TRACTION
ENERGY ASIA

Shared Stakes, Shared Responsibility:

Assessing China's Investments in Indonesia's Energy and Transition Minerals Sectors to Identify Policy Gaps and Strengthen Environmental and Social Safeguards

List of Abbreviations

AEER	*Aksi Ekologi dan Emansipasi Rakyat.*
BRI	Belt and Road Initiative.
BRICS	An intergovernmental organization comprising ten countries – Brazil, Russia, India, China, South Africa, Egypt, Ethiopia, Indonesia, Iran and the United Arab Emirates.
BRIGC	Belt and Road Initiative Green Development Coalition.
BKPM	Badan Koordinasi Penanaman Modal: Capital investment coordinating board.
CAC	Command And Control.
CCCMC	China Chamber of Commerce of Metals, Minerals, and Chemicals Importers and Exporters.
CDB	China Development Bank.
CSIS	Centre for Strategic and International Studies.
CSR	Corporate Social Responsibility.
CSRC	China's Securities Regulatory Commission.
EIA	Environmental Impact Assessment.
EPML	Environmental Protection and Management Law.
ESG	Environmental, Social and Governance.
ESS	Environmental and Social Safeguards.
EV	Electric Vehicle.
FDI	Foreign Direct Investment.
FPIC	Free, Prior, Informed, Consent.
GDI	Global Development Initiative.
GR	Indonesian Government Regulation.
GHG	Greenhouse Gas.
HKSE	Hong Kong Stock Exchange.
HPL	Halmahera Persada Lygend.
ICBC	Industrial and Commercial Bank of China.
ICBF	Indonesia-China Business Forum.
ICEF	Indonesia-China Energy Forum.
IEEFA	Institute for Energy Economics and Financial Analysis.
IESR	Institute for Essential Services Reform.
IHIP	Indonesia Huabao Industrial Park.
IMIP	Indonesia Morowali Industrial Park.
IUPE	*Izin Usaha Pertambangan Eksplorasi* (Indonesian mining exploration business permit).
IUPOP	*Izin Usaha Pertambangan Operasi Produksi* (Indonesian mining business permit for production operation activities).
KP2B	*Kawasan Pangan Pertanian Berkelanjutan:* Sustainable Agricultural Food Area.
KSPN	*Konfederasi Serikat Pekerja Nusantara*: National Union of Trade Unions.
LP2B	*Lahan Pertanian Pangan Berkelanjutan:* Sustainable Food Crop Land.
MEE	Ministry of Ecology and Environment.
MEMR	Ministry of Environment and Mineral Resources.
MOFCOM	Ministry of Commerce.
MoU	Memoranda of Understanding.
NDB	New Development Bank.
NGO	Non Governmental Organization.
NRE	New and Renewable Energy.
NZE	Net Zero Emissions.
OLJC	Omnibus Law on Job Creation.
OSS	Obsidian Stainless Steel.

OSS	Online Single Submission.
PMK	*Peraturan Menteri Keuangan: Minister of Finance regulation.*
Perda	*Peraturan Daerah:* Local regulation.
PLN	*Perusahaan Listrik Negara* (Indonesia State-Owned Electricity Company).
PLTU	*Pembangkit Listrik Tenaga Uap:* Steam-electric power station, usually coal fired but can also use fuel oil or biomass.
PT	*Perseroan Terbatas:* Limited company.
PSN	*Proyek Strategi Nasional*: National Strategic Projects.
PUK	*Pimpinan Unit Kerja*: Management of Workers Units
RKAB	*Rencana Kerja dan Anggaran Biaya Tahunan:* Annual work plan and budget.
RTRW	*Rencana Tata Ruang dan Wilayah:* Spatial and regional planning.
RUEN	*Rencana Umum Energi Nasional:* National energy general plan.
SASAC	State-owned Assets Supervision and Administration Commission of the State Council.
SSE	Shanghai Stock Exchange.
SDGs	Sustainable Development Goals.
SEI	Stardust Estate Investment.
TCFD	Task Force on Climate-related Financial Disclosures.
UMK	*Upah Minimum Kota:* City Minumum Wage.
UMP	*Upah Minimum Provinsi:* Provincial Minimum Wage.
UN	United Nations.
WIUP	*Wilayah Izin Usaha Pertambangan:* Mining business permit area.
XMXYG	Xiamen Xiangyu Corporation Limited.

Executive Summary

Shared Stakes, Shared Responsibility: Strengthening Environmental and Social Safeguards in China–Indonesia Investment Cooperation assesses how China's growing investments in Indonesia's energy and transition minerals sectors can serve as a platform for advancing stronger environmental and social protections. It identifies key policy and regulatory gaps on both sides and explores opportunities for Indonesia and China to work together to align investment practices with higher environmental and social standards, ensuring long-term benefits for communities, ecosystems, and economies.

Methodology

The research was based on a combination of policy reviews and investment data analysis. Data was collected from government reports, financial disclosures, academic studies, Non-Governmental Organization (NGO) investigations, as well as the results from discussions at a Stakeholder Workshop on 14th April, 2025.

Key Findings

China's Strategic Role in Indonesia's Energy and Transition Minerals Sectors

China is the largest investor in Indonesia's nickel mining and processing industries, driven by the global demand for Electric Vehicle (EV) batteries. China has also financed a significant portion of Indonesia's coal power infrastructure, particularly captive coal plants supporting mineral processing in industrial parks.

Although China's 2021 commitment at the United Nations General Assembly to end support for new overseas coal plants was welcome, many off-grid coal projects in Indonesia continued to receive Chinese support. While these investments align with Indonesia's industrialization and economic growth ambitions, they also exacerbate environmental and social risks.

