hermawan et al., 2023; Sato, 2014). These studies demonstrate that policy structures oriented towards economic growth frequently disregard the rights of local communities and lead to various agrarian conflicts and environmental degradation. Subsequent studies expand on this analysis by highlighting the roles of decentralisation, legal reforms, and social movements in reshaping the relationship among the state, society, and natural resources (Bradlow, 2024; Sirimorok et al., 2023).

As attention to climate change issues grows, several recent studies have highlighted the social implications of climate change mitigation policies in Indonesia. Studies on the REDD+ mechanism, for example, show that programmes to reduce emissions from deforestation and forest degradation can provide opportunities for forest conservation whilst improving the welfare of local communities (Do & van Noordwijk, 2023; Wunder et al., 2024). However, their implementation frequently faces challenges related to governance, transparency, and benefit distribution. Several studies have found that although REDD+ is designed to involve local communities, in practice, such participation is often merely symbolic and does not always provide real control over resource management (Lozano Flores et al., 2024; Mukono & Faustine Sambaiga, 2022). This indicates that climate change mitigation programmes based on natural resource management cannot be separated from complex local political dynamics.

The literature on the energy transition in Indonesia has also grown rapidly in recent years. Several studies highlight the economic opportunities arising from the development of a nickel-based electric-vehicle battery industry in Indonesia, including the potential to increase domestic value addition and strengthen Indonesia's position in the global clean energy supply chain (Basuhi et al., 2024; Lahadalia et al., 2024; Schröder & Iwasaki, 2024). However, other studies indicate that the expansion of the nickel industry and other strategic minerals also gives rise to various social and environmental impacts, including deforestation, pollution, and conflicts with local communities. In many cases, mining areas are located in regions that are historically indigenous territories, meaning that such industrial expansion risks exacerbating inequalities in access to resources and reinforcing the marginalisation of local communities.

Research on indigenous communities in the context of climate change also indicates that these communities often find themselves in a paradoxical position. On the one hand, indigenous communities are recognised as guardians of ecosystems possessing local knowledge vital to environmental sustainability. Various studies show that areas managed by indigenous peoples often have lower deforestation rates than areas managed by the state or the private sector (Sze et al., 2022; Zhunusova et al., 2022). On the other hand, recognition of this role is not always accompanied by adequate protection of territorial rights (Reed et al.,

2022). Consequently, indigenous peoples often face the risk of losing access to their territories precisely within the context of programmes aimed at protecting the environment or reducing carbon emissions.

Although the literature on natural resource politics, climate change, and indigenous communities in Indonesia has expanded considerably, there are several limitations in existing research. Many studies analyse natural resources conflicts from a classical political economy perspective without specifically linking them to the dynamics of the global energy transition and the decarbonisation agenda (Bringel & Svampa, 2024; Kus & Jackson, 2025). Conversely, several studies on climate policy tend to focus on the technical aspects of emissions mitigation or environmental governance without giving sufficient attention to the political and social implications for local communities, particularly indigenous peoples. Furthermore, the majority of research on indigenous peoples still positions these communities as the objects of policy impacts rather than as political actors capable of influencing the direction of natural resource management.

Another limitation in the existing literature is the lack of analysis that simultaneously integrates varying scales, ranging from the global dynamics of the energy national policies on natural resources to local practices of indigenous territory management. Many studies tend to focus on only one level of analysis and thus have not fully explained how interactions among these levels shape the political configuration of natural resources in the era of decarbonisation. Yet, the decarbonisation agenda is an inherently multi-level process, in which global policies, national economic interests, and local social practices interact and influence one another.

Most studies examining the relationship between decarbonisation and indigenous communities remain limited to specific case studies or focus on particular sectors, such as forestry or mining. Such a sectoral approach provides important insights into the dynamics of resource conflicts at the local level. However, it does not fully explain how the various sectors linked to the energy transition as a whole influence the position of indigenous communities within the political structure of natural resources. In this context, this study is grounded in the understanding that the era of decarbonisation marks not only a shift in energy technology or environmental policy, but also represents a transformation in the political economy of natural resources. This transformation has the potential to create new opportunities for environmental protection and the recognition of indigenous peoples' rights, yet may also give rise to new forms of inequality and conflict if not accompanied by an inclusive and equitable governance framework. This study aims to analyse the relationship between the global decarbonisation agenda and natural resource management policies in Indonesia, with a specific focus on its implications for the rights of indigenous peoples.

