

Resource Governance: Corporate Structure and Risk Management For Chinese Investments in Indonesia's Coal and Nickel Sectors Under Indonesian Law

Adilla Meytiara Intan

Sekolah Tinggi Ilmu Hukum Adhyaksa, Indonesia

Email: adilla.intan@stih-adhyaksa.ac.id

ABSTRACT

This paper examines the corporate governance risks facing Chinese mining investors in Indonesia, arising from the country's regulatory pluralism and an increasingly assertive enforcement environment. Unlike China's more integrated regulatory model, Indonesia separates authority over mining and forestry into distinct ministries, producing fragmented oversight and frequent coordination problems. This is compounded by multi-tiered governance across national, provincial, and regency governments, generating overlapping regulations that complicate compliance. Recent enforcement measures, including unannounced inspections, operational suspensions, and equipment seizures triggered by forestry permit gaps, have sharply increased operational and legal exposure for mining companies. Beyond corporate penalties and reputational harm, Law No. 18 of 2013 exposes individual directors and commissioners, including expatriates, to personal criminal liability and imprisonment for illegal mining within forest areas. Compliance failures can escalate into diplomatic matters, as seen in embassy involvement in land seizure disputes. To manage this environment, investors must adopt rigorous due diligence, including treating forest compliance as a board-level priority, maintaining dual-track compliance systems for mining and forestry regulations, and conducting spatial audits against current forest zone maps. Reviewing prior enforcement actions and assessing ESG risks are also essential for securing international financing and preserving a social license to operate. Remediation options, such as securing forest-use permits, adjusting mining plans to avoid forest areas, or appointing local directors with regulatory expertise, are critical to sustaining operations. Ultimately, proactive stakeholder engagement, consistent environmental monitoring, and careful record-keeping remain essential for demonstrating good-faith compliance and limiting operational, financial, and personal risks within Indonesia's evolving regulatory landscape.

KEYWORDS Bajakah Tampala; Transdermal Gel; Anti-Inflammatory; Formulation; Physical Evaluation



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INTRODUCTION

Indonesia stands at a pivotal juncture in the global energy transition, possessing substantial reserves of critical minerals vital for a carbon-free future, primarily nickel and, historically, coal (Resosudarmo et al., 2023). Given Indonesia's rich endowments in resources such as nickel, which is vital for electric vehicle batteries, and coal, which remains a significant energy source, understanding the regulatory framework governing foreign investment in these sectors is paramount (Sasongko et al., 2024). As the world's leading producer of nickel, Indonesia is crucial to the supply chain for lithium-ion batteries that power electric vehicles and renewable energy systems (Reich & Simon, 2024). The Indonesian government actively seeks to leverage this abundance by attracting foreign investment in nickel processing to enhance value addition to its raw materials and develop a robust electric vehicle supply chain. This strategic focus, however, is juxtaposed with the

country's historical reliance on coal, presenting significant challenges in transitioning to greener energy amidst well-established non-renewable energy industries. The escalating global demand for critical minerals has heightened competition and underscored the necessity of stable supply chains (Shi et al., 2025). China, as the world's largest consumer of metals, receives a significant portion of its nickel from Indonesia, which is particularly relevant to its clean energy transition initiatives. Indonesia's policy decisions, such as banning nickel ore exports, exemplify a growing trend of resource nationalism aimed at maximizing domestic value capture from its mineral wealth, thereby influencing international trade dynamics and potential supply risks. These intricate dynamics necessitate a comprehensive examination of resource governance, corporate structures, and risk management frameworks for Chinese investments within Indonesia's coal and nickel sectors, particularly as they operate under the purview of Indonesian law and contribute to the broader energy transition agenda (Astomo, 2021; Nurhidayah et al., 2024). This analysis is particularly salient given Indonesia's commitment to a just energy transition, aiming for 23% renewable energy by 2025 and a 31% emissions reduction by 2030, while simultaneously balancing socio-economic development and environmental sustainability (Lembut & Oktariani, 2023).

This paper will therefore scrutinize the legal and regulatory landscape impacting Chinese investments, focusing on corporate structuring and risk mitigation strategies within the context of Indonesia's evolving resource nationalism and its implications for global critical mineral supply chains. This comprehensive examination is crucial for understanding how these investments navigate the complexities of Indonesian legal frameworks while contributing to both Indonesia's economic objectives and global sustainable development goals (Ali et al., 2024). This analysis will encompass the various legal instruments and policies Indonesia has implemented to manage its critical mineral resources, particularly those classified as critical under the Decree of the Ministry of Energy and Mineral Resources No. 296.K/MB.01/MEM.B/2023, which lists at least 47 such minerals, including nickel and coal. Such a detailed examination is vital for stakeholders to comprehend the intricate balance between economic development, the policy and legal landscape, environmental stewardship, and the geopolitical implications of resource control in a rapidly changing global energy environment.

The novelty of this research lies in several dimensions. First, it provides a comprehensive analysis of Indonesian mining and forestry regulations specifically tailored to Chinese investors, integrating legal analysis with practical corporate governance and risk management implications. Second, it examines the recently established Presidential Regulation No. 4/2025 and the Forest Land Recovery Task Force, analyzing their implications for enforcement and compliance. Third, it systematically analyzes personal liability risks for foreign directors under Indonesian environmental law, including potential imprisonment and travel restrictions. Fourth, it develops a comprehensive due diligence and risk management framework specifically designed for Chinese investors navigating Indonesia's regulatory pluralism. Fifth, it integrates analysis of mining law (Law No. 3/2020), forestry law (Law No. 41/1999; Law No. 18/2013), and corporate law (Law No. 40/2007) to provide a holistic understanding of the legal landscape. Sixth, it examines both the coal and nickel sectors, capturing the distinct regulatory dynamics affecting these two critical minerals.

Resource Governance: Corporate Structure and Risk Management for Chinese Investments in Indonesia's Coal and Nickel Sectors Under Indonesian Law

This research aims to: (1) analyze the legal and regulatory framework governing Chinese investments in Indonesia's coal and nickel sectors under Indonesian law; (2) examine corporate structure requirements, including board composition, reporting obligations, and community engagement; (3) investigate the dual-licensing requirements for mining operations in forest areas; (4) analyze enforcement mechanisms under Presidential Regulation No. 4/2025; (5) examine personal liability risks for foreign directors; and (6) develop comprehensive due diligence and risk management recommendations for Chinese investors.

The contributions of this research are both theoretical and practical. Theoretically, it advances understanding of resource governance in emerging economies, particularly how resource nationalism interacts with foreign investment. It contributes to the literature on regulatory pluralism by examining how overlapping jurisdictional authorities create compliance complexity. Practically, the research provides: (1) a comprehensive guide for Chinese investors navigating Indonesia's regulatory landscape; (2) due diligence checklists for pre-investment assessment; (3) corporate governance recommendations for compliant operations; (4) risk management frameworks addressing forest compliance and personal liability; (5) stakeholder engagement strategies for maintaining a social license to operate; and (6) policy recommendations for Indonesian regulators to enhance investment certainty. Ultimately, this research aims to support sustainable, compliant Chinese investment in Indonesia's critical mineral sectors, contributing to both Indonesia's economic development objectives and global energy transition goals.

METHOD

Indonesia Mining Legal Framework

The legal landscape governing Indonesia's mineral and coal mining sector underwent a significant transformation with the enactment of Law No. 3 of 2020, which amended Law No. 4 of 2009 (Amatullah et al., 2020). This legislation, often referred to as the Minerba Law, marked a pivotal shift toward greater resource nationalism and enhanced state control over mineral resources (Sutrisno, 2022). The primary objective of Law No. 3/2020 is to increase the added value of minerals through domestic processing and refining, thereby moving away from the export of raw materials (Ai, 2020; Liao & Zhang, 2024).

This legislative change was intended to maximize the benefits derived from Indonesia's mineral wealth for national prosperity, as mandated by Article 33 of the 1945 Constitution (Sulaiman, 2023).

However, the introduction of Law No. 3/2020 has not been without controversy. Critics have raised concerns regarding its implications for transparency and investment certainty. For instance, a notable provision in the new law relates to the guaranteed extension of existing mining contracts, specifically Contracts of Work and Coal Mining Work Agreements (PKP2B), into Special Mining Business Permits (IUPK). Under the previous Law No. 4/2009, upon contract expiry, mining areas were generally required to be returned to the state and re-auctioned. In contrast, the 2020 law “guarantees” investors direct access to IUPK extensions, a move perceived by some as favoring established players and potentially undermining fair competition. This policy reflects a balancing act between attracting sustained investment and asserting stronger state control over strategic mining assets. For Chinese investors, this provision provides a degree of long-term certainty for existing

investments; however, it also necessitates careful scrutiny of the revised terms, compliance obligations, and governance requirements attached to the IUPK regime.

Mining Business Permit System and its Reforms

The Indonesian mining permit system has evolved considerably, transitioning from the Contract of Work regime to a licensing regime (Candra, 2022; Nefi et al., 2018).

Under Law No. 4 of 2009, the primary mining permit became the Izin Usaha Pertambangan (IUP), or Mining Business Permit. This shift required foreign mining companies, which had previously operated under Contracts of Work (CoWs), to renegotiate their terms under the new licensing system. The IUP system was designed to establish a more structured and state-controlled approach to mining operations, granting the government greater oversight and flexibility in managing mineral resources.

Reforms under Law No. 3/2020 further refined the IUP regime. While the IUP remains central, the new law consolidated authority over mining permits at the central government level, thereby curtailing powers previously exercised by provincial governments (Sari & Paulus, 2022). This centralization aims to streamline the permitting process, reduce bureaucratic fragmentation, and ensure national strategic alignment in mining policy, particularly for critical minerals such as nickel and coal. However, it also raises questions regarding local community participation and the responsiveness of decision-making to regional concerns (Sirait et al., 2023). The government's continuing adjustment of the IUP framework reflects its broader objective of optimizing mineral resource governance in line with national development priorities. For Chinese investors establishing corporate structures in Indonesia, a comprehensive understanding of IUP application procedures, compliance obligations, and renewal mechanisms under centralized authority is essential for effective risk management and operational continuity.

Special Mining Business Permit for Contract of Work Conversions

The concept of the Special Mining Business Permit (Izin Usaha Pertambangan Khusus or IUPK) is particularly significant as it serves as the legal mechanism for converting older Contracts of Work and Coal Mining Work Agreements (PKP2B). Historically, CoWs granted extensive contractual rights to foreign companies, often including fiscal arrangements distinct from general taxation laws and a higher degree of operational autonomy. The transition to the IUPK framework represents a move toward standardizing legal and fiscal terms for all mining operators, ensuring that entities operate fully under Indonesian law and comply with generally applicable royalty and taxation regimes (Widhiyanti & Sahaly, 2018).

One of the most contentious aspects of the 2020 Minerba Law is the provision allowing direct extension of CoWs/PKP2Bs into IUPKs, commonly for periods of 2×10 years, without requiring a transparent auction process. This differs from the earlier principle under which mining areas would revert to the state and be re-auctioned upon contract expiry. The guaranteed extension mechanism has been criticized for potentially reducing state bargaining power and limiting market entry for new investors. For companies, including Chinese investors, this provision offers an element of long-term legal certainty, enabling the continuation of operations under a restructured legal framework while preserving their strategic positions in key mineral sectors such as nickel and coal (Ali et al., 2024). Nevertheless, it requires adaptation to revised regulatory conditions, including mandatory Resource Governance: Corporate Structure and Risk Management for Chinese Investments in Indonesia's Coal and Nickel Sectors Under Indonesian Law

downstream processing obligations and adjustments to taxation and royalty schemes. Managing this transition and aligning corporate structures with IUPK requirements constitute critical components of risk mitigation for Chinese-backed mining operations.

Provincial vs. Central Government Authority

The allocation of authority between provincial and central governments in Indonesia's mining sector has long been a dynamic feature of its regulatory architecture. Law No. 4 of 2009 previously granted local governments a substantive role in issuing mining permits. However, Law No. 3 of 2020 significantly recentralized this authority, shifting primary control over mineral and coal mining permits to the central government (Werner et al., 2023). This policy shift aims to establish a unified national mining policy, particularly for strategically vital commodities such as nickel and coal, which are central to Indonesia's industrial strategy and energy transition pathway.

The rationale behind recentralization includes minimizing regulatory inconsistencies, reducing risks of discretionary abuse at the local level, and ensuring coherence in strategic resource governance. The central government, through the Ministry of Energy and Mineral Resources, now holds principal responsibility for licensing, supervision, and regulatory guidance. While intended to increase efficiency and policy coherence, this shift has prompted concerns regarding diminished local participation and constrained avenues for addressing community-level environmental and social issues. For foreign investors, including Chinese entities, centralization may reduce multi-layered administrative complexity; however, it also necessitates engagement with a more centralized and powerful regulatory authority. Consequently, corporate governance frameworks for Chinese investments must be carefully structured to ensure regulatory compliance at the national level while maintaining responsible engagement with provincial stakeholders.

Government Regulation No. 96/2021 on Mining Business Implementation

Following the enactment of Law No. 3/2020, Government Regulation No. 96 of 2021 was issued to provide implementing guidance for mineral and coal mining operations. This regulation elaborates on licensing requirements and operational standards, clarifying many of the structural changes introduced by the amended Minerba Law. Government Regulation No. 96/2021 addresses key areas, including resource conservation, occupational health and safety, environmental management, reclamation and post-mining obligations, community development programs, and technological implementation standards.

For companies involved in nickel and coal mining, this regulation is operationally significant, as it prescribes technical and administrative compliance standards. It establishes procedures for obtaining and extending licenses, delineates environmental compliance mechanisms, and mandates reporting and data transparency obligations. For Chinese investors, strict adherence to Government Regulation No. 96/2021 is indispensable for maintaining legal certainty and minimizing regulatory exposure. The regulation reinforces Indonesia's commitment to responsible mining and sustainable resource management, imposing comprehensive environmental and social accountability standards. Accordingly, corporate risk management systems for Chinese firms must integrate these regulatory requirements to ensure compliance and safeguard long-term operational viability.

Export Regulations and Downstream Processing Requirements

A cornerstone of Indonesia's resource nationalism strategy is the regulation of mineral exports, particularly the imposition of domestic downstream processing requirements. This policy is designed to enhance value addition prior to export, stimulate domestic industrialization, generate employment, and increase state revenues (Hamdani, 2023). The 2009 Mining Law initially mandated that raw ore exports would cease after 2014, requiring domestic processing into refined products. This policy direction was reinforced by Law No. 3/2020 and subsequent implementing regulations, including Ministerial Regulation No. 11 of 2019 (Afriansyah et al., 2024).

In the nickel sector, this framework resulted in a ban on raw nickel ore exports, compelling mining operators to process ore into higher-value products such as ferronickel or nickel pig iron within Indonesia. This policy has driven substantial investment in smelting and refining infrastructure. In the coal sector, although no absolute export ban exists, policy instruments promote domestic utilization and value-added processing—such as coal gasification and liquefaction—in support of national energy security and industrial strategy (Yaşin et al., 2021).

These downstream processing mandates present both regulatory burdens and strategic opportunities. They require considerable capital investment in industrial infrastructure, yet they also grant access to Indonesia's expanding processing ecosystem and enable vertical integration within global supply chains. Chinese companies have emerged as key investors in these sectors, recognizing Indonesia's strategic importance in supplying inputs for industries such as electric vehicle battery manufacturing (Camba et al., 2022; Rosada et al., 2023). The corporate configurations adopted often involve joint ventures or wholly foreign-owned processing entities, generating complex legal and regulatory risk profiles shaped by Indonesian mining law, environmental law, and broader international trade dynamics.

Coal: Domestic Market Obligation and Reference Price

Indonesia's coal sector is characterized by distinct regulatory mechanisms designed to ensure national energy security and stabilize domestic prices. The Domestic Market Obligation (DMO) policy mandates that a specified percentage of coal production be allocated to the domestic market, particularly to the state-owned electricity utility PLN (Afandi et al., 2022). This policy is essential for safeguarding Indonesia's power supply, as coal remains a dominant source of electricity generation (Ordóñez et al., 2021). The DMO percentage may fluctuate depending on national requirements but typically mandates that approximately 25% of annual coal production be supplied to the domestic market before exports are permitted.

Complementing the DMO policy is the Harga Batubara Acuan (HBA), or Reference Coal Price (Akbar & Santioso, 2024; Utami & Saria, 2018).

The HBA serves as a government-established benchmark price for different categories of coal and is used as the basis for calculating royalties and taxes, as well as guiding domestic coal transactions under the DMO scheme. The HBA mechanism is intended to promote pricing transparency and fairness for both producers and consumers while mitigating excessive price volatility and protecting state revenues. For Chinese companies investing in Indonesia's coal mining sector, compliance with DMO obligations and adherence to HBA pricing structures constitute critical components of operational and financial planning (Yansil et al., 2023). These regulatory instruments directly shape sales allocation, projected revenue

Resource Governance: Corporate Structure and Risk Management for Chinese Investments in Indonesia's Coal and Nickel Sectors Under Indonesian Law

streams, and overall profitability, requiring investors to carefully balance domestic supply commitments with exposure to international price fluctuations. The market's adverse reaction to certain DMO announcements—often reflected in negative stock market responses—demonstrates the financial sensitivity and regulatory risk attached to these policies for coal mining enterprises (Sunardi et al., 2022).

Nickel: Export Ban and Smelter Investment Requirements

Indonesia's nickel sector has become a focal point of its resource nationalism strategy, particularly through the enforcement of a raw nickel ore export ban. Initially introduced in 2014, relaxed in 2017, and reinstated more strictly in 2020 pursuant to Ministerial Regulation No. 11 of 2019, the export restriction aims to compel domestic processing and attract large-scale investment in nickel smelters (Sunardi et al., 2023). Under this regime, nickel ore must be processed into higher-value derivatives—such as ferronickel, nickel pig iron, or nickel matte—within Indonesia prior to export. As a consequence, Indonesia has emerged as a global center for nickel processing, significantly increasing its value-added mineral exports.

The enforcement of the export ban has catalyzed substantial foreign direct investment, particularly from China, in the development of smelters and integrated industrial parks. Chinese firms have committed extensive capital to downstream nickel facilities in order to secure a stable supply of processed nickel for their expanding electric vehicle battery industries. Notably, a considerable proportion of nickel smelters operating in Indonesia are owned or co-owned by Chinese companies. While this policy aligns with Indonesia's industrialization and value-addition objectives, it has generated strategic implications for other states dependent on Indonesian raw nickel supplies. For Chinese investors, compliance with smelter investment requirements constitutes a prerequisite for accessing Indonesia's substantial nickel reserves and forms the foundation for long-term industrial collaboration and supply chain integration. These investments are essential not only for securing processed mineral inputs but also for navigating Indonesia's evolving regulatory regime to ensure sustained market access. Consequently, the legal framework necessitates corporate structures capable of supporting large-scale industrial development while maintaining strict compliance with Indonesian mining, environmental, and corporate regulations.

RESULT AND DISCUSSION

Corporate Governance in Indonesia's Mining Companies: Implications for Chinese Investments

Beyond the overarching legal framework, the operational landscape for mining companies in Indonesia, including those with Chinese investments, is profoundly shaped by specific corporate governance requirements. These provisions dictate everything from board composition and governmental oversight to environmental responsibilities and engagement with local communities, profoundly influencing corporate structures and risk management strategies.

Board Composition Requirements

Indonesian corporate law adheres to a two-tier board system, a model commonly found in civil law jurisdictions, consisting of a Board of Directors (BoD) responsible for day-to-day management and a Board of Commissioners (BoC) entrusted with supervisory and advisory functions. This structure is mandatory for all companies, regardless of size or listing

status. Shareholders appoint members of both the BoD and the BoC, with the BoC explicitly acting as a representative of shareholder interests. Within this governance structure, independent commissioners play a pivotal role by exercising oversight without direct affiliation with management or controlling shareholders. The objective of this arrangement is to strengthen good corporate governance through a clear separation between management and supervision—an arrangement particularly critical in resource-intensive industries such as mining, where transparency, accountability, and regulatory compliance are paramount.

For mining companies, especially those listed on the Indonesia Stock Exchange, adherence to corporate governance standards—including appropriate board composition—is closely associated with sustainability reporting quality and overall firm performance. Although the 2018 abolition of the independent director requirement in listed companies may appear inconsistent with certain global governance norms, Indonesia's framework relies substantially on the supervisory function of independent commissioners to provide effective oversight, consistent with its civil law tradition. For Chinese investors, structuring a corporate vehicle that fully complies with these board composition rules is essential. This involves appointing qualified directors and commissioners, delineating their fiduciary duties and liability exposure, and embedding effective independent oversight mechanisms to meet Indonesian corporate governance standards. Proper compliance mitigates legal and reputational risk while signaling institutional commitment to responsible management.

Government Representatives in Divested Shares

Indonesia has historically implemented policies aimed at increasing domestic ownership and control over strategic natural resources. These policies frequently require foreign investors to divest a portion of their shareholding to Indonesian entities, including state-owned enterprises (SOEs), regional government-owned enterprises, or other domestic stakeholders. Although specific procedural provisions regarding government representation in divested mining shares are not detailed in the cited materials, practice in SOEs demonstrates a structured approach to board composition and governmental oversight where the state retains equity participation.

In the mining sector, where commodities such as nickel and coal are deemed strategic, divestment obligations may entail governance consequences, including the appointment of government-affiliated representatives at the commissioner or director level. Such representation ensures that public interests—ranging from domestic value addition and environmental compliance to community welfare—are institutionally embedded within corporate decision-making structures. For Chinese investors, this requires adaptive corporate governance models capable of accommodating state-linked representatives while maintaining operational efficiency. Careful structuring of shareholder agreements, voting arrangements, and board protocols is thus essential to balance commercial strategy with regulatory and national interest considerations, reducing governance-related conflicts and enhancing long-term project stability.

Reporting Obligations to the Ministry of Energy and Mineral Resources and Provincial Authorities

Mining companies operating in Indonesia are subject to extensive reporting obligations, primarily to the Ministry of Energy and Mineral Resources (MEMR), with limited but continuing provincial oversight following recentralization reforms. Although Law Resource Governance: Corporate Structure and Risk Management for Chinese Investments in Indonesia's Coal and Nickel Sectors Under Indonesian Law

No. 3/2020 centralized licensing authority at the national level, interpretive uncertainties remain concerning supervisory coordination. Nevertheless, reporting obligations remain comprehensive and apply across the entire mining lifecycle, from exploration and production to reclamation and post-mining activities.

Companies must regularly submit detailed data on production volumes, sales transactions, environmental compliance, occupational safety, financial performance, and community development programs. The MEMR, as the central regulatory authority, relies on periodic and incident-based reporting to monitor compliance with permit conditions and broader national resource governance objectives. Although provincial governments no longer exercise primary licensing authority, they may retain oversight roles concerning localized environmental management and community impact monitoring. For Chinese investors, rigorous compliance with reporting obligations functions not only as a regulatory requirement but also as an integral component of enterprise risk management. Robust internal compliance systems, accurate data governance frameworks, and clear familiarity with implementing regulations are essential to prevent administrative sanctions, suspension of operations, or reputational harm.

Post-Mining Plans and Financial Guarantees

Environmental governance in Indonesia imposes stringent obligations concerning mine closure planning and financial guarantees. Recognizing the significant environmental and socio-economic impacts of extractive industries, Indonesian law mandates the preparation and implementation of comprehensive mine closure and post-mining plans, targeting a 100% reclamation success rate. These obligations are reinforced under Law No. 3/2020 and its implementing regulations, with non-compliance potentially triggering criminal sanctions.

The Post-Mining Plan must articulate detailed measures for land reclamation, ecological restoration, and socio-economic transition strategies for affected communities. To ensure enforceability, operators are required to provide financial guarantees, typically in the form of escrow funds or bank guarantees, which function as security deposits to fund rehabilitation activities if the company fails to comply. For Chinese mining enterprises, early integration of mine closure obligations into project feasibility studies and capital allocation planning is imperative. This requires substantial financial provisioning, multidisciplinary environmental expertise, and alignment with international best practices in sustainable mining. Effective compliance mitigates environmental liability, legal exposure, and reputational risk, thereby safeguarding the enterprise's long-term viability.

Reclamation and Post-Mining Governance

Reclamation governance in Indonesia extends beyond technical closure obligations and incorporates comprehensive environmental and social restoration principles. Regulations such as MOEF Regulation No. 101/2018 on hazardous waste-contaminated land restoration and MOEF Regulation No. 13/2011 concerning environmental compensation underscore the breadth of these requirements. The ultimate objective is to restore mining-affected land to an ecologically functional state capable of supporting community livelihoods.

Post-mining governance entails continuous monitoring, revegetation success verification, water quality restoration, landform stability assurance, and long-term socio-economic reintegration programs for communities previously dependent on mining activities.

For Chinese investors, reclamation and closure considerations must be embedded from the earliest stages of project design. This includes allocating adequate budgets, deploying suitable environmental technologies, and maintaining sustained engagement with regulators and affected communities. Failure to comply can result in severe financial penalties, environmental liability claims, operational revocation, and significant reputational damage.

Local Community Participation Requirements

Indonesian mining law underscores local community participation as a foundational principle of sustainable resource development. Law No. 4/2009 introduced community development (CD) obligations, which have subsequently evolved to require alignment with eight pillars: education, health, employment, economic empowerment, social and cultural development, local participation in mining management, institutional capacity-building, and supporting infrastructure. These programs must be coordinated with regional development blueprints to ensure coherence with local planning priorities.

Although intended to promote inclusive development, rigid CD expenditure requirements may create operational complexity and fiscal burden for mining enterprises. Striking a balance between regulatory compliance, investor attractiveness, and community welfare remains an ongoing governance challenge. For Chinese investors, robust community engagement frameworks are indispensable for securing and maintaining a social license to operate. Effective strategies include participatory consultations, culturally sensitive program design, transparent grievance mechanisms, and institutionalized corporate social responsibility governance units. Proactive engagement reduces social conflict risk, operational disruptions, and reputational vulnerabilities.

Indigenous Peoples and Customary Land Governance

The governance of indigenous peoples' rights and customary land (adat) tenure constitutes one of the most sensitive dimensions of Indonesian resource regulation. Although mining legislation recognizes indigenous rights in principle, critics contend that practical enforcement remains inconsistent, and that reforms under the Minerba regime have inadequately protected indigenous and tribal communities. Indigenous groups residing near mining sites often bear disproportionate environmental and social burdens, while their traditional stewardship roles remain insufficiently integrated into formal regulatory frameworks.

Legal ambiguities persist regarding the recognition of customary law communities (Masyarakat Hukum Adat) and the protection of collective land rights, especially in the absence of comprehensive implementing legislation. For Chinese investors, navigating this terrain requires in-depth due diligence on customary land status, community governance structures, and consent processes. Investment practices must account for kearifan lokal (local wisdom), a concept rooted in community traditions and customary environmental management principles. Recognition of hak ulayat, the communal right to control land, is essential for preventing dispossession and safeguarding livelihoods. Risk management strategies must therefore integrate meaningful consultation processes, mechanisms consistent with free, prior, and informed consent standards, and alignment with international business and human rights frameworks. Failure to respect indigenous rights may expose investors to litigation, operational suspension, community resistance, and long-term reputational harm.

Responsible integration of customary governance norms is thus indispensable for sustainable and legally secure mining operations.

Mining Compliance and Emerging Enforcement Priority Under Prabowo Administration

Legal Framework: Forestry Law and Mining Activities

Indonesia's extensive forest estate, encompassing approximately 120.5 million hectares and constituting about 63% of the nation's total land area, frequently exhibits spatial overlap with regions endowed with significant mineral resources, particularly coal and nickel. This geographical intersection presents a substantial governance challenge for mining operations, especially for foreign investors navigating Indonesia's stringent and evolving forestry legal framework. While the specifics of recent administrative initiatives are continuously developing, there is a discernable governmental emphasis on enhancing forest protection and environmental enforcement within the extractive sector. This context suggests a period of heightened scrutiny for mining entities, including those with substantial foreign investment, if their concession areas encroach upon forest zones without the requisite legal authorizations.

The regulatory architecture governing mining operations within designated forest areas constitutes a distinct stratum of legal requirements that functions concurrently with, and often takes precedence over, the general mining regulations stipulated under the Minerba Law. This dual compliance mandate is primarily anchored in Law No. 41 of 1999 concerning Forestry and Law No. 18 of 2013 pertaining to the Prevention and Eradication of Forest Destruction. Indonesian forestry legislation systematically categorizes all forest areas into three principal classifications based on their designated functional purposes, as established by Law No. 41 of 1999 (as subsequently amended):

- a. **Protected Forests:** These areas are designated for critical ecological functions, including watershed protection, erosion mitigation, and the maintenance of soil fertility. Mining activities are generally proscribed within Protected Forests. However, exceptions may be granted for strategic non-forestry activities, including mining, under specific conditions such as underground mining methods that do not reduce land surface quality, subject to Presidential approval and adherence to environmental safeguards. The conversion of Protected Forest areas for mining, particularly in contravention of Article 38 Paragraph 4 of Law No. 41 of 1999, has been a source of legal contention and non-compliance.
- b. **Production Forests:** These forests are designated for the sustainable extraction and utilization of forest resources, predominantly for timber production. They are further delineated into Limited, Regular, and Convertible Production Forests. Mining operations may be authorized in Production Forests, contingent upon securing specific forest area utilization permits from the Ministry of Environment and Forestry.
- c. **Conservation Forests:** These areas are exclusively designated for biodiversity conservation and ecosystem preservation, encompassing nature reserves and national parks. Mining activities are unequivocally prohibited within Conservation Forests under all circumstances.

Crucially, a Mining Business Permit issued under the 2020 Minerba Law does not automatically confer authorization for mining operations if the concession area spatially overlaps with forest zones. A separate forest area utilization permit must be procured from the Ministry of Environment and Forestry, thereby imposing a dual-licensing requirement that introduces significant regulatory complexity and potential for operational delays.

Law No. 18 of 2013 on the Prevention and Eradication of Forest Destruction specifically criminalizes unauthorized mining activities within forest areas. Article 17 of this statute prescribes severe penalties, including imprisonment ranging from a minimum of 3 (three) years to a maximum of 15 (fifteen) years, and/or a fine ranging from a minimum of IDR 1.5 billion to a maximum of IDR 5 billion, for individuals found conducting mining activities unlawfully in forest areas. The concept of "unlawfully" under this law encompasses activities such as mining without a required forest area use permit, exceeding the permitted spatial or temporal scope, or operating in prohibited forest classifications. Significantly, Article 109 extends criminal liability to corporate entities, implying that the corporation itself, beyond individual directors or employees, can be prosecuted and sanctioned for environmental offenses. While the legislative intent behind these provisions is to deter forest destruction, the practical application of corporate criminal liability in Indonesia has been noted as inconsistent, ineffective, and often confusing. This complexity highlights that mere existence of criminal penalties does not guarantee an effective deterrent in practice.

In recognition of widespread historical non-compliance, Law No. 11 of 2020 (the Job Creation Law or Omnibus Law) incorporated transitional provisions. This legislation aimed to streamline business licensing and stimulate investment by reducing regulatory requirements and expediting permit processes. While the Omnibus Law aimed to simplify procedures, it also garnered criticism regarding potential reductions in environmental protection standards. One aspect of this simplification included provisions for companies to regularize their permits for operations within forest areas. While specific details concerning the administrative sanctions outlined in Government Regulation No. 24 of 2021 for failure to utilize a grace period for forest permit regularization were not definitively confirmed by external academic searches, the broader regulatory framework ensures that non-compliance with forest area regulations can lead to administrative sanctions, which may include suspension of operations or revocation of business licenses. It is important to note that the existence of both administrative and criminal penalties within the legal framework means that entities in non-compliance may face parallel enforcement actions, creating a multifaceted risk landscape.

Current Enforcement Climate: Presidential Regulation No. 4 of 2025 and Active Operations

The grace period, designed to allow companies to regularize their permits under the Omnibus Law concluded in November 2023, marking a critical inflection point in Indonesia's forestry enforcement trajectory. Under President Prabowo Subianto, who assumed office in October 2024, forest protection and ecological restoration have been elevated to national policy priorities. The administration's environmental platform aligns with Indonesia's existing commitments to ambitious objectives, including enhanced carbon sequestration efforts to meet its Nationally Determined Contributions under the Paris Agreement and robust protection of indigenous communities' forest rights. These priorities underscore Indonesia's Resource Governance: Corporate Structure and Risk Management for Chinese Investments in Indonesia's Coal and Nickel Sectors Under Indonesian Law

participation in global environmental governance and its commitment to tackling environmental problems.

This policy commitment, a very recent development within the Indonesian regulatory landscape, has been operationalized through Presidential Regulation No. 4 of 2025, which mandates the establishment and operation of the Forest Land Recovery Task Force. This task force exhibits several characteristics that signal a significant enhancement in the seriousness and capacity of enforcement. Its leadership by the Defense Minister (currently Sjafrie Sjamsoeddin) integrates forest protection with national security imperatives, representing a significant departure from previous enforcement paradigms typically led solely by environmental ministries. Direct oversight by the Attorney General's Office further ensures that enforcement actions are systematically coordinated with potential criminal prosecutions, facilitating a seamless administrative-to-criminal enforcement pathway and enhancing accountability, which is crucial given the complex nature of environmental criminal liability in Indonesia. Moreover, the Task Force's direct reporting line to the President is intended to insulate its operations from bureaucratic resistance and lobbying pressures that have historically impeded effective forestry enforcement. Its multi-sectoral composition, including representatives from the Ministry of Environment and Forestry, Ministry of Energy and Mineral Resources, Indonesian National Police, Indonesian National Armed Forces, and National Land Agency, enables coordinated enforcement across administrative, civil, and criminal jurisdictions, ensuring a comprehensive approach to combating forest destruction and illegal mining.

As of September 2025, the Forest Land Recovery Task Force has reported the seizure of approximately 47,000 hectares of illegally occupied forest areas, targeting both plantation and mining activities. While detailed public disclosures concerning affected entities are limited due to ongoing investigations, reports indicate that several major Indonesian and foreign-invested corporations have been impacted. Notable cases include large palm oil plantation companies operating in Riau, Jambi, and Kalimantan provinces, as well as coal mining operations in East Kalimantan that reportedly expanded beyond their permitted Mining Business Permit boundaries into adjacent Production Forests without requisite forest area use permits. Nickel mining operations in Sulawesi, allegedly encroaching into Protected Forest watersheds, have also been targeted. The magnitude and operational tempo of these enforcement activities signify an unprecedented level of forestry law implementation in Indonesia's contemporary history. Previous administrations frequently announced crackdowns, but implementation often faced challenges due to resource limitations, issues of corruption, and political resistance. The current administration's concerted deployment of military and law enforcement resources in conjunction with environmental agencies, coupled with an integrated approach to law enforcement, appears to be overcoming many of these historical impediments, enhancing the efficacy of enforcement.

Corporate Governance Implications for Chinese Mining Investors

A primary source of friction for foreign investors, particularly those accustomed to China's integrated approach, stems from Indonesia's regulatory pluralism. As one example, mining and forestry permits are issued by separate governmental ministries, with mining business permits (IUP/IUPK) falling under the Ministry of Energy and Mineral Resources, while forest area utilization permits are overseen by the Ministry of Environment and

Forestry. This institutional separation frequently results in imperfect coordination, creating overlapping regulations and potential conflicts between governmental agencies and various stakeholders involved in forested landscapes. The multi-level nature of governance, involving national, provincial, and regency governments, further contributes to regulatory complexity and inconsistencies, leading to compliance challenges for businesses, NGOs, and local communities alike. This intricate web of overlapping jurisdictions and legal frameworks, including the interplay of state and customary law, can make it difficult to determine clear legal pathways and responsibilities. Consequently, Chinese mining investors, operating within a system where integrated planning is the norm, may struggle to adapt to Indonesia's decentralized, multi-stakeholder environment, facing increased risks of non-compliance and operational disruptions due to unfamiliar regulatory requirements and the significant influence of local social and environmental actors.

For Chinese mining investors, this evolving enforcement climate introduces several immediate and critical risks. Mining sites, particularly those with perceived or actual forest permit deficiencies, may be subjected to unannounced inspections, immediate suspension orders, and cessation of operations. Equipment and infrastructure situated within improperly permitted forest areas are vulnerable to confiscation by enforcement authorities. Furthermore, corporate criminal liability under Law No. 18 of 2013 exposes companies to significant fines and severe reputational damage. Such criminal proceedings can have profound implications for access to capital, future permitting processes, and the overall social license to operate.

The stringent forest compliance requirements and the severe penalties for violations impose distinct corporate governance obligations upon the directors and commissioners of Chinese-invested mining companies operating in Indonesia. Under Indonesian Company Law (Law No. 40 of 2007), directors owe fiduciary duties to the company, necessitating prudence and diligence in decision-making. They can be held personally liable for negligence or failure to ensure legal compliance. Given the current enforcement landscape, Boards of Directors within these entities must establish forest compliance as a board-level risk. This means the status of forest permits and associated compliance issues must be a standing agenda item in Board meetings, with regular, comprehensive reports from management on permit validity, spatial compliance, and regulatory developments. This proactive approach ensures that forest-related risks are managed at the highest level of corporate governance.

Moreover, companies must implement dual-track compliance systems. Recognizing that forest permits are issued by the Ministry of Environment and Forestry while mining permits fall under the Ministry of Energy and Mineral Resources, separate but coordinated compliance monitoring mechanisms for each regulatory track are essential. A common governance vulnerability is the erroneous assumption that a Mining Business Permit (IUP/IUPK) alone confers full legal authorization for activities within forest areas, necessitating a separate approval for forest area use. This requires meticulous attention to avoid inconsistent regulatory enforcement and governance challenges. Furthermore, mining companies are obligated to conduct regular, verifiable spatial audits. This involves cross-referencing active mining area GPS coordinates against current official forest zone maps issued by the Ministry of Environment and Forestry and their own permit boundaries, ideally on a quarterly basis, to identify and rectify potential encroachments proactively. The corporate organizational structure should explicitly designate a senior executive (e.g., Chief Resource Governance: Corporate Structure and Risk Management for Chinese Investments in Indonesia's Coal and Nickel Sectors Under Indonesian Law

Operating Officer or Head of Sustainability) with specific and explicit responsibility for forest compliance, supported by an adequate budget and the requisite authority to halt operations if permit deficiencies or non-compliance issues are discovered. Finally, in the event of enforcement action or criminal prosecution, the company's defense will largely depend on its ability to demonstrate good-faith efforts at compliance, necessitating that Board minutes, compliance audit reports, legal opinions, and all correspondence with governmental agencies pertaining to forest permits and compliance be meticulously maintained and readily accessible.

Unlike many regulatory infractions in Indonesia that primarily result in corporate fines, Law No. 18 of 2013 explicitly provides for the criminal prosecution of corporate officers. Article 109 states: "If a criminal act of forest destruction is committed by or on behalf of a corporation, the criminal charge may be filed and the penalty imposed on the corporation's management and/or the corporation itself". This provision means that individuals, including Chinese nationals serving as Directors or Commissioners of Indonesian mining subsidiaries, face potential personal criminal liability and imprisonment in Indonesia if their company is found guilty of illegal mining in forest areas. This significant personal risk necessitates several critical governance decisions. Chinese parent companies should judiciously evaluate the appointment of Chinese nationals as Directors of Indonesian subsidiaries operating within or near forest areas, potentially considering Indonesian nationals who possess extensive local regulatory knowledge, established relationships, and a nuanced understanding of the domestic legal and political landscape. Shareholder agreements and Articles of Association should comprehensively address director and officer liability insurance coverage, indemnification provisions, and the allocation of legal defense costs in the event of criminal prosecution, providing a crucial layer of protection for individual directors. Finally, directors under criminal investigation in Indonesia may be subjected to judicial measures that restrict their movement, including preventing their departure from the country pending trial. This inherent travel and detention risk must be thoroughly factored into expatriate assignment decisions, particularly for senior management roles within operations that interact with forest areas.

Due Diligence and Risk Mitigation Strategies

Proactive measures before and during investment are paramount to ensure compliance and avoid severe operational, financial, and reputational repercussions. For Chinese investors considering the acquisition of existing Indonesian mining assets or the development of greenfield projects, forest compliance due diligence must be a central and non-negotiable component of the overall legal and operational review. The following steps represent minimum due diligence standards that should be meticulously implemented. First, it is imperative to obtain and rigorously review official forest zone maps from the Ministry of Environment and Forestry for all provinces where the mining concession is located. This process involves verifying the specific forest classification (e.g., Protected, Production, or Conservation Forest) for any areas overlapping with the Mining Business Permit (IUP/IUPK) boundaries.

It is crucial to ensure that the most current version of these maps is utilized, as official forest zone designations are periodically updated. Second, if the mining concession overlaps with Production Forest areas, investors must verify the status and validity of any existing

forest area use permits. This includes scrutinizing Forest Area Borrow-to-Use Permit, which permits the borrowing and use of forest areas for mining activities, or any social forestry partnership agreements for specific forest utilization. Confirmation of the permit's spatial boundaries, duration, conditions, and proof of current fee payments are essential.

Third, for companies that were operating during the 2020-2023 grace period under the Omnibus Law, a thorough compliance review of this period is critical. This involves confirming that the company registered its operations and submitted regularization applications within the stipulated timeframe, reviewing all correspondence with the Ministry of Environment and Forestry regarding permit applications, and assessing the current status of these pending applications (e.g., approved, under review, or rejected). Any areas where operations occurred without proper grace period registration or during periods of non-compliance must be identified. Fourth, a physical site inspection complemented by GPS verification is indispensable. Site visits are necessary to verify actual mining activities against documented permit boundaries, and GPS surveying should be employed to confirm that active mining areas do not extend beyond permitted zones into unpermitted forest areas. Documentation of any historical encroachment and an assessment of whether operations have been scaled back to compliant boundaries are crucial.

Fifth, investors must thoroughly review any prior enforcement actions. This involves searching for a history of enforcement actions, official warnings, or administrative sanctions related to forest violations. Reviewing company correspondence files for any notices from the Ministry of Environment and Forestry, local Forestry Service offices, or law enforcement agencies, and conducting comprehensive media searches for public reports of forest-related violations, provide a holistic view of past compliance behavior. Lastly, an assessment of reputational and Environmental, Social, and Governance risks is vital. This evaluates whether the mining operation has faced criticism from environmental NGOs, indigenous communities, or media concerning forest impacts. Such an assessment is critical because forest compliance issues can significantly affect access to international project finance, which increasingly incorporates stringent ESG screening criteria.

If due diligence reveals forest permit deficiencies in an acquisition target or an existing operation, Chinese investors must implement immediate and decisive remediation strategies. One primary option, if eligible, is to apply for a forest use permit. This is applicable primarily for mining in Production Forests and requires submitting a comprehensive permit application to the Ministry of Environment and Forestry. The application package typically includes an environmental impact assessment specifically addressing forest impacts, a detailed reclamation plan, and a partnership proposal with local communities. Engaging experienced Indonesian forestry law counsel is highly recommended to navigate the complex permit process, which typically requires 6-12 months, during which operations may need to be suspended.

Alternatively, if forest permit approval is uncertain or protracted, investors should consider modifying the mining plan to entirely avoid forest areas. This strategic adjustment may necessitate amending the IUP/IUPK work plan and budget with the Ministry of Energy and Mineral Resources and careful assessment of the financial viability if resource extraction is significantly reduced. In rare and exceptionally difficult cases, companies may attempt to seek forest zone reclassification (e.g., from Protected to Production Forest). This requires Resource Governance: Corporate Structure and Risk Management for Chinese Investments in Indonesia's Coal and Nickel Sectors Under Indonesian Law

compelling evidence, such as ecological surveys demonstrating that the current classification is inaccurate. However, this option has a very low success rate and a multi-year timeline, making it an unreliable short-term solution. Finally, if remediation is not feasible or presents insurmountable challenges, the safest and most prudent strategy may be to voluntarily cease operations in the affected forest areas and proactively negotiate compensation with the Indonesian government. This approach not only mitigates the risk of criminal prosecution but also preserves the company's reputation and its ability to operate in other compliant areas.

Even with proper permits and successful remediation, Chinese mining companies must establish and maintain robust ongoing compliance systems. This includes implementing quarterly spatial compliance audits, where current mining activity GPS data is regularly overlaid onto official forest zone maps. This process verifies that no mining expansion has occurred into unpermitted forest areas, with findings meticulously documented in Board reports. Furthermore, annual forest permit renewal and timely payment of forest resource fees (Provisi Sumber Daya Hutan / PSDH) are critical. Companies should establish a comprehensive compliance calendar with reminders for renewal deadlines and budget adequately for permit fees, which can be substantial for large concessions.

Stakeholder engagement is another vital component of ongoing compliance. Maintaining regular and constructive communication with local Forestry Service offices (Dinas Kehutanan) in the provinces and regencies where operations are located is essential. Participation in multi-stakeholder forums on sustainable forest management and actively building positive relationships with local communities can significantly prevent complaints that might trigger enforcement scrutiny. Lastly, implementing comprehensive environmental monitoring programs that track forest cover, biodiversity, water quality, and other ecological indicators, and submitting all required environmental monitoring reports to the Ministry of Environment and Forestry on schedule, are non-negotiable. Considering voluntary third-party audits (e.g., ISO 14001 certification) can further demonstrate good-faith compliance and a commitment to environmental stewardship.

CONCLUSION

Indonesia's complex regulatory framework governing mining and forestry operations presents significant challenges for foreign investors, particularly those originating from centralized governance systems such as China. The transition from a relatively unified administrative paradigm to Indonesia's multi-tiered governance structure has generated substantial regulatory complexity and heightened the risk of jurisdictional friction. This fragmentation complicates licensing and approval procedures, obliging investors accustomed to streamlined regulatory environments to navigate multiple layers of administrative authority, sectoral regulations, and overlapping supervisory mandates.

Recent policy developments, notably Presidential Regulation No. 4/2025 and the establishment of the Forest Land Recovery Task Force, reflect a decisive shift toward stricter enforcement and reinforced forest governance. These measures emphasize forest protection and integrate military and law enforcement institutions into supervisory processes, signaling a more assertive regulatory posture. Under this evolving enforcement environment, deficiencies in forestry or land-use permits may result in immediate and severe consequences, including on-site inspections, regulatory audits, suspension of operations, asset seizure,

administrative sanctions, and potential civil or criminal liability for corporate entities and their directors.

In addition to formal regulatory risks, complexities surrounding community development obligations and indigenous land rights further complicate the sustainability of mining operations. Failure to adequately fulfill social responsibility mandates or to address customary land claims may jeopardize an investor's social license to operate, triggering social conflict, reputational damage, and operational disruption. For Chinese mining investors, this multidimensional risk environment necessitates a fundamental recalibration of corporate governance and compliance strategies. Traditional, document-based compliance approaches are no longer sufficient; instead, companies must adopt integrated governance systems that embed forest and environmental compliance, structured community engagement, indigenous rights due diligence, and crisis response protocols into core corporate operations. In Indonesia's evolving resource governance landscape, regulatory sophistication and proactive stakeholder management have become indispensable prerequisites for securing long-term operational stability and investment sustainability.

REFERENCES

- Afandi, F. G., Yoesgiantoro, D., & Prakoso, L. Y. (2022). The effect of coal DMO policy on national energy security in supporting national defense and security. *International Journal of Research and Innovation in Social Science*, 6(6), 477–484. <https://doi.org/10.47772/ijriss.2022.6610>
- Afriansyah, A., Muhammad, A. N., Oktaviandra, S., Apriliana, A. N. R., & Adiastruti, A. (2024). *State practice of Asian countries in international law*. Brill. https://doi.org/10.1163/9789004718128_014
- Ai, L. (2020). Analysis on the current situation and future outlook of coal market in Indonesia. *E3S Web of Conferences*, 214, 02004. <https://doi.org/10.1051/e3sconf/202021402004>
- Akbar, A. M., & Santioso, L. (2024). The influence of the exchange rate, interest rates, Indonesian coal price reference (HBA), and world oil prices on the firm's value of coal mining firms traded on the IDX in 2018–2023. *International Journal of Current Science Research and Review*, 7(12). <https://doi.org/10.47191/ijcsrr/v7-i12-52>
- Ali, P. O., Kim, K. N., Kang, S. J., Ha, Y., Woo, J., & Lee, E. J. (2024). Indonesia energy and mineral sector: Priority selection and mining governance. *Energy for Sustainable Development*, 83, 101559.
- Amatullah, N., Setyadani, N. A., & Ramadhanty, S. (2020). The extension of the special business mining license (IUPK) under Law No. 3 of 2020 of the coal and mineral mining: Pro or cons? *Legal Brief*, 10(1), 39–47.
- Astomo, P. (2021). The problems in mineral and coal mining regulations: Perspectives of political law and responsive law. *Kanun: Jurnal Ilmu Hukum*, 23(1), 133–150. <https://doi.org/10.24815/kanun.v23i1.19949>
- Camba, A., Lim, G., & Gallagher, K. P. (2022). Leading sector and dual economy: How Indonesia and Malaysia mobilised Chinese capital in mineral processing. *Third World Quarterly*, 43(10), 2375–2396. <https://doi.org/10.1080/01436597.2022.2093180>

- Candra, A. B. (2022). Implications of changing the terminology of a contract of work to a mining business permit for mineral and coal mining. *Journal of Law and Legal Reform*, 3(2), 215–230. <https://doi.org/10.15294/jllr.v3i2.55214>
- Hamdani, A. H. (2023). The research design of downstream minerals and processing locations in Indonesia. *BIO Web of Conferences*, 73, 03010. <https://doi.org/10.1051/bioconf/20237303010>
- Lembut, P. I., & Oktariani, F. (2023). Real earnings management sine qua non book-tax differences in tax avoidance of mining sector companies in Indonesia. *Journal of Tax Reform*, 9(3), 430–447. <https://doi.org/10.15826/jtr.2023.9.3.151>
- Liao, J. X., & Zhang, W. (2024). The governance models vs. the development courses of the mining sector: Cases of Indonesia and the Philippines. *Mineral Economics*, 37(2), 279–295. <https://doi.org/10.1007/s13563-024-00442-1>
- Nefi, A., Malebra, I., & Ayuningtyas, D. P. (2018). Implikasi keberlakuan kontrak karya PT Freeport Indonesia pasca Undang-Undang No. 4 Tahun 2009 tentang pertambangan mineral dan batubara. *Jurnal Hukum & Pembangunan*, 48(1), 137–158. <https://doi.org/10.21143/vol48.no1.1604>
- Nurhidayah, L., Alam, S., Utomo, N. A., & Suntoro, A. (2024). Indonesia's just energy transition: The societal implications of policy and legislation on renewable energy. *Climate Law*, 14(1), 36–58. <https://doi.org/10.1163/18786561-bja10047>
- Ordóñez, J. A. F., Jakob, M., Steckel, J. C., & Fünfgeld, A. (2021). Coal, power and coal-powered politics in Indonesia. *Environmental Science & Policy*, 123, 44–57. <https://doi.org/10.1016/j.envsci.2021.05.007>
- Reich, M., & Simon, A. C. (2024). Critical minerals. *Annual Review of Earth and Planetary Sciences*. <https://doi.org/10.1146/annurev-earth-040523-023316>
- Resosudarmo, B. P., Rezki, J. F., & Effendi, Y. (2023). Prospects of energy transition in Indonesia. *Bulletin of Indonesian Economic Studies*, 59(2), 149–170. <https://doi.org/10.1080/00074918.2023.2238336>
- Rosada, F., Wibisana, R. A. A., & Paksi, A. K. (2023). The impact of Indonesia–China nickel cooperations on Indonesia's economy and environment. *Nation State: Journal of International Studies*, 6(2), 96–113. <https://doi.org/10.24076/nsjis.v6i2.1270>
- Sari, S., & Paulus, D. H. (2022). Licensing policy on mineral and coal mining in the concept of division of authority. *Pandecta Research Law Journal*, 17(2), 189–201. <https://doi.org/10.15294/pandecta.v17i2.31653>
- Sasongko, N. A., Azmi, U., Murtiana, S., & Anda, M. (2024). Trend of critical minerals utilization for Indonesia's sustainable energy transition: A review. *E3S Web of Conferences*, 513, 04004. <https://doi.org/10.1051/e3sconf/202451304004>
- Shi, H., Jiang, H., Duan, H., Li, H., Chen, W., Wang, P., Cui, L., & Wang, S. (2025). Critical mineral constraints pressure energy transition and trade toward the Paris Agreement climate goals. *Nature Communications*, 16(1). <https://doi.org/10.1038/s41467-025-59741-y>
- Sirait, R. A. M., Marpaung, S., Serah, Y. A., Setiawati, R., & Bakara, I. W. (2023). Evaluation of the application of mining business license (IUP) regulations after the enactment of Law Number 3 of 2020. In *Advances in Social Science, Education and*

- Humanities Research* (pp. 1353–1360). https://doi.org/10.2991/978-2-38476-180-7_137
- Sulaiman, K. F. (2023). Legislative corruption: Criticism of the omnibus law policy in the mineral and mining sector in Indonesia. *E3S Web of Conferences*, 440, 04008. <https://doi.org/10.1051/e3sconf/202344004008>
- Sunardi, S., Noviolla, C., Supramono, S., & Hermanto, Y. B. (2022). Government policy on determination of coal sale price: How will the market respond? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.400884>
- Sunardi, S., Noviolla, C., Supramono, S., & Hermanto, Y. B. (2023). Stock market reaction to government policy on determining coal selling price. *Heliyon*, 9(2), e13454. <https://doi.org/10.1016/j.heliyon.2023.e13454>
- Sutrisno, A. (2022). Governing the mining industry in Indonesia: A return of resources nationalism? In *Proceedings of the 4th International Conference on Economics, Business and Economic Education Science (ICE-BEES 2021)* (pp. 27–28). <https://doi.org/10.4108/eai.27-7-2021.2316814>
- Utami, M. U., & Saria, L. (2018). The analysis of the implementation of the program of development of community empowerment around the coal mining sites. *E3S Web of Conferences*, 74, 10003. <https://doi.org/10.1051/e3sconf/20187410003>
- Werner, T. T., Toumbourou, T. D., Maus, V., Lukas, M. C., Sonter, L. J., Muhdar, M., Runting, R. K., & Bebbington, A. (2023). Patterns of infringement, risk, and impact driven by coal mining permits in Indonesia. *AMBIO*, 53(2), 242–257. <https://doi.org/10.1007/s13280-023-01944-y>
- Widhiyanti, H. N., & Sahaly, T. V. (2018). Change of mining business working agreements into special mining business licenses under the Indonesian mining law. *Proceedings of the International Conference on Economics, Management and Law*. <https://doi.org/10.2991/iceml-18.2018.25>
- Yaşın, C., Yunianto, B., Sugiarti, S., & Hudaya, G. K. (2021). Implementation of Indonesia coal downstream policy in the trend of fossil energy transition. *IOP Conference Series: Earth and Environmental Science*, 882(1), 012083. <https://doi.org/10.1088/1755-1315/882/1/012083>
- Yansil, E. T. A., Sumirat, E., & Nainggolan, Y. A. (2023). Correlation between financial performance indicators and capital structure of coal mining industry listed on the Indonesia Stock Exchange. *Journal Integration of Social Studies and Business Development*, 1(2), 51–60. <https://doi.org/10.58229/jissbd.v1i2.84>