Environmental and Social Risks

The rapid expansion of nickel smelters and captive coal plants has contributed to deforestation, water pollution, labor rights violations, and community displacement. Many projects operate with limited transparency, highlighting serious gaps in regulatory enforcement and corporate accountability.

Evolving Policy and Regulatory Landscape

China's evolving sustainability commitments—including its dual carbon goals, ESG disclosure requirements, and green finance initiatives—present an important opportunity to elevate environmental and social standards in its overseas investments. However, enforcement remains inconsistent, particularly abroad.

Indonesia's regulatory frameworks, meanwhile, have not yet caught up with the pace of investment, and institutional incentives to prioritize ESG compliance remain weak.

Regulatory and Policy Gaps

- **Limited ESG Compliance and Enforcement:** Both countries have ESG frameworks, but practical application and enforcement lag behind, creating significant governance gaps.
- **Weak Community Engagement:** Affected communities lack effective avenues to participate meaningfully in project planning, grievance processes, and decision-making.
- **Insufficient Incentives for Renewable Energy:** Despite China's capacity and interest in supporting clean energy, Indonesian policies have not provided the necessary incentives to attract greater Chinese investment into renewables.

Strategic Risks and Opportunities

Indonesia's Growing Risk of Being Left Behind

Indonesia's slow progress in institutionalizing ESG standards threatens its global competitiveness. In an investment environment increasingly shaped by ESG and green finance requirements, countries without credible safeguards risk losing access to high-quality, low-risk capital—particularly in the fast-growing clean energy and green technology sectors. Without urgent reform, Indonesia risks missing substantial economic opportunities and falling behind regional peers who are moving faster to integrate sustainability into their investment climates.

Leveraging China's Sustainability Frameworks and the Global Development Initiative (GDI)

China's domestic sustainability agenda, including its "Ecological Civilization" concept and the Global Development Initiative (GDI), provides a critical framework for encouraging higher ESG standards in Indonesia-bound investments. The GDI, grounded in the Sustainable Development Goals (SDGs) and the Paris Agreement, offers a platform for piloting climate-aligned, socially inclusive cooperation models—moving beyond transactional investments toward true development partnerships.

Opportunities for Strengthening Sustainability and Accountability

- **Leveraging China's Green Finance Commitments:** Encouraging Chinese financial institutions to apply stricter ESG criteria to investments in Indonesia, aligning with China's own domestic standards.
- **Strengthening Regulatory Oversight:** Advocating for harmonization between China's green investment principles and Indonesia's environmental and social governance frameworks.
- **Enhancing Civil Society Engagement:** Building civil society capacity to monitor, report, and advocate for stronger ESG practices in Chinese-funded projects.
- **Framing ESG as an Economic Imperative:** Positioning stronger ESG compliance not merely as an environmental or social necessity, but as crucial for Indonesia's future competitiveness and investment attractiveness.

Conclusion

China's investment in Indonesia's energy and transition minerals sectors is at a pivotal juncture. These investments offer important economic opportunities, but without stronger safeguards and enforcement mechanisms, they risk entrenching environmental harm, social injustice, and economic vulnerability.

Strengthening regulatory frameworks, enhancing transparency, and fostering collaboration among policymakers, investors, and civil society will be critical. Initiatives like the GDI, if operationalized effectively, offer a path toward greener, fairer, and more resilient China–Indonesia investment cooperation.

The recommendations outlined in this report provide a practical roadmap for achieving these goals, ensuring that Chinese investments contribute meaningfully to Indonesia's sustainable development and global competitiveness.

1. Introduction

1.1. Background & Context

China has emerged as a dominant foreign investor in Indonesia, particularly in the energy and mineral sectors, as part of its broader Belt and Road Initiative (BRI) strategy. As the world's second-largest economy, China has long pursued global investment strategies across strategic sectors, including energy, infrastructure, and minerals. According to Indonesia's Ministry of Investment and Downstreaming, China ranks among Indonesia's top foreign investors—after Singapore and Hong Kong—with a total investment value of US$35 billion from 2006 to 2022. A quarter of this investment has been directed toward Indonesia's energy sector (Institute for Essential Services Reform - IESR, 2023), underscoring the significance of energy and mineral resources within the BRI framework.

The BRI, launched in 2013, has accelerated China's overseas investments, especially in developing countries. China's total outward direct investment (ODI) flow has seen a dramatic rise, growing 65.7 times from 2002 to 2023, with an average annual growth rate of 22.1%. Investment to BRI countries alone reached US$40.7 billion in 2023—up 31.5% from the previous year—accounting for 23% of China's total ODI. Indonesia has become a key focus, ranking as the sixth-largest destination for Chinese investment in 2023.

China's strong presence in Indonesia's energy transition aligns with Indonesia's commitment to achieving Net Zero Emissions (NZE) by 2060 and reaching a renewable energy share of 23% by 2025, as outlined in the National Energy Plan (*Rencana Umum Energi Nasional - RUEN*). A pivotal step was taken during the 2024 Indonesia-China Business Forum (ICBF), where Indonesia's state utility PT PLN signed MoUs with China's SDIC Power Holdings and PT Huawei Tech Investment to drive digital transformation in the power sector (Ministry of Energy and Mineral Resources, 2024).