## **B. Method**

This study employs a qualitative approach using a critical case study design to enable an in-depth exploration of the political dynamics surrounding natural resources and their implications for the rights of indigenous peoples in the context of the transition towards a low-carbon economy in Indonesia, given that these phenomena are complex, context-dependent, and involve power relations that cannot be adequately explained through a quantitative approach alone. The study focuses on three main dimensions: the configuration of decarbonisation policies in natural resource management. The nature of power relations between the state, corporations, and indigenous communities, and the implications of these policies for the recognition, access, and control of indigenous communities over their territories and natural resources, which are operationally defined through indicators such as policy forms, licensing mechanisms, patterns of resource conflict, and indigenous communities' adaptation and advocacy strategies. The study population comprises actors directly involved in natural resource governance in regions facing decarbonisation policy pressures, including representatives of indigenous communities, government officials from

the forestry, energy and mining sectors, civil society organisations, and industry stakeholders, with research subjects identified through a combination of purposive sampling and snowball sampling to ensure the representation of key actors possessing relevant knowledge and experience regarding the phenomena under study.

The research instruments comprised semi-structured interview guidelines, field observation sheets, and a policy document analysis format developed through preliminary literature reviews and conceptual consultations to ensure alignment between the instruments and the study's analytical framework, whilst data validity was maintained through source and method triangulation, member checking with key informants, and audit trails to ensure transparency of the research process. Data collection procedures were carried out in stages through a document review of national and international policies relating to decarbonisation and natural resource management, in-depth interviews with key informants, and contextual observations of social dynamics in the study area, whilst data analysis was conducted using thematic analysis techniques grounded in a political economy of natural resources approach, involving data reduction, thematic categorisation, interpretation of power relations, and conceptual synthesis to critically explain how the decarbonisation agenda reshapes structures of access to and control over resources and influences the position of indigenous communities within contemporary political configurations of natural resources.

### **C. Results and Discussion**

#### **1. The Paradox of Decarbonisation as a New Extraction Regime Threatening the Rights of Indigenous Peoples**

Indonesia occupies a strategic position in the global energy geopolitical landscape, as it possesses the world's largest nickel reserves and other minerals essential to the production of electric vehicle batteries and renewable energy technologies (Soamole & Mokodompit, 2025). The Indonesian government is actively promoting the development of mineral downstream industries as part of a national strategy to enhance domestic economic value-added whilst strengthening the country's position within the global clean energy supply chain. This policy is reflected in various regulations that encourage the development of mineral-based industrial zones, accelerate investment in the electric-vehicle battery sector, and integrate the mining industry with new-energy projects. Within this policy framework, strategic minerals are no longer viewed merely as traditional extractive commodities but as key resources in the green economic transformation. However, this shift in discourse has not automatically altered the fundamental practices of extraction that have long characterised Indonesia's resource-based development model.

Global demand for battery minerals is rising significantly alongside the accelerated adoption of electric vehicles and renewable energy technologies in various developed nations (Jones et al., 2023). This rise in demand creates new pressures on regions holding strategic mineral reserves, including many areas that have historically been the traditional territories of indigenous communities. In Indonesia, numerous areas rich in nickel, bauxite and other minerals are situated within tropical forests, small islands and mountainous regions that have for centuries formed the social, economic and cultural foundations of indigenous communities. As these areas become targets for exploitation within the framework of the global energy transition, indigenous communities face new threats in the form of losing access to the land, forests, and resources that have long sustained their livelihoods. In many cases, the expansion of the mining industry to meet clean energy needs actually reinforces patterns of marginalisation that indigenous communities have long experienced throughout the history of natural resource development in Indonesia.

This phenomenon demonstrates that the global energy transition does not automatically alter the underlying structure of extractivism that has long dominated natural resource management. On the contrary, decarbonisation often reproduces extraction patterns

similar to those of the fossil fuel era, albeit with different commodities (Acker et al., 2023). In this context, several environmental political scientists and scholars of the political economy of natural resources have put forward the concept of green extractivism to describe situations in which projects claimed to be part of a sustainability agenda are, in fact, dependent on the intensification of natural resource extraction. This concept highlights how clean energy technologies, which are considered environmentally friendly at the global consumption level, still require production processes that are highly intensive in terms of natural resource use at the local level.

In the Indonesian context, this extractive logic operates through various policy mechanisms that accelerate the expansion of the strategic mineral mining industry. The government has adopted various regulatory instruments to accelerate investment in the new energy sector, including through the designation of national strategic projects that provide streamlined permitting and various incentives for investors. This policy framework often positions mineral-based projects as an integral part of the national development agenda, whilst also presenting them as Indonesia's contribution to global efforts to reduce carbon emissions. However, in practice, the acceleration of licensing and investment deregulation often reduces the scope for local communities to participate in decision-making processes concerning the management of their territories (Belof & Kryczka, 2025). Consequently, projects claimed to be part of the solution to the climate crisis could deepen social conflicts and weaken protections for customary territories.

In this context, the discourse on the energy transition serves as a form of political legitimisation for the opening of new mining concessions. The narrative regarding the global need to tackle climate change creates strong moral and political pressure on mineral-producing nations to increase production of commodities required for clean energy technologies. In many cases, this narrative is used to justify policies prioritising the accelerated exploitation of natural resources on the grounds of global or national interests. Thus, decarbonisation is not merely an environmental agenda but also an ideological tool that enables states and corporations to expand their control over resource-rich territories. Within this framework, indigenous communities are often positioned as obstacles to development or as groups that need to be integrated into new economic projects based on resource exploitation.

The paradox of decarbonisation becomes increasingly clear when viewed through the lens of the long history of control over natural resources in Indonesia. Since the colonial era, the management of natural resources across the archipelago has been dominated by an extraction model oriented towards the interests of the global market. The colonial economic system established a legal and administrative infrastructure that enabled the seizure of land and resources from local communities for the exploitation of commodities such as spices, minerals, and forest products (Hope, 2025). Although Indonesia has gained independence, many of the foundational structures of that system persist in the form of natural resource management policies that position the state as the primary authority over land and resources (Trihatmoko & Susilo, 2024). Within the national legal framework, customary territories are often categorised as part of state forest areas or concession areas that can be allocated for various development interests.

As the global decarbonisation agenda enters the political arena of natural resources in Indonesia, these colonial structures have not fully changed. Instead, the energy transition often operates through the same institutions and legal frameworks used in exploit resources in the past. This results in mineral extraction processes for clean energy needs continuing to follow a centralised, top-down logic of resource control. Under these conditions, indigenous communities often lack a strong position in determining the future of their own territories, despite having historically been the primary stewards of these ecosystems.

Analysis of this paradox must also consider how global clean energy supply chains shape economic relations between developed nations and resource-producing nations. Many industrialised nations are accelerating domestic energy transitions to meet carbon emission reduction targets. The raw material requirements for these technologies are largely met through mineral extraction in developing nations. This situation creates an unbalanced global division of labour, in which developed nations reap the benefits of clean energy technologies whilst the ecological and social impacts of resource extraction are largely borne by local communities in mineral-producing nations. In this context, global decarbonisation can be seen not as a process that is entirely politically neutral, but rather as one linked to the long-established structures of global economic inequality.

For indigenous communities in Indonesia, these dynamics have very real implications for their survival. Indigenous territories possess not only economic value but also serve as social and cultural spaces that form the basis of the community's collective identity. Forests, rivers, mountains, and land are not merely resources to be exploited, but integral parts of indigenous peoples' knowledge systems, spiritual practices, and social structures. When these territories are converted into mining industrial zones or energy projects, indigenous communities not only lose access to their livelihoods but also face threats to the sustainability of their culture and social systems.

The acceleration of mineral and energy-based projects is also often accompanied by changes to spatial planning policies and environmental regulations that facilitate resource exploitation. In some cases, policy revisions are made to expand industrial access to forest areas or territories that previously enjoyed specific ecological protection. Such changes are often justified based on their strategic value for national development and the global energy transition. However, these policies also raise questions regarding the extent to which principles of environmental protection and the rights of indigenous communities are genuinely incorporated into the decarbonisation agenda, which is touted as a solution to the climate crisis.

## **2. The Green State as a New Dominant Force in the Politics of Natural Resources and Indigenous Territories**

In policy practice in Indonesia, the green economy agenda is realised through various development programmes that emphasise integration between the industrial, energy, and natural resources sectors (Keumala et al., 2025; Murthi et al., 2025). One of the most prominent examples is the mineral downstreaming policy, which promotes the development of industrial zones focused on processing nickel and other strategic minerals. These industrial zones are often designed as production hubs for electric vehicle batteries and renewable energy components, which are expected to strengthen Indonesia's position in the global clean energy supply chain. Furthermore, the government is developing large-scale renewable energy projects, such as hydroelectric dams in mountainous regions and solar farms in areas with high energy potential. In various policy documents, these projects are promoted as part of a national strategy to achieve low-carbon development whilst accelerating the economic transition towards a green industrial sector. However, the implementation of these projects frequently takes place in areas with a long history of customary claims that the state's legal system has not fully recognised.

Many areas designated for hydroelectric dams, strategic mineral mines, or green industrial zones are situated in forests, on small islands, or in mountainous regions that indigenous communities have traditionally managed. In many cases, these areas lack formal legal recognition as indigenous territories, despite local communities acknowledging their social and historical existence (Harada et al., 2022; Osborne et al., 2024). This situation creates a structural condition in which the state possesses the legal authority to allocate these

territories for various development interests, including projects categorised as part of the green economy agenda.

The transformation of the state's role in this context can be understood through the concept of the 'green state', which, in theory, refers to a state that integrates sustainability principles into development policies and environmental governance. In the literature on environmental politics, the concept of the green state is often associated with the state's ability to regulate economic activities to align them with ecological limits and to ensure environmental protection (Rea & Frickel, 2023). However, in the practice of natural resource politics in many developing countries, this concept is often subject to a more pragmatic reinterpretation. A green state does not necessarily mean a state that restricts resource exploitation, but rather one that manages such exploitation within a development framework claimed to be more environmentally friendly (Purba et al., 2025).

In the Indonesian context, the state's transformation into a new dominant actor in natural resource politics can be observed through various policy instruments that grant the government significant authority in determining the direction of green industrial development (Rohmy & Nihayaty, 2023). Regulations on investment acceleration, for instance, provide various administrative incentives for projects deemed to hold strategic value for national development. The national strategic project policy enables the government to expedite licensing processes, land provision, and the construction of supporting infrastructure for large-scale projects related to the energy and industrial sectors. Furthermore, the establishment of special economic zones and green industrial zones provides an institutional framework that facilitates the integration of industrial investment, natural resource management, and energy infrastructure development.

These policy instruments are formally designed to create a conducive investment climate and accelerate economic transformation towards a sustainable industrial sector. However, in practice, these mechanisms can also create conditions where decision-making processes regarding land use and resource allocation become increasingly centralised within the state and among major economic actors. When an area is designated as part of a national strategic project or a green industrial zone, the scope for local community participation in determining the area's future is often limited. In such situations, indigenous communities with historical claims to the area often lack a strong bargaining position in development negotiation processes.

This phenomenon can be analysed through the lens of internal colonialism, which examines how the modern state can reproduce practices of domination over specific social groups within its own territory. Within this framework, colonialism is understood not merely as the relationship between a colonial state and its colonies, but also as an internal process whereby the state employs legal, administrative, and economic instruments to control territories and populations deemed to be on the periphery of the national political system. In the context of natural resource politics in Indonesia, internal colonialism can be seen in the way the state claims authority over territories historically managed by indigenous communities and subsequently allocates them for various national development interests. The green economy agenda, in this regard, can serve as a new form of such practice, where sustainability rhetoric is used to justify the state's expanding control over indigenous territories.

Beyond industrial development policies, the state's transformation into a dominant actor is also evident in the rapidly evolving carbon governance framework of recent years. As global attention on climate change mitigation grows, various carbon management mechanisms, such as carbon trading, emissions offset schemes, and forest-based carbon sequestration projects, have begun to be adopted in national policies. These mechanisms are theoretically designed to provide economic incentives for the protection of forests and ecosystems that act as carbon sinks. However, the implementation of carbon policies often

involves designating specific areas as conservation zones or carbon projects under the supervision of the state or specific institutions.

In some cases, areas designated as carbon projects are territories traditionally managed by indigenous communities, meaning such policies may restrict local communities' access to resources that were previously integral to their livelihood systems (Sakapaji et al., 2024). In such situations, carbon governance functions not only as an environmental instrument but also as a new mechanism for territorial regulation (A et al., 2025). The state gains additional legitimacy to regulate land use and resource management on the grounds of protecting the ecological functions of these areas to mitigate climate change. Although the objective of environmental protection may, in principle, yield global ecological benefits, its implementation often fails to adequately consider the rights of indigenous communities that have long managed these territories. Consequently, carbon policies can result in new forms of restricted access to resources that were previously managed by local communities.

The state's role in regulating strategic minerals also reinforces these dynamics of territorial domination. Policies regarding the development of the electric-vehicle battery and renewable-energy industries drive the exploration and exploitation of various minerals deemed crucial to the global energy transition. Within the national policy framework, these minerals are categorised as strategic resources of vital importance to energy security and economic development. This classification provides a legal basis for the state to take measures deemed necessary to ensure the availability of these resources, including by opening new mining areas or developing mineral-based industrial zones. In many cases, the areas targeted for strategic mineral exploration are located in regions with historical ties to indigenous communities.

When the state designates certain areas as strategic zones for national interests, unrecognised indigenous claims are often sidelined in the decision-making process. State law serves as the primary instrument for determining the legitimacy of land use, whilst the knowledge systems and resource management practices of indigenous communities are not always recognised within that legal framework. This situation creates a structural imbalance in which indigenous communities must navigate complex legal and bureaucratic systems to defend their rights. In many cases, local communities lack sufficient political and economic resources to engage effectively in these processes.

Within a broader framework, these dynamics demonstrate that the green economy agenda cannot be understood in isolation from the power structures shaping natural resource politics in Indonesia. The transition towards a low-carbon economy often proceeds through institutions and legal frameworks long established for the management of extractive resources. The state plays a central role in determining the direction of development, yet this role is not always accompanied by adequate mechanisms to protect indigenous peoples' rights. Consequently, sustainability agendas that are normatively aimed at protecting the environment can interact with existing power structures, giving rise to new forms of territorial domination.

### **3. Global Carbon Politics as a New Arena for the Struggle for Sovereignty over Indigenous Territories**

The transformation of ecological value into economic value through carbon mechanisms is bringing about a fundamental shift in the way natural landscapes are understood and contested. Whereas in the past forests were often viewed as sources of timber, agricultural land, or mining areas, within the carbon economy, they are also positioned as financial assets whose value derives from their capacity to absorb and store carbon. This value can be converted into carbon credits traded on the global market to offset emissions generated by industrial activities in various countries. Thus, natural landscapes possess not only ecological and cultural value, but also financial value that can be traded within an increasingly

integrated global economic system. This process creates a new form of commodification of nature, in which carbon stored within ecosystems becomes a tradable commodity through various market schemes.

For indigenous territories in Indonesia, the development of the carbon economy presents an ambivalent dynamic. On the one hand, various studies indicate that areas managed by indigenous communities often have lower deforestation rates than areas managed by the state or the private sector (Panwar et al., 2023; Sze et al., 2022). This suggests that resource management practices rooted in local knowledge and indigenous social systems hold great potential for sustaining ecosystems. Within the framework of global climate policy, these findings are frequently cited as arguments to promote recognition of the role of indigenous communities as forest guardians.

Many international organisations and conservation bodies emphasise that the success of climate change mitigation depends heavily on the protection of indigenous territories and the strengthening of local communities' rights to manage natural resources (Osborne et al., 2024). However, the integration of indigenous forests into the carbon economy also creates new potential conflicts over territorial management and sovereignty. When forests are viewed as carbon assets possessing global economic value, various new actors begin to become involved in the regulation and management of these territories. States, carbon companies, international conservation organisations, and various financial institutions form part of a carbon governance network operating across national borders. In such situations, indigenous communities often find themselves confronted with complex institutional structures and technical regulations that do not always align with their traditional management systems. The processes of carbon measurement, emissions verification, and carbon credit certification standards often require technical expertise and administrative capacity that lie beyond the reach of local communities.

Carbon commodification in this context can be seen as part of a broader process of the capitalisation of nature, in which the ecological functions of an ecosystem are translated into economic value that can be monetised. This process involves various scientific and administrative mechanisms that transform the complexity of ecosystems into quantifiable, verifiable, and tradable carbon units. In the literature on environmental political economy, this phenomenon is often linked to the concept of the financialisation of nature, which describes how nature is increasingly integrated into the global financial system through various market instruments (Insani & Karimullah, 2023; Karimullah, 2023). In the context of natural resource politics, the financialisation of nature can alter power relations over territories because control over resources is no longer determined solely by physical ownership of land, but also by the ability to manage and trade the carbon value contained within it.

In the Indonesian context, the implementation of various carbon schemes often takes place within a legal framework that positions the state as the primary authority over forest areas (Hermawan et al., 2023). Although the constitution recognises the existence of indigenous communities and their traditional rights, this recognition is often not fully reflected in the land and forestry administration systems. Many indigenous territories have, *de facto*, been managed by local communities for centuries, yet *de jure* they remain categorised as state forest areas. When such territories become part of carbon projects or market-based conservation programmes, the state holds a very strong position in determining how the territory is managed and who is entitled to benefit from the carbon value generated. Under such conditions, indigenous communities may lose some control over their territories even though the project is formally intended to protect the forest.

This situation raises critical questions regarding whether carbon market mechanisms genuinely strengthen the recognition of indigenous peoples' rights or instead create a new form of 'green grabbing'. The concept of 'green grabbing', which has emerged in environmental political literature, describes how various projects claimed to be part of a

conservation or climate change mitigation agenda can be used as a tool to acquire land and resources from local communities. In many cases, conservation or carbon projects require restrictions on traditional community activities such as shifting cultivation, forest product gathering, or the use of specific resources. Although such restrictions are often justified on the grounds of ecosystem protection, for indigenous communities, these policies can mean the loss of access to livelihoods that have been an integral part of their social and cultural systems.

Carbon governance also involves international actors with a stake in ensuring the credibility and integrity of the global carbon market. Certification bodies, international conservation organisations, and companies purchasing carbon credits play a crucial role in setting standards for carbon project management. In many cases, decisions regarding project design, benefit-sharing, and monitoring mechanisms are made through highly technocratic processes involving various external institutions. This can create a disconnect between local communities and decision-making processes directly affecting their own territories.

Experience from various countries shows that these dynamics are not unique to Indonesia. In several countries in Latin America, Africa, and Southeast Asia, the implementation of carbon projects has also sparked debates about the relationship between climate change mitigation and the rights of local communities. In Brazil, for example, several REDD+ (Reducing Emissions from Deforestation and Forest Degradation) projects in the Amazon region have sparked debates regarding benefit-sharing and control over indigenous territories. Some indigenous communities welcome these projects as an opportunity to secure financial support for forest conservation, whilst others criticise them for allegedly restricting traditional practices and increasing external oversight of their territories (Herse et al., 2024; Roux et al., 2025). Similar situations have arisen in African nations such as Kenya and the Democratic Republic of the Congo, where carbon-based conservation projects have at times led to conflicts with local communities who feel they are losing access to land and resources.

In Southeast Asia, the experiences of countries such as the Philippines and Malaysia also demonstrate that the success of carbon projects depends heavily on the extent to which indigenous peoples' rights are legally recognised and protected. In the Philippines, legislation that explicitly recognises indigenous peoples' rights to ancestral territories provides a stronger legal basis for local communities to participate in carbon projects as landowners (Kristianto, 2025). However, even within this context, various challenges persist regarding the distribution of economic benefits, governance transparency, and the relationship between local communities and external actors. This comparison demonstrates that the implementation of the carbon economy cannot be separated from the legal and political structures governing land tenure in each country.

In the Indonesian context, the dynamics of carbon politics are also linked to the state's efforts to strengthen its position in global climate diplomacy. Indonesia has one of the world's largest areas of tropical forest and is frequently positioned as a key actor in global climate change mitigation efforts. The Indonesian government has developed various policies to harness the carbon potential of forests and other ecosystems as part of a low-carbon development strategy (Nugroho et al., 2022). However, when these policies are implemented on the ground, questions arise regarding how the economic benefits of carbon trading are distributed and how the rights of indigenous communities are protected in the process.

If carbon mechanisms merely serve as a new instrument to monetise the ecological functions of forests without strengthening recognition of indigenous peoples' rights, the risk of new conflicts will increase (Karimullah, 2024). Local communities may feel that their territories are once again becoming objects of exploitation in a different form, in which economic value no longer stems from timber or minerals but from the carbon stored within the ecosystem (Purwanto, 2022). In such a situation, the carbon economy has the potential to reproduce patterns of unfair resource control, even when cloaked in the rhetoric of

environmental protection. Nevertheless, it is also important to acknowledge that the carbon economy does not always have negative impacts on indigenous peoples.

In some cases, carbon projects designed with a participatory and rights-based approach can provide opportunities for local communities to gain economic benefits whilst strengthening the protection of their territories. When indigenous communities are recognised as the rightful owners of forest territories and are actively involved in the management of carbon projects, such mechanisms can serve as tools to strengthen local sovereignty over natural resources. Consequently, the outcomes of carbon economy implementation are highly dependent on the institutional design and legal framework governing the relationships between the various actors involved.

#### **D. Conclusion**

The era of global decarbonisation not only represents a technological transformation towards low-carbon energy but also shapes a new configuration in the politics of natural resources that has the potential to reproduce patterns of extraction and territorial domination over indigenous territories in Indonesia through the expansion of strategic minerals, green economy projects, and the commodification of carbon within global climate governance. An analysis integrating perspectives on the political economy of natural resources, internal colonialism, and the financialisation of nature reveals that sustainability narratives frequently serve to legitimise the expansion of state and market actors' control over indigenous communities' living spaces through legalistic mechanisms such as national strategic projects, mineral downstreaming policies, carbon governance, and market-based conservation, thus demonstrating that the global energy transition does not automatically result in ecological justice or the recognition of local communities' rights.

The implications of these findings underscore the importance of an energy transition approach oriented towards social justice through legal recognition of indigenous territories, strengthening community participation mechanisms in resource governance, and reforming carbon and green industry policies to prevent the reproduction of new forms of extractivism; however, this study has limitations in its empirical scope, which remains focused on policy dynamics and conceptual analysis; therefore, future research needs to expand the basis of comparative field studies across regions and countries to understand variations in decarbonisation governance practices affecting indigenous communities. Consequently, the future research agenda must develop a more integrative analytical framework linking global climate politics, national resource governance, and local sovereignty, whilst simultaneously promoting policy formulation that ensures the transition to a low-carbon economy does not merely shift the centre of extraction from fossil fuels to minerals and carbon, but genuinely transforms the structure of resource control towards a more just, democratic, and sustainable development model.

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