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The Geopolitics of Critical Minerals and the Future of National Economic Sovereignty

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ABSTRACT

Indonesia's abundance of minerals places the country in a paradoxical position, caught between the opportunity to build new economic sovereignty and the risk of becoming trapped in technological dependence and global economic power imbalances. This study aims to analyse the role of critical minerals in shaping the global economic geopolitical landscape and its implications for efforts to strengthen Indonesia's national economic sovereignty. The study employs a qualitative approach with an exploratory-analytical economic geopolitical research design. The findings confirm that the future of Indonesia's economic sovereignty within the geopolitics of critical minerals is not solely determined by the abundance of natural resources, but by the state's ability to transform mineral wealth into a foundation of technological, institutional, and economic justice capable of critically navigating the complexities of the global green economy, which simultaneously opens up new opportunities for power and the risk of deeper geopolitical inequalities. The practical implications demand a paradigm shift in policy from mere resource nationalism towards a more radical and inclusive strategy of technological and industrial sovereignty, whilst theoretically opening up space for the development of new energy geopolitical studies that are more sensitive to the dimensions of domestic power and global inequality within the green economy.

A. Introduction

In the contemporary geopolitical landscape, competition amongst major nations to secure access to critical minerals is intensifying. The United States, China, the European Union, Japan and South Korea are racing to develop national strategies to secure supplies of strategic minerals to support their high-tech industries and energy transitions (Deberdt & Park, 2026; Yoshimatsu, 2026). This competition is reflected in various industrial policies, foreign investment, the formation of supply chain alliances, and increasingly aggressive resource diplomacy. China, for example, has long consolidated its dominance in the processing of critical minerals and global battery production, whilst the United States and the European Union are beginning to formulate new industrial policies to reduce their dependence on supply chains concentrated in specific countries. These dynamics indicate that critical minerals are now at the centre of global geopolitical contestation, where control over natural resources implies not only economic benefits but also strategic power in determining the direction of future technological and industrial development.

Indonesia, as a country with abundant mineral resources, occupies a highly strategic position within the global geopolitical landscape of critical minerals (X. Zhao, 2025). The country holds the world's largest nickel reserves and significant potential for other strategic minerals, including bauxite, copper, and tin. In recent years, the Indonesian government has taken relatively progressive policy steps to enhance the value of mineral resources through industrial downstreaming policies (Krustiyati & Gea, 2023). The policy banning the export of raw mineral ores, the development of mineral processing industrial zones, and efforts to build an electric-vehicle battery industry ecosystem are part of a national strategy to strengthen economic sovereignty through more strategic management of natural resources. These efforts reflect a paradigm shift in resource policy from an export-oriented focus on raw materials to the development of higher-value-added industries. Nevertheless, Indonesia's strategic position in the geopolitics of critical minerals also poses complex challenges for national economic sovereignty (Karimullah et al., 2025).

Dependence on foreign investment in the development of the mineral processing industry, the dominance of multinational corporations in global value chains, and fluctuations in global commodity prices raise questions regarding the extent to which control over mineral resources can truly strengthen national economic self-reliance. Furthermore, geopolitical pressure from advanced industrial nations seeking to secure supplies of strategic minerals often has implications for the dynamics of international trade negotiations, industrial policy disputes, and shifts in the configuration of international economic relations (P. Zhao & Zhao, 2025). The trade dispute between Indonesia and the European Union regarding the nickel ore export ban policy is a concrete example of how domestic resource policies can become part of a broader geopolitical contestation.

The discourse on the geopolitics of critical minerals is becoming increasingly relevant for understanding how control over natural resources can be translated into tangible economic and political power for nations possessing strategic mineral reserves. The geopolitical-economic perspective emphasises that natural resources possess not only intrinsic economic value but also strategic value linked to a state's ability to influence global production structures, control international supply chains, and enhance its bargaining position in international relations. Consequently, the management of critical mineral resources requires a policy approach that considers not only economic aspects but also political, security, and long-term development dimensions (Dou et al., 2023).

Several previous studies have made significant contributions to explaining the relationship between strategic mineral resources and global geopolitical dynamics. The study conducted by Sovacool and Hook (2021), for example, demonstrates that the global energy transition towards a low-carbon energy system has the potential to create a new form of energy geopolitics centred on critical minerals. Within this framework, countries possessing strategic

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mineral reserves stand to gain significant geopolitical advantages, whilst those reliant on mineral imports face the risk of increasing supply chain vulnerabilities. Another study by Humphreys (2024) highlights that the concentration of critical mineral production in certain countries can create power imbalances within the global economic system, particularly when those countries control mineral processing and refining.

A study by Bradshaw (2026) emphasises that the geopolitics of critical minerals relates not only to the geographical distribution of resources but also to a country's ability to develop industrial processing capacity and downstream technology. In many cases, countries with large mineral reserves derive limited economic benefits because they lack domestic industrial capacity to process these resources into high-value-added products. This indicates that success in utilising critical minerals as a source of economic strength is highly dependent on the industrialisation strategies and development policies implemented by each country.

In the Indonesian context, various studies have examined the implications of mineral downstreaming policies for national economic development. A study by Warburton (2024) indicates that Indonesia's ban on raw mineral exports forms part of a resource nationalism strategy aimed at increasing state control over the mining sector and strengthening the domestic industrial base. Another study by Patunru (2023) highlights that nickel downstreaming policies have the potential to increase national economic value added. Their success depends heavily on the government's ability to manage foreign investment, technology transfer, and the integration of domestic industry into global value chains. Meanwhile, a study by Mubarok and Evvy Kartini (2024) emphasises that the development of the electric vehicle battery industry in Indonesia could present a strategic opportunity to strengthen the country's position within the global clean energy supply chain.

Although these various studies have provided important insights into the dynamics of critical mineral management and its implications for economic development, there remain several limitations in the existing literature. Most studies tend to frame critical mineral issues within the context of resource economics or industrial policy alone, without integrating them deeply into a broader analysis of economic geopolitics. Consequently, the relationship between control over strategic minerals, global power dynamics, and their implications for national economic sovereignty remains incompletely understood (Vivoda et al., 2024). Furthermore, some studies still focus on sectoral analyses of specific mineral downstreaming policies, such as those for nickel, without examining their connection to broader resource geopolitical strategies within the context of the global energy transition.

Another limitation evident in previous studies is the tendency to view Indonesia merely as a supplier of raw materials within the global value chain, without thoroughly exploring the potential for structural transformation that could occur if the country were able to develop a more integrated mineral geopolitical strategy. In many analyses, Indonesia's role is often positioned passively within a global economic structure dominated by advanced industrial nations, thereby failing to give sufficient attention to the possibility of new power configurations emerging from shifts in the global distribution of strategic resources (Dorigné-Thomson, 2023; Mahaseth & Zainab, 2025). In the context of rising global demand for critical minerals, countries with large reserves have the potential to play a more significant role in shaping the future architecture of the global economy.

Changes in global geopolitical dynamics, triggered by strategic rivalry among major powers, also have the potential to open new avenues for developing nations to strengthen their bargaining positions within the international system. The competition between the United States and China to secure technology and clean energy supply chains, for instance, has spurred increased attention to nations with strategic mineral reserves (Zhang, 2025). In such a situation, a country's ability to formulate effective resource management strategies becomes a crucial factor in determining whether this mineral wealth will become a source of economic strength or, conversely, deepen dependence on external powers.

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Based on the above, it is evident that there is a significant knowledge gap in the literature regarding how the geopolitics of critical minerals can be understood in relation to efforts to strengthen Indonesia's national economic sovereignty amidst the transformation of the global economic structure. Most studies have not comprehensively examined the relationship between the distribution of strategic mineral resources, global geopolitical dynamics, and national development strategies that could optimise the potential of these resources for the country's long-term interests. Furthermore, there remains a scarcity of research that specifically positions Indonesia as a strategic actor in global critical mineral geopolitics, whilst simultaneously considering the dimensions of industrial policy, economic diplomacy, and the development of domestic value chains.

Within this framework, this study aims to examine in greater depth the relationship between critical mineral geopolitics and Indonesia's future national economic sovereignty. This study does not merely focus on the economic aspects of mineral resource management but also considers the geopolitical dimensions that influence Indonesia's position within the global economic system, currently transforming. The objective is to analyse the role of critical minerals in shaping the geopolitical configuration of the global economy and its implications for efforts to strengthen Indonesia's national economic sovereignty. The significance of this study lies in its attempt to bridge the gap between resource geopolitics and national economic development studies by positioning critical minerals as a strategic variable in shaping a nation's economic sovereignty.

B. Method

This study employs a qualitative approach with an exploratory-analytical economic geopolitics research design, chosen for its ability to provide an in-depth explanation of the interrelationship between the distribution of critical minerals, power dynamics within global supply chains, and the implications for Indonesia's national economic sovereignty in the context of shifts in the international economic structure. The focus of the study is directed at three main analytical variables, namely the geopolitics of critical minerals, which is operationally defined as the configuration of state power and interests in the control of strategic mineral resources and their global supply chains; national mineral management policy strategies, defined as a series of state policies regarding downstream processing, industrialisation, and resource diplomacy; and national economic sovereignty, understood as the state's capacity to control strategic resources, enhance domestic value addition, and strengthen its bargaining position in the global economy.

The research instruments consist of a document analysis protocol and an analytical categorisation framework developed from the literature on economic geopolitics and strategic resource studies, which were tested using conceptual validation techniques against primary literature and source triangulation to ensure consistency in data interpretation. Data collection procedures were carried out in stages through systematic literature reviews, the collection of policy documents and industry reports, and the compilation of statistical data relating to the production, reserves, and global and national supply chains of critical minerals (Klingenberg et al., 2021). Data analysis was conducted using qualitative content analysis and economic geopolitical analysis techniques, integrating data reduction, thematic categorisation, and the interpretation of structural relationships between mineral resources, state policies, and global power dynamics, thereby enabling the formulation of a comprehensive analytical argument regarding Indonesia's strategic position within the geopolitics of critical minerals and its implications for the future of national economic sovereignty.

C. Results and Discussion

1. Resource Nationalism Versus the Reality of Global Technological Dependence

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The global economic transformation driven by the accelerating energy transition, industrial digitalisation and advancements in high technology has positioned critical minerals as strategic components in shaping the contemporary global economic and political landscape. In this context, countries possessing strategic mineral reserves are often perceived as having the potential to secure a stronger bargaining position within the global economic system, particularly when these minerals form key components of clean energy technologies such as electric vehicle batteries, wind turbines, solar panels, and energy storage systems.

Indonesia occupies a highly significant position within this configuration, as it possesses the world's largest nickel reserves and significant potential for strategic minerals such as bauxite, copper, tin, and several rare-earth elements (Soamole & Mokodompit, 2025). This situation has fuelled a discourse on resource nationalism, which positions control over critical minerals as the foundation for strengthening national economic sovereignty. Mineral downstreaming policies, implemented through restrictions on raw material exports, the development of domestic processing industries, and the development of an electric vehicle battery ecosystem, are often presented as the state's strategy to transform Indonesia's position from merely a supplier of raw materials into a more sovereign industrial actor within the global value chain. However, the optimism accompanying this narrative of resource nationalism requires more critical scrutiny, taking into account the reality of the global economic structure, which is heavily influenced by the distribution of technology, capital, and capacity for innovation.

In many cases, control over natural resource reserves does not automatically lead to economic sovereignty if the resource-owning state lacks the technological and industrial capabilities to process those resources into high-value-added products (Lunstrum & Havice, 2025). This paradox becomes increasingly relevant in the context of critical minerals, which have highly complex technological value chains, ranging from mining and chemical refining to material processing and the production of high-tech components, and ultimately to integration into global manufacturing systems. Although Indonesia possesses vast mineral reserves, the majority of advanced processing technologies, battery design, energy storage systems, and electric vehicle manufacturing are still dominated by multinational corporations and advanced industrial nations. This situation raises fundamental questions regarding the extent to which resource nationalism policies can genuinely achieve structural economic self-reliance, or whether they instead create a new, more complex form of dependency.

From an international political economy perspective, resource nationalism is often understood as a state strategy to increase control over the exploitation of natural resources to secure greater economic benefits for national development (Xu et al., 2024). This strategy is typically implemented through various policies such as restrictions on raw material exports, increased state involvement in the mining sector, domestic processing obligations, and regulations on foreign investment. Within the theoretical framework of economic nationalism, these policies are viewed as a state's effort to reduce dependence on the global economic structure, which tends to position developing countries as suppliers of raw materials for the industries of developed nations.

Without the capacity to develop globally competitive downstream industries, policies restricting raw material exports often result in only limited changes to the national economic structure. In the context of critical minerals, these challenges become increasingly complex as advanced processing industries rely heavily on cutting-edge materials chemistry, high-precision production systems, and robust research and innovation networks. Countries currently dominating the battery and clean energy technology sectors, such as China, Japan, South Korea, and several European nations, have built thriving technological ecosystems over decades through substantial investment in research, industrial development, and integration with global supply chains. Consequently, nations possessing large mineral reserves but

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lacking a robust technological foundation often remain in a relatively subordinate position within the global value chain (Shiquan & Deyi, 2023).

The paradox between resource nationalism and global technological dependence is particularly evident when analysed in the context of Indonesia's downstreaming policies for minerals. In recent years, the Indonesian government has successfully attracted substantial investment in the construction of nickel smelters and other mineral refining industries. The ban on nickel ore exports has encouraged foreign companies to build processing facilities domestically, thereby significantly increasing the capacity for processed nickel production. To a certain extent, this development can be regarded as an initial success in efforts to boost domestic value addition and strengthen Indonesia's position within the global supply chain for electric vehicle batteries. However, upon closer examination, the majority of investment in the nickel processing industry remains dominated by foreign companies that bring their own technology, capital, and global market networks.

This situation indicates that downstreaming policies do not automatically alter the structure of economic dependence unless accompanied by a more comprehensive strategy to build domestic technological capacity. In many cases, the development of mineral processing industries reliant on foreign investment can create new patterns of dependency, in which resource-rich nations serve merely as production sites for intermediate materials for the global technology industry. The products resulting from this processing are then re-exported for further processing into high-tech components in other countries possessing more advanced manufacturing and innovation capabilities.

This phenomenon is also linked to a popular assumption frequently encountered in public policy discourse that ownership of strategic mineral reserves automatically yields economic sovereignty. This assumption is often based on the historical experience of oil-producing nations that have secured significant geopolitical influence by controlling energy resources. However, critical minerals differ from crude oil in several key aspects. The value chain of industries based on critical minerals is far more complex and fragmented, with various production stages requiring specialised technology and extremely high quality standards.

The market for critical minerals is also heavily influenced by technological developments that can alter the composition of materials used in specific products. For example, innovations in battery technology may reduce reliance on specific mineral types or replace them with alternative materials. Consequently, comparative advantages based solely on the ownership of mineral reserves are not always permanent. In this context, resource nationalism often carries a strong symbolic dimension in domestic politics as it relates to notions of national sovereignty and state control over natural wealth.

Narratives regarding the utilisation of mineral resources for the benefit of the people are frequently employed to build political legitimacy for industrial and economic development policies (Engels, 2024). However, if not accompanied by structural transformation in technological capacity and innovation, resource nationalism may function more as a political symbol than as an economic strategy truly capable of altering a country's position within the global economic system. This does not mean that policies strengthening state control over natural resources are unimportant. Still, it does indicate that such policies need to be integrated with broader strategies for technological and industrial development.

The experiences of various countries show that success in utilising natural resources as a driver of development depends heavily on a country's ability to develop domestic innovation capacity. Countries such as South Korea and Japan, which lack significant natural resource reserves, have nonetheless become leaders in high-tech industries due to long-term investment in education, research, and industrial development. Conversely, many countries with abundant natural resources struggle to develop high-tech industries because their economic structures are overly reliant on commodity exports. This phenomenon is often

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referred to as the resource paradox or resource curse, wherein natural resource wealth does not always lead to sustainable economic development unless accompanied by strengthened institutional and technological capacity.

In the Indonesian context, the potential for such a paradox may arise if strategies for managing critical minerals are not integrated with the national technology transformation agenda (Ali & Kim, 2024). The development of smelters and mineral processing industries is indeed a crucial step in enhancing domestic value addition. Still, this stage is merely the initial phase of a far more complex technology value chain. To truly derive greater economic benefits from critical minerals, Indonesia must develop capabilities across various technological fields related to advanced materials, chemical engineering, battery design, energy storage systems, and integration within the electric vehicle industry and other clean energy technologies. Without such capabilities, Indonesia risks remaining in the position of a supplier of materials to the global technology industry controlled by other nations.

The transformation towards a technology-based economy requires long-term investment in research and development, higher education, and the strengthening of the national innovation ecosystem. Universities, research institutions, and domestic industry need to be integrated into an innovation system capable of generating new technologies and enhancing national production capabilities. Furthermore, industrial policies must be designed to encourage tangible technology transfer from foreign companies to domestic actors, rather than merely facilitating investment focused on resource exploitation. This strategy could encompass various policy instruments such as mandatory technology partnerships, the development of joint research centres, and incentives for domestic companies to participate in the value chain of critical mineral industries.

On the other hand, global geopolitical dynamics also influence Indonesia's opportunities to strengthen its position within the critical mineral supply chain. Competition amongst major powers to secure supplies of strategic minerals creates an opportunity for resource-rich nations to enhance their bargaining power in international economic negotiations. However, such opportunities can only be fully utilised if the country possesses a clear strategy regarding how these resources will be used to support national industrial development. Without a coordinated strategy, global geopolitical competition may instead reinforce the country's dependence on foreign investment and technology.

2. The Global Energy Transition: Both a New Opportunity for Power and a Risk of Green Colonialism

Indonesia is often regarded as a key player in the new energy geopolitics due to its possession of the world's largest nickel reserves. Nickel is a vital component in the production of lithium-ion batteries for electric vehicles, which currently dominate the global energy storage industry. This position has given rise to the narrative that Indonesia has the potential to become a 'nickel superpower', capable of leveraging its mineral wealth to gain greater economic and political influence within the international system. Policies on mineral downstreaming, the development of battery industrial zones, and the government's efforts to attract investment in the electric vehicle value chain are often presented as strategic steps to capitalise on the momentum of the global energy transition as an opportunity for national economic transformation.

In public policy discourse, this strategic position is often associated with the possibility of a new form of resource-based economic power emerging, enabling mineral-producing nations to gain stronger geopolitical leverage in international relations. However, the optimism accompanying this narrative requires more critical analysis, taking into account the structural dynamics of the global economy, which remain heavily influenced by the distribution of technology, capital, and capacity for innovation. In many cases, countries with abundant natural resource reserves do not automatically gain significant geopolitical

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advantages if they lack the capacity to control the technology, manufacturing industries, and global market networks that determine the distribution of value within production chains.

In the context of clean energy technology, the majority of innovation capacity, technological design, and high-value-added manufacturing remains concentrated in advanced industrial nations and a few newly industrialised countries such as China, Japan, and South Korea. This raises an important question about the extent to which Indonesia's position as a holder of large nickel reserves can truly generate new economic power, or whether it instead places the country in a new, more complex form of dependency within the global green energy-based economic system.

This paradox becomes increasingly relevant when analysed within the framework of the concept of 'green colonialism', which is beginning to emerge in the literature on environmental political economy. This concept refers to the possibility that the global energy transition driven by advanced industrial nations could create a new form of global inequality, in which developing nations become the primary sites for the extraction of resources needed to support the global green economy. In this scenario, developed nations retain control over technology, manufacturing, and the distribution of key value-added elements within the clean energy production chain, whilst mineral-producing nations bear the bulk of the ecological and social burdens of resource extraction activities (Nwangwu, 2025).

Indonesia, as one of the primary producers of critical minerals, faces a dilemma that reflects these dynamics. On the one hand, rising global demand for nickel and other strategic minerals presents significant economic opportunities for the country to expand its domestic processing industry and increase value-added within the global production chain. The construction of nickel smelters, the development of the electric-vehicle battery industry, and integration into the global clean-energy supply chain can make a significant contribution to national economic growth. On the other hand, the accelerated exploitation of mineral resources also entails various risks, including environmental degradation, social conflict, and inequitable distribution of economic benefits (Bukido et al., 2025; Insani et al., 2024). Large-scale mining activities often result in ecosystem damage, deforestation, water pollution, and changes to the local economic structure that can exacerbate social vulnerabilities in mineral-producing regions.

The global energy transition has the potential to shift ecological burdens from technology-consuming nations to raw material-producing nations. Industrialised nations can reduce their domestic carbon emissions by adopting clean energy technologies (Han et al., 2025). Still, the production of the materials required for these technologies often takes place in developing nations with weaker environmental standards and limited regulatory capacity. Consequently, the environmental impacts of the global energy transition are not eliminated, but rather redistributed geographically to regions that serve as hubs for the extraction of critical minerals. This phenomenon raises ethical and political questions regarding justice in the global energy transition, particularly when the nations that have contributed least to climate change are forced to bear the brunt of the environmental impacts of solutions designed to address the crisis.

Beyond the ecological dimension, the potential for green colonialism is also linked to the distribution of economic value within the production chain of clean energy technologies. The majority of economic profits in the electric vehicle, battery, and renewable energy technology industries stem from the stages of technology design, advanced component manufacturing, and the development of digital systems integrated with these products (Rembulan et al., 2025). Production stages related to the extraction and processing of raw materials generally have lower profit margins than stages of technological innovation and high-value manufacturing. If mineral-producing nations merely act as suppliers of raw materials or intermediate materials within the global production chain, the majority of the

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economic value of the global green economy will remain concentrated in the nations that control the technology and manufacturing industries.

In the context of contemporary geopolitics, these dynamics are further reinforced by the emergence of global policy instruments covering environmental standards, carbon regulations, and green financing mechanisms. Advanced industrial nations are increasingly developing trade policies that incorporate environmental sustainability into international economic regulations (Ji et al., 2022). An example is the carbon border adjustment mechanism, designed to impose additional tariffs on imported products deemed to have a high carbon footprint. Such policies are fundamentally aimed at preventing 'carbon leakage', in which companies relocate production to countries with looser environmental regulations. However, in practice, these policies can also function as geopolitical instruments that restrict the policy space of developing nations and reinforce the dominance of developed nations in global trade.

The development of green finance markets is also creating new mechanisms in the distribution of global economic power. Clean energy projects and related industries often rely on access to international funding from global financial institutions, multilateral development banks, and institutional investors who are increasingly adopting environmental, social, and governance (ESG) principles (Kandpal et al., 2024). Whilst green finance can provide opportunities for developing countries to secure funding for clean energy infrastructure development, such mechanisms may also create new forms of financial dependency if recipient countries are required to align their domestic policies with global investors' standards and preferences. In such situations, environmental sustainability standards can function as regulatory tools that constrain developing countries' policy choices in managing their resources.

These dynamics demonstrate that the global energy transition is not merely a technological process of replacing fossil fuels with renewable energy, but also a geopolitical arena of contestation involving the distribution of economic, technological, and natural resource power. Within this framework, Indonesia's position as a producer of critical minerals presents strategic opportunities whilst simultaneously posing complex challenges (Vivoda et al., 2025). Comparative advantages based on mineral reserves can indeed enhance a country's bargaining position in international economic negotiations. Still, tangible geopolitical leverage can only be achieved if the country controls the production stages that generate high-value-added within the global industrial chain. It is therefore important to challenge the optimistic narratives that frequently emerge in the discourse on the global green economy.

This narrative often portrays the energy transition as a process that automatically generates equitable economic and environmental benefits for all nations. In reality, the unbalanced structure of the global economy can lead to the benefits of the green economy being concentrated in countries that already possess more advanced technological and industrial capacities. If mineral-producing countries are unable to develop domestic innovation capacity and strengthen their own technology industries, the global energy transition risks exacerbating existing geopolitical inequalities.

Criticism of the green economy narrative is also crucial in the context of the social legitimacy of energy transition projects. If communities in mineral-producing nations perceive that the exploitation of their resources yields only limited economic benefits whilst environmental and social impacts are borne locally, public support for clean energy projects may wane. In such situations, the energy transition, which should serve as a solution to the global climate crisis, could instead spark new social conflicts and deepen mistrust towards the sustainability agenda promoted by international actors. Therefore, the success of the global energy transition depends not only on technological innovation but also on the ability to create a fairer economic system in the distribution of the benefits and burdens of this transformation.

In the long term, Indonesia's future position in the geopolitics of clean energy will be largely determined by the country's ability to integrate the management of mineral resources

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with national technology and industrial development strategies. The development of the mineral processing industry is a crucial step in enhancing domestic value addition. Still, this phase must be followed by the development of research and innovation capacity that enables Indonesia to engage in more advanced stages of technology production. Investment in higher education, the development of advanced materials technology, and collaboration among universities, research institutions, and domestic industry are key factors in building an innovation ecosystem capable of supporting a clean-energy-based economic transformation.

3. The Struggle Between National Economic Sovereignty and the Domestic Resource Oligarchy

From a political economy perspective, the management of natural resources is never entirely technocratic or politically neutral, but is always influenced by the configuration of power within society. The ownership structure of the extractive industries, access to mining licences, and the relationships between business actors and political elites play a crucial role in determining how natural resources are managed and who reaps the primary economic benefits from such activities. In the context of developing countries with abundant natural resources, the relationship between the state and the business sector often forms a complex pattern in which public interests and the interests of elite groups are intertwined (Karimullah et al., 2023; Sutisna et al., 2025).

In the literature on the political economy of resources, this phenomenon is often explained through the concept of resource oligarchy, namely, a situation in which control over the extractive sector is concentrated among economic and political elites who have access to capital, power networks, and state institutions (Nurizka et al., 2025). In such a system, state policies formally designed to strengthen national economic sovereignty can simultaneously serve to reinforce the position of domestic oligarchic groups capable of accessing the economic opportunities created by those policies (Sahab et al., 2025).

In the Indonesian context, these dynamics have deep historical roots in the development of the national mining sector. Since the era of resource-based industrialisation in the late 20th century, the extractive sector has frequently served as an arena in which the relationship between the state and major business groups has been closely intertwined through licensing mechanisms, exploitation contracts, and investment partnerships. The ownership structure of mining companies, involving domestic conglomerates, multinational corporations, and networks of international investors, creates a complex political-economic configuration in which the interests of various actors often influence resource management decision-making at different levels of power. In such situations, state policy not only reflects national economic development objectives but is also the result of a process of negotiation and compromise between various interest groups wielding influence within the political system (Sahide, 2025).

The mineral downstreaming policy, which has been one of the main pillars of Indonesia's industrialisation strategy in recent years, provides a concrete example of how state policy can interact with domestic power structures. The ban on the export of raw nickel ore and the obligation to build smelters have spurred significant investment in the mineral processing industry across various regions of Indonesia (Hanafi, 2025). From a macroeconomic perspective, this policy has succeeded in increasing the production capacity of processed nickel and expanding Indonesia's involvement in the global supply chain for electric vehicle batteries. However, upon closer analysis, these developments also reveal a concentration of ownership and economic control within a handful of large companies possessing the financial capacity and political access required to build large-scale industrial infrastructure.

The construction of smelters and mineral industrial zones requires massive investment and complex technology, making it feasible only for companies or consortia with strong economic resources and political networks. This situation raises a crucial question regarding

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whether the downstream processing policy truly broadens economic benefits for the wider public or, conversely, reinforces the concentration of economic power within domestic oligarchic groups. In many cases, large companies holding mining concessions and processing facilities derive significant benefits from rising mineral commodity prices and increasing global demand for clean energy technology feedstocks. Meanwhile, local communities in mining areas often face complex environmental and social impacts, including changes to the local economic structure, ecosystem degradation, and conflicts over the distribution of economic benefits. Such disparities indicate that resource nationalism policies do not automatically lead in a more equitable distribution of welfare when the industry's ownership structure remains concentrated among certain elite groups.

Analysis of the relationship between the state and resource oligarchies must also consider how the ownership structure of the extractive industry influences the direction of national industrial policy. Large companies involved in the critical minerals sector often possess the capacity to influence policy formulation through various formal and informal channels, including political lobbying, personal connections with government elites, and involvement in business networks that wield influence within the national economic system. In such situations, policies formally designed to increase domestic value-added may be directed in such a way as to provide greater benefits to specific economic actors with access to decision-making processes. This can occur, for example, through the structuring of investment incentives, the granting of mining concessions, and fiscal policies that favour large corporations.

These dynamics demonstrate that conflicts over the management of critical minerals do not only manifest as competition between states within the global geopolitical system, but also as contests for power within a nation. In much of the discourse on resource geopolitics, the focus of analysis is often directed towards the relationships between states vying for access to strategic resources. However, this approach often overlooks the fact that domestic power structures play a crucial role in determining how these resources are managed and who reaps the primary benefits from their exploitation. In the Indonesian context, the struggle between the agenda of national economic sovereignty and the interests of the domestic resource oligarchy constitutes a key dimension influencing the effectiveness of resource nationalism policies (Murthi et al., 2025).

This domestic power struggle is also linked to the distribution of economic benefits generated by the critical minerals industry. In political economy theory, the distribution of value within the production chain is often influenced by the ownership structure of productive assets and access to technology and markets (Bair et al., 2023). Companies that control mining concessions, processing facilities, and global distribution networks hold a stronger position in determining how economic benefits are distributed within the industry's value chain (Diprose et al., 2022). If this ownership structure is concentrated among domestic oligarchic groups with close ties to the political elite, then the majority of economic benefits from the exploitation of critical minerals may accrue to a small segment of society. In such situations, the concept of resource sovereignty, often promoted in public policy discourse, can be distorted because the economic benefits generated are not fully translated into collective well-being for the wider public.

Domestic power structures also influence Indonesia's bargaining position in global geopolitical negotiations regarding critical minerals (Sheng et al., 2025). Countries with strong institutional capacity and transparent resource governance systems tend to have greater ability to utilise their resource wealth as an instrument of international economic diplomacy. Conversely, if oligarchic groups with short-term business interests dominate the extractive sector, state policy may be more influenced by commercial interests than by long-term geopolitical strategies. In such circumstances, the state's ability to use critical minerals as instruments of economic and political power may be limited, as resource policies are more

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oriented towards short-term economic gains rather than the sustainable development of national industrial capacity (Braunstein & Chuchko, 2025; Karimullah, 2024).

Another important dimension in this analysis is how the narrative of resource sovereignty is employed in domestic political discourse. Rhetoric about the control of natural resources for the nation's benefit often holds strong political appeal, as it relates to notions of economic justice and national self-reliance. However, in practice, such narratives can serve as political legitimisation for policies that ultimately benefit specific elite groups. When the public perceives that the economic benefits of resource exploitation are not distributed fairly, the political legitimacy of resource nationalism projects can erode. In this context, the debate over who actually reaps the primary benefits of resource sovereignty becomes increasingly significant in public discourse.

The question of whether the state and the wider public truly reap the primary benefits from policies on the management of critical minerals, or whether it is instead economic oligarchies that do, is becoming an increasingly relevant issue in the context of the development of the extractive industry in Indonesia. Increased mineral production and the development of processing industries can indeed contribute to national economic growth and state revenue. However, these macroeconomic indicators do not always reflect an equitable distribution of economic benefits within society. If the economic gains from the mineral sector are concentrated among large corporations and business elites, the sector's contribution to inclusive social development may be limited.

From a broader perspective, the success of a resource nationalism strategy depends not only on the state's ability to control the exploitation of natural resources but also on its ability to ensure that the management of these resources is transparent, accountable, and oriented towards the public interest. Reforms to the governance of the extractive sector, the strengthening of oversight institutions, and increased public participation in decision-making processes are key factors in ensuring that mineral wealth truly serves as the foundation for more equitable and sustainable economic development.

D. Conclusion

The possession of strategic mineral reserves such as nickel, bauxite, copper and tin does indeed present opportunities for Indonesia to enhance its position within the global economic architecture, which is currently transforming into a low-carbon economy. However, these opportunities do not automatically lead to economic sovereignty unless accompanied by structural transformation in technological capacity, industrial innovation, resource governance and the distribution of domestic economic power. This finding both reinforces and refines the resource geopolitics literature by demonstrating that power based on critical minerals is determined not only by the geological distribution of resources and the dynamics of competition between states, but also by the configuration of global technology value chains, the potential for green colonialism in the global energy transition, and domestic power relations between the state, corporations, and economic oligarchies that influence the distribution of benefits from resource exploitation.

In practical and policy terms, the results of this study imply the importance of national strategies that focus not only on mineral downstreaming but also on building national technological capacity, strengthening domestic innovation and research systems, reforming the governance of the extractive sector, and designing industrial policies capable of ensuring a more inclusive distribution of economic benefits. Nevertheless, this study has limitations, particularly in its use of a qualitative analytical approach based on literature and policy documents, which has not fully captured the empirical dynamics at the local level or direct industrial negotiation practices; consequently, further research is recommended to develop a more in-depth empirical approach through industrial case studies, analysis of domestic

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economic power networks, and evaluation of the socio-ecological impacts of the expansion of the critical minerals industry.

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