Beyond energy, China's investments have been critical in Indonesia's mineral sector, particularly supporting the government's downstreaming policy aimed at moving away from raw material exports toward domestic processing. This policy has led to industrial booms, especially in nickel-rich areas like Central Sulawesi. Consequently, Indonesia has grown to supply over half of global nickel output, with the added value of nickel production jumping from US$1.4 billion to US$34.8 billion between 2020 and 2023 (GIS Reports, 2025). Major milestones include the inauguration of a US$941 million alumina refinery in West Kalimantan (Reuters, 2024).

However, this surge in investment has not been without challenges. The rapid expansion of resource extraction industries has led to deforestation, environmental pollution, and human rights concerns, particularly related to labor conditions in Chinese-funded projects such as the Jawa 7 and Sumsel 8 coal-fired power plants (*Aksi Ekologi dan Emansipasi Rakyat* - AEER, 2019). Moreover, despite commitments to green growth, as of 2025, 86% of Chinese investments in Indonesia's energy sector still support fossil fuels, with only 14% backing renewables (Aurelia, 2025). This has forced Indonesia to revise its 2030 renewable energy target downward from 26% to 19–21% (Institute for Energy Economics and Financial Analysis - IEEFA, 2024).

Recognizing these issues, China has begun to implement early-stage supervision mechanisms for its foreign investments. Initiatives like the joint annual inspection introduced in 2003—later revised in 2009 to allocate 20% of evaluation marks to compliance with host country laws—reflect China's growing sensitivity to legal and sustainability standards abroad. Additionally, China has promoted the concept of "Green Development," which emphasizes balancing economic growth with environmental

protection and social welfare (Liang et al., 2022). Tools like Environmental and Social Safeguards (ESS) have been introduced to mitigate the negative impacts of overseas projects (Inclusive Development International, 2019).

Looking ahead, China's upcoming 15th Five-Year Plan is expected to introduce new measures for improving the sustainability and transparency of its outbound investments. Commitments to halt new coal power projects overseas, strengthen due diligence in mineral supply chains, and mandate ESG reporting for Chinese companies by 2026 are important steps forward (IESR, 2024).

For Indonesia, ensuring that incoming investments align with its Sustainable Development Goals (SDGs)—particularly Goal 7 (Affordable and Clean Energy) and Goal 13 (Climate Action)—is critical to realizing a just and sustainable transition. Strengthening environmental governance, transparency, and stakeholder engagement will be key to maximizing the benefits of Chinese investments while mitigating their social and environmental costs.

1.2. Objectives & Scope

The objective of this report, *Shared Stakes, Shared Responsibility: Assessing China's Investments in Indonesia's Energy and Transition Minerals Sectors to Identify Policy Gaps and Strengthen Environmental and Social Safeguards* includes the following:

1. Providing an up-to-date and accurate assessment of the status of China's investments in Indonesia's energy and transition mineral sectors.
2. Identifying regulatory and fiscal gaps, including the lack of incentives for sustainable investments that may hinder clean energy transition and low-carbon growth in Indonesia.
3. Analyzing China's current policies, including its commitment to halting overseas coal power projects, developing due diligence standards for transition minerals, ESG reporting guidelines for companies, anticipated sustainability improvements in the upcoming 15th Five-Year Plan, and their implications for Indonesia.
4. Identifying and evaluating opportunities and challenges based on the points above.

Shared Stakes, Shared Responsibility: Assessing China's Investments in Indonesia's Energy and Transition Minerals Sectors to Identify Policy Gaps and Strengthen Environmental and Social Safeguards covers the following areas:

1. Evaluating compliance of Chinese investments with Indonesia's sustainability standards.
2. Assessing projects that potentially violate environmental and social regulations, particularly in the energy and mineral sectors.
3. Examining the transparency of Chinese investments, including public disclosure of business permits and their environmental impacts.
4. Analyzing Chinese investment projects and their effects on local communities and the environment.

1.3. Methodology

The data collection in this study used a qualitative approach from secondary data, which was in the form of a literature review consisting of:

A. Official government documents from both the Government of Indonesia and the Government of China;

B. Research results from scientific publications and independent research institutions or non-government organizations;
C. National and international official databases;
D. Official reports of United Nation (UN) organizations; and
E. Stakeholder workshop results. To ground our analysis in real-world concerns and experience, we held a workshop with government, civil society, and academic stakeholders from both Indonesia and China. Their insights sharpened our understanding of the challenges on the ground, highlighted key policy gaps, and helped strengthen our recommendations. We integrated their feedback directly into this report to ensure it is not only evidence-based, but also responsive, practical, and aligned with shared goals for more responsible and sustainable investment.

2. China's Investments in Indonesia's Energy and Transition Minerals Sectors

2.1. Investment Trends & Scale

Chinese investment continues to play a crucial role in Indonesia's economic growth, particularly in the industrial and mineral sectors. According to investment realization data from the Ministry of Investment and Downstreaming/Badan Koordinasi Penanaman Modal (BKPM), China ranks as the third-largest foreign investor in Indonesia, with an investment value of IDR 121.6 trillion. This investment has successfully created 128,310 jobs, demonstrating a significant impact on the national economy, especially in employment generation within the heavy industry sector. Centre for Sustainable Development Studies, Hong Kong Baptist University (2025) adding that China has been among the top three globally for outward direct investment flows for 12 consecutive years since 2012. The flow in 2023 is 65.7 times that in 2002, with an average annual growth rate of 22.1%.

1. China's Investment Dominance Outside Java

   One of the key trends in China's investment realization is the greater distribution of investments outside Java. Of the total investment, 75.5% was directed outside Java, while only 24.5% was allocated to Java.

   This investment distribution reflects the government's strategy to promote development outside Java and the interest of Chinese investors in regions with abundant natural resources.

   This is evident from the provincial investment distribution, where Central Sulawesi received the largest share (57.33%), followed by North Maluku (12.79%) and West Java (11.77%).

   a. Central Sulawesi and North Maluku have become primary investment destinations due to the presence of nickel mining and smelter industries, which support the electric vehicle (EV) battery supply chain.
   b. West Java and Jakarta, as manufacturing and business hubs, also received substantial investments, though not as significant as mineral-rich regions.
   c. Banten, Central Java, and East Java received lower investments compared to Sulawesi and Maluku, indicating that resource-based industries remain the primary focus of Chinese investments.

   The increased investment allocation outside Java signifies a shift from the previous concentration on Java. This aligns with the government's program to reduce regional economic disparities through the development of industries in resource-rich areas.

2. Dominant Industrial Sectors in Investment

Chinese investment in Indonesia is primarily concentrated in the manufacturing sector, particularly in metal-based and chemical industries. The sectoral distribution of investment is as follows:

a. Basic Metal Industry, Metal Products, Non-Machinery, and Equipment: 60.46%
b. Chemical and Pharmaceutical Industry: 15.51%
c. Housing, Industrial Estates, and Office Spaces: 5.26%

The majority of Chinese investment, amounting to 60.46%, flows into the basic metal industry, including nickel smelters and raw materials for Electric Vehicle (EV) batteries. This indicates that Indonesia has become a key processing hub for minerals, especially within the EV battery ecosystem driven by global demand. The chemical and pharmaceutical sector accounts for 15.51% of total investment, highlighting Chinese investors' interest in basic chemicals and pharmaceuticals. This sector plays a vital role in supporting national manufacturing and global supply chain needs. Meanwhile, investments in housing, industrial estates, and office spaces account for 5.26%, reflecting efforts to develop supporting infrastructure for manufacturing and business operations in Indonesia.

3. 100% Foreign Investment: Dependence on Foreign Capital

According to investment realization data from the Ministry of Investment and Downstreaming/BKPM, all Chinese investments in Indonesia are classified as 100% Foreign investment[1], the implications of this 100% Foreign investment status include:

a. A lack of optimal technology transfer for the local workforce, as ownership and management remain dominated by foreign companies.
b. Potential long-term economic dependence on foreign investors.
c. Significant job creation, but challenges in developing workforce skills that align with industry requirements.

Although Chinese investment has generated numerous job opportunities, more strategic policies are needed to enhance the role of domestic companies in supply chains and to promote technology transfer. This would prevent Indonesia from merely serving as a production site and instead position it as an industrial innovation hub.

Chinese investment in Indonesia continues to grow, with realized investments reaching IDR 121.6 trillion and creating 128,310 jobs. The majority of investments are directed toward the basic metal industry (60.46%), closely linked to nickel downstream processing and the electric vehicle industry. Most investments are allocated outside Java (75.5%), with Central Sulawesi and North Maluku as the primary destinations. This trend indicates a shift towards resource-based industries. While Chinese investment has brought substantial economic benefits, challenges related to foreign capital dependence, technology transfer, and environmental impact must be addressed through more strategic policies. With the right approach, Indonesia can optimize these investments to strengthen its industrial sector, enhance workforce welfare, and drive more inclusive and sustainable economic growth.

[1] https://data.bkpm.go.id/visualisasi-detail/statistik-realisasi-investasi-januari-desember-tahun-2024-GIsXrfG Last accessed 27 March 2025.

2.2. Investment Breakdown by Sector

2.2.1. Coal investments: Historical trends, existing projects, phase-out commitments

China's investments in Indonesia's energy and transition minerals sectors have played a critical role in shaping the country's economic and environmental landscape. These investments span three major areas: coal-fired power generation, renewable energy, and transition minerals, particularly nickel for EV batteries. The interplay between these sectors presents both opportunities and challenges in Indonesia's path toward a sustainable and low-carbon economy.

A. Coal Investments: Historical Trends, Existing Projects, and Phase-Out Commitments

For decades, coal has been the backbone of Indonesia's energy sector, largely fueled by strong financial support from Chinese investors. Despite growing global efforts to phase out coal in favor of cleaner energy sources, China remains Indonesia's biggest financier of coal-fired power lants (PLTUs), accounting for 86% of the country's total energy-related investments (IESR, 2023). This heavy financial backing has helped coal maintain its dominance in Indonesia's energy mix, making the transition to renewables a much tougher challenge. One of the main reasons coal remains so entrenched in Indonesia is the country's abundant domestic coal reserves. As the third-largest coal producer in the world, Indonesia has access to a cheap and steady energy supply, reducing the need to rely on expensive fuel imports. This easy access to coal has made it the go-to energy source for decades, reinforcing its position as the country's primary energy provider.

Another major factor is industrial dependence on coal, particularly in energy-intensive sectors like nickel smelting and cement production. These industries need massive amounts of energy, and coal-fired power plants provide a stable, cost-effective solution. In the case of nickel smelting, which plays a key role in Indonesia's ambitions to become a global leader in EV battery production, continued reliance on coal raises concerns about sustainability. A nickel supply chain powered by coal significantly increases the carbon footprint of EV batteries, potentially undermining the environmental benefits they are meant to provide. Government policies have also played a role in maintaining coal's dominance. Coal subsidies help keep electricity prices low, making coal an attractive option compared to renewables. While these subsidies support economic growth and industrial competitiveness, they also discourage investment in cleaner alternatives, slowing down Indonesia's shift toward a more sustainable energy system.

China's BRI has further cemented coal infrastructure investments in Indonesia. As part of its broader geopolitical and economic strategy, China has actively promoted and financed large-scale coal projects across the country. Centre for Sustainable Development Studies, Hong Kong Baptist University (2025) adding that China has been among the top three globally for outward direct investment flows for 12 consecutive years since 2012. The flow in 2023 is 65.7 times that in 2002, with an average annual growth rate of 22.1%. These power plants do not only meet Indonesia's domestic energy needs but also serve China's business interests, ensuring a long-term market for its coal and energy technologies. This deep-rooted investment has made it even harder for Indonesia to move away from coal and embrace cleaner energy sources. However, pressure to accelerate the transition is growing. With global commitments to combat climate change and Indonesia's own pledge to reach net-zero emissions by 2060, the country must start making serious policy changes.

B. Key Existing Coal-Fired Power Projects

China's growing footprint in Indonesia's coal power sector reflects deepening bilateral ties, but also highlights the urgent need to align investment practices with sustainability goals. On the China side, while important commitments have been made — such as the 2021 pledge to stop building new coal plants abroad and promoting green development — implementation remains uneven. Strengthening the environmental and social standards applied to overseas projects, improving transparency around project financing and ownership, and enhancing independent monitoring and reporting mechanisms are critical next steps. Chinese stakeholders, including financiers, EPC contractors, and equity partners, must work together to ensure that overseas energy investments genuinely contribute to low-carbon, sustainable development pathways.

For Indonesia, there is an urgent need to move beyond rhetorical commitments and take concrete action to phase out coal, particularly captive coal plants tied to industrial development. Strengthening and enforcing environmental and social safeguards — including community consultation, biodiversity protection, and just transition planning — must become central pillars of Indonesia's energy and industrial policies. China can and should be a key partner in this transition: by redirecting investment towards renewables and green industrial infrastructure, supporting capacity-building, and working jointly with Indonesian counterparts to build more transparent, accountable frameworks for project development. Shared responsibility and shared leadership are essential to ensure that cooperation between China and Indonesia accelerates — rather than hinders — a just and sustainable transition.

Table 1
China-Linked Coal Plants in Indonesia

Status	Grid Type	Plant Name	Capacity (MW)	Chinese Involvement
Operating	On-grid	Java 7	2100	Equity (China Shenhua), EPC (CEEC), Finance (CDB)
Operating	On-grid	Sumsel-8	1320	Equity (China Huadian), Finance
Operating	On-grid	Cirebon-2	1000	Finance, Equipment supply
Operating	On-grid	Nagan Raya 3 & 4	400	Construction, Equipment
Operating	On-grid	Celukan Bawang	426	Equity (China Huadian), Finance (CDB)
Operating	On-grid	Pelabuhan Ratu	1050	Finance (China Exim Bank)
Operating	On-grid	Pacitan	630	Finance (China Exim Bank)
Under Construction / Planned	On-grid	Java 9 & 10	2000	Finance (Bank of China), EPC (Chinese)

Status	Grid Type	Plant Name	Capacity (MW)	Chinese Involvement
Under Construction / Planned	On-grid	Jambi 2	700	Design (China Energy Construction)
Under Construction / Planned	On-grid	Cilacap Expansion	5000	Proposed (Chinese-Indonesian consortium)
Under Construction / Planned	On-grid	Mesuji	700	MOU (China Shenhua)
Under Construction / Planned	On-grid	Parit Baru	210	EPC (Gezhouba Group)
Operating	Off-grid	Delong Nickel (Morowali)	810	Equity (Chinese firm), Captive for nickel smelting
Operating	Off-grid	Sulawesi Labota	1520	Equity (Chinese firm), Captive for smelting
Operating	Off-grid	Weda Bay	2150	Equity (Chinese firm), Captive for smelting
Operating	Off-grid	Nanshan (Bintan)	60	EPC (Chinese), Captive for aluminum
Under Construction / Planned	Off-grid	Delong Nickel (Morowali) Expansion	1350	Planned Expansion, same stakeholders
Under Construction / Planned	Off-grid	Sulawesi Labota Expansion	1500	Planned Expansion, same stakeholders
Under Construction / Planned	Off-grid	Weda Bay Expansion	1140	Planned Expansion, same stakeholders
Under Construction / Planned	Off-grid	Obi Island Industrial Park	1520	EPC (Tianjin Electric), captive for nickel smelting

Sources: Boston University's Global Development Policy Center (GDPC) China's Global Power Database, Centre for Research on Energy and Clean Air (CREA)/ People of Asia for Climate Solutions (PACS): Three Years Later: Impacts of China's Overseas Coal Power Ban - October 2024

C. Phase-Out Commitments

Indonesia's pledge to phase out coal by 2040 is being undermined by its own actions, as new coal projects continue to be approved. This contradiction between policy commitments and real-world decisions raises concerns about the country's ability to transition away from fossil fuels. While the government has set ambitious targets for reducing coal dependency, recent plans to expand captive coal capacity and increase coal-fired power generation send mixed signals. These inconsistencies not only slow down the shift to renewable energy but also make it harder for Indonesia to meet its climate goals (Ember Climate, 2023).

Beyond policy contradictions, financial challenges make the transition even more difficult. Shutting down coal-fired power plants ahead of schedule requires enormous financial compensation for investors, particularly those from China. The cost of refinancing the early retirement of just one coal plant in Indonesia is estimated at $325 million, showing how expensive it is to move away from coal (World Resources Institute, 2023). Without a clear strategy to fund this transition, Indonesia risks being locked into coal for longer than intended.

At the same time, the shift away from coal raises serious concerns for workers and communities that depend on the industry. Thousands of jobs are at stake, and without proper transition programs, many could be left without a stable source of income. A just transition isn't just about switching to cleaner energy, it's also about making sure that workers and communities aren't left behind. Investing in alternative industries, reskilling programs, and social protections is crucial to ensuring that the transition is fair and sustainable (Center for Global Sustainability, 2023). To truly move toward a cleaner future, Indonesia needs not just policy commitments, but real action aligning regulations, securing funding, and prioritizing people's livelihoods along the way.

2.2.2. Renewable energy investments: Solar, wind, hydro, and potential future investments

A. Slow Uptake of Renewable Energy Investments

Despite its high renewable energy potential, Indonesia has struggled to attract significant investment in solar, wind, hydro, and geothermal power. Currently, only 14% of China's total energy investments in Indonesia are directed toward renewable projects, far below expectations (IESR, 2023).

Several challenges hinder the expansion of renewables:

1. Unclear regulatory frameworks – Frequent policy changes and lack of long-term guarantees deter investors.
2. Coal dominance – The government's commitment to coal subsidies reduces competitiveness for renewables.
3. Grid infrastructure limitations – Weak transmission networks make it difficult to integrate intermittent renewable sources.

B. Key Renewable Energy Projects

While limited in number, some Chinese-backed renewable projects indicate a shift toward clean energy investments:

Table 2
Key Renewable Energy Projects

Project Name	Type	Capacity (MW)	Investment Partner	Status	Challenges
Cirata Floating Solar Power Plant	Solar	145	PLN & China Power International Development Ltd.	Operational (2024)	Grid integration, financing
Windu Hydro Power Project	Hydro	120	Chinese consortium	Under construction	Environmental impact
Sulawesi Wind Farm	Wind	N/A (Feasibility study)	Chinese investors	Planned	Regulatory barriers

Source: Traction Energy Asia, 2025, Compiled from various sources.

Despite these initiatives, Indonesia lags behind ASEAN peers like Vietnam and Thailand, which have seen greater renewable energy investment due to more supportive policies (Asian Development Bank, 2022).

C. Future Opportunities and Policy Needs

To accelerate renewable energy investments, Indonesia must:

1. Provide clear tax incentives for green energy investments.
2. Reduce bureaucratic red tape that slows project approvals.
3. Improve transmission infrastructure to accommodate renewable energy expansion.

China's involvement in hydro, solar, and wind projects could increase if Indonesia strengthens its regulatory environment and enhances investment incentives.

2.2.3. Transition minerals investments: Nickel mining and processing for electric vehicle (EV) batteries

A. Indonesia's Role in the Global Nickel Market

Indonesia has rapidly emerged as a global leader in nickel production, driven by soaring demand for EV batteries. The country's 2014 ban on raw nickel exports forced international companies, particularly from China, to invest in domestic nickel processing facilities (International Energy Agency, 2024).

As a result, Indonesia now controls 61% of the global refined nickel supply, solidifying its position in the EV battery supply chain (International Energy Agency - IEA, 2024).

B. Key Chinese Investments in Nickel Processing

Table 3
Key Chinese Investments in Nickel Processing

Company	Investment Focus	Project Location	Estimated Investment	Status
Tsingshan Holding Group	Nickel smelting	Morowali & Weda Bay	N/A	Operational
CNGR Advanced Material Co.	Battery precursor materials	Indonesia (multiple sites)	$10 billion	Planned (2024–2039)
GEM Co. Ltd & PT Vale	HPAL processing	Central Sulawesi	N/A	Under construction

Source: Traction Energy Asia, 2025, Compiled from various sources.

C. Environmental and Social Risks

a. Deforestation and water pollution are among the most critical environmental consequences of nickel mining. The extraction process requires large-scale land clearing, leading to the destruction of forests and natural habitats. This deforestation not only threatens biodiversity but also disrupts local water cycles. Furthermore, nickel smelting generates hazardous waste, including acid runoff and heavy metals, which contaminate rivers and groundwater. This pollution endangers aquatic ecosystems and poses health risks to nearby communities (Greenpeace, 2023).

b. Social conflicts and land disputes frequently arise in nickel mining areas, particularly where operations encroach on Indigenous lands. Many communities face forced displacement, losing access to their traditional lands and livelihoods. The lack of transparent land acquisition processes and weak regulatory enforcement exacerbates tensions between mining companies and local populations. In some cases, disputes have led to legal battles and protests, highlighting the need for stronger governance and community engagement (Transparency International, 2023).

c. High carbon emissions from smelting also undermine the sustainability of nickel mining, particularly its role in the Electric Vehicle (EV) battery supply chain. Many nickel smelters rely on coal-fired power plants, significantly increasing greenhouse gas emissions. This reliance on fossil fuels contradicts the goal of promoting clean energy through EV adoption, as the carbon-intensive nickel refining process diminishes the overall environmental benefits of battery production (IEA, 2023).

D. Indonesia's EV Battery Ambitions and Sustainability Challenges

Indonesia has big ambitions to become a global hub for Electric Vehicle (EV) battery production, leveraging its vast nickel reserves. But with this opportunity comes a major responsibility, ensuring that nickel mining and processing don't come at the cost of the environment and local communities. One of the biggest challenges is enforcing stronger sustainability regulations to protect forests, prevent water pollution, and properly manage toxic waste from smelting operations. At the same

time, the industry needs to move away from its heavy reliance on coal-fired power plants and adopt cleaner, carbon-neutral processing technologies. Shifting to renewable energy sources like hydropower or solar could significantly cut emissions and position Indonesia as a leader in responsible nickel production. Beyond environmental concerns, the welfare of workers and communities also needs to be a priority. Fair wages, safe working conditions, and respect for Indigenous land rights must be non-negotiable. If Indonesia can tackle these challenges head-on, it has the chance to not just lead the global EV battery market but also set an example for how sustainability and economic growth can go hand in hand.

China has made significant investments in Indonesia's transition minerals sector, particularly in nickel mining and processing, to support the global production of Electric Vehicle (EV) batteries. These investments are turning Indonesia into a crucial hub in the global EV supply chain.

2.3. Key Chinese Financial Institutions & Mechanisms

China's engagement in Indonesia's energy and transition minerals sectors is facilitated through key financial institutions and mechanisms, notably the China Development Bank (CDB), the Export-Import Bank of China (China Exim Bank), and various commercial banks. These entities play pivotal roles in financing projects, particularly under the BRI.

China Development Bank (CDB):
As one of China's primary policy banks, CDB focuses on national economic strategies by providing medium- to long-term financing. Internationally, CDB has financed significant infrastructure projects, including energy developments in ASEAN countries. The bank provides concessional loans, equity investments, and project financing, supporting Indonesia's energy infrastructure development. In particular, CDB has played a key role in financing major renewable energy projects and critical mineral processing facilities.

Export-Import Bank of China (China Exim Bank):
China Exim Bank offers individual and co-financing for projects across various sectors, including energy, transport, and communications. In 2008, China Exim Bank extended an RMB 1.8 billion ($240 million) concessional loan to Indonesia for the National Air Bridge Project, aimed at enhancing the country's transportation infrastructure. More recently, it has provided financing for hydropower, geothermal energy, and battery material production, aligning with Indonesia's energy transition goals.

Commercial Banks:
In addition to policy banks, Chinese commercial banks such as the Industrial and Commercial Bank of China (ICBC) and the Bank of China contribute to overseas lending for energy projects. These institutions operate with different risk appetites and loan terms than policy banks, often targeting a mix of traditional fossil fuels and renewable energy ventures. Their involvement broadens the scope and capacity of China's financial engagement in Indonesia's energy sector.

Belt and Road Initiative (BRI) Financing:
The BRI serves as a central mechanism for China's investment in global infrastructure, including energy projects. By 2023, cumulative BRI engagement surpassed $1 trillion, encompassing construction contracts and non-financial investments. In Indonesia, BRI financing has supported various initiatives, such as the Jakarta-Bandung high-speed railway and renewable energy projects. While BRI investments have been instrumental in accelerating energy infrastructure, concerns over debt sustainability, environmental impact, and social safeguards remain key issues for future

collaborations.

Recent Developments in China-Indonesia Energy Collaboration

1. **Green Energy Investments:** In November 2024, China and Indonesia signed deals worth US$10 billion, focusing on sectors including food, new energy, technology, and biotechnology. These agreements aim to enhance collaboration in areas such as new energy vehicles, lithium batteries, photovoltaics, and the digital economy.[2]

2. **Hydroelectric Projects:** In January 2025, the Jatigede Hydroelectric Power Station, undertaken by China Electric Power Construction Corporation, was completed. With an annual power generation capacity of 450 million kWh, it can meet the electricity needs of approximately 500,000 Indonesian households and contribute significantly to Indonesia's energy conservation and emission reduction efforts[3].

3. **Battery Material Facilities:** In October 2024, CNGR Advanced Material Co, a Chinese battery material producer, announced plans to construct an integrated production facility in Indonesia with an investment of $10 billion over the next 10 to 15 years. This project aligns with Indonesia's strategy to develop a comprehensive battery industry and electric vehicle ecosystem[4].

4. **New Development Bank Membership:** In March 2025, Indonesia announced its decision to join the New Development Bank (NDB), established by Brazil, Russia, India, China, and South Africa (BRICS) member nations, to support its economic transformation efforts. The NDB has shown interest in sectors like renewable energy, biodiesel, and technological development, aligning with Indonesia's focus on green energy initiatives[5].

China's Evolving Energy Investment Strategy

China has shifted its overseas energy investment strategy toward renewable energy, aligning with Indonesia's 2060 Net-Zero Target and China's commitment to stop financing new coal-fired power projects abroad. However, some coal-related financing still continues through loopholes, such as retrofitting projects or extensions of existing plants. This shift reflects China's growing emphasis on sustainable development and its response to global climate commitments.

Indonesia's Transition Minerals and China's Supply Chain Strategy

Indonesia is the world's largest producer of nickel, a key component for EV batteries, and China is a dominant player in global battery supply chains. Recent Chinese investments in nickel smelting and EV battery plants in Indonesia are driven by Beijing's efforts to secure critical minerals amid

[2]https://www.esdm.go.id/id/media-center/arsip-berita/presiden-prabowo-ajak-kolaborasi-investor-tiongkok-garap-proyek-strategis-di-indonesia. Last accessed 25 April 2025.
[3] https://www.seetaoe.com/details/243622.html?utm_source=chatgpt.com. Last accessed 27 March 2025.
[4]https://www.reuters.com/markets/commodities/chinas-cngr-plans-build-around-10-bln-battery-plant-indonesia-2024-10-30/?utm_source=chatgpt.com. Last accessed 27 March 2025.
[5]https://www.reuters.com/world/indonesia-join-brics-new-development-bank-president-says-2025-03-25/?utm_source=chatgpt.com. Last accessed 27 March 2025.

growing geopolitical competition. However, concerns about deforestation and labor rights issues in Chinese-backed nickel projects have sparked local and international scrutiny.

Regulatory Considerations and Policy Responses

The Indonesian government has tightened export controls on raw minerals, requiring foreign companies (including Chinese firms) to process minerals domestically before export. At the same time, Indonesia is diversifying its partnerships, engaging with Western firms and other Asian countries to avoid over-reliance on China. This dynamic creates both competition and collaboration opportunities for Chinese investors.

These developments underscore the deepening collaboration between China and Indonesia in the energy sector, with significant investments and projects aimed at supporting Indonesia's energy transition and economic development. Future cooperation will likely depend on aligning investment strategies with environmental and social safeguards, ensuring that projects deliver sustainable and equitable benefits for both nations.

3. Regulatory and Fiscal Landscape in Indonesia

Fiscal policy plays a crucial role in attracting foreign investment by creating a stable and competitive economic environment. Government measures in managing revenue (taxation) and state expenditures have a direct impact on investment attractiveness, with one of the key instruments being tax incentives such as tax holidays, tax allowances, or import duty exemptions, which can reduce corporate tax burdens and enhance investment profitability (Feld & Heckemeyer, 2011; Djankov et al., 2010). Moreover, foreign investors tend to seek countries with economic stability and fiscal policy certainty, as a well-managed budget deficit and consistent tax policies create a safer investment climate (Aizenman & Jinjarak, 2009). Public expenditure directed toward infrastructure development, such as roads, electricity, and ports, is also a crucial factor, as high-quality infrastructure helps reduce operational costs for multinational companies and improves investment efficiency (Calderón & Servén, 2010). Furthermore, sound fiscal policies can shield a country from economic crises that may undermine investor confidence, for instance, by keeping the fiscal deficit under control to mitigate the risk of high inflation, which could be detrimental to investments (Reinhart & Rogoff, 2010). However, an attractive fiscal policy alone is insufficient to ensure the sustainability of foreign investment without strong legal certainty.

Legal certainty is a fundamental factor in attracting foreign investment, as it provides stability, transparency, and protection for investors. Clear regulations and policy predictability are crucial, as investors tend to seek countries with consistent rules that do not change abruptly, allowing them to better assess risks and returns (North, 1991). Additionally, legal certainty ensures the protection of investor rights, including asset ownership and dispute resolution mechanisms, thereby increasing their confidence in a country's investment climate (World Bank, 2020). Well-defined and non-bureaucratic regulations also facilitate ease of doing business, as reflected in the *Ease of Doing Business* index, where countries with simpler licensing systems are more attractive to foreign investors (World Bank, 2020). Furthermore, legal certainty shields investors from political risks such as asset expropriation, unfair government intervention, or unforeseen policy changes, thereby fostering long-term investment interest (United Nations Conference on Trade and Development - UNCTAD, 2019). Thus, the synergy between a competitive fiscal policy and guaranteed legal certainty will create a secure, stable, and sustainable investment environment. Countries that effectively manage both aspects will not only attract more foreign investment but also enhance their global

competitiveness and credibility, ultimately driving inclusive and sustainable economic growth (Organisation for Economic Co-operation and Development - OECD, 2021).

3.1. Indonesia's Energy & Minerals Investment Policies

Indonesia offers a range of incentives to attract investment from China in the energy and transitional mineral sectors. Recognizing the significant capital required for energy transition, the Indonesian government has introduced various measures to encourage collaboration and ensure a stable investment climate. One of the key incentives is tax incentives, which aim to enhance the appeal of investment in the New and Renewable Energy (NRE) sector. The Minister of Energy and Mineral Resources (MEMR), Arifin Tasrif, emphasized the necessity of synergy and collaboration among ASEAN countries in implementing tax incentives to support energy transition efforts.

In addition to fiscal measures, strategic partnerships and Memoranda of Understanding (MoU) play a crucial role in fostering investment cooperation. Indonesia and China have signed two strategic MoUs in the mineral sector to advance clean energy development in both nations. These agreements focus on establishing a green mineral industry and promoting the sustainable utilization of mineral resources. The Indonesian government also facilitates investment and partnership forums to strengthen economic ties. Platforms such as The 7th Indonesia-China Energy Forum (ICEF) serve as avenues to maintain the stability of Chinese investments in Indonesia and explore various collaboration opportunities in the energy sector.

Moreover, Indonesia provides investment opportunities in renewable energy, offering Chinese investors prospects in infrastructure development, including new electricity transmission networks, renewable energy supply chains, and the electric vehicle ecosystem. Furthermore, collaboration in the mineral supply chain is a key priority for both nations. Indonesia and China have agreed to reinforce their partnership to support the global energy transition while ensuring the security of mineral supply chains and associated industries.

To complement these incentives, Indonesia has established a regulatory framework designed to facilitate investment in renewable energy and transitional minerals. The key regulations and their respective incentive mechanisms include:

A. Law No. 30 of 2007 on Energy
   a. Article 20: The government provides fiscal and non-fiscal incentives to support the development and utilization of renewable energy sources.
   b. Mechanism: Fiscal incentives include tax relief, while non-fiscal incentives encompass streamlined licensing processes and research support.

B. Government Regulation No. 79 of 2014 on National Energy Policy
   a. Article 10: Establishes national energy mix targets, with a significant portion dedicated to renewable energy, and promotes investment through various incentives.
   b. Mechanism: Tax facilities, import duty exemptions, and price support via feed-in tariffs for renewable energy projects.

C. **Presidential Regulation No. 4 of 2016 on the Acceleration of Electricity Infrastructure Development**
   a. Article 14: Provides licensing facilitation and fiscal incentives for electricity projects utilizing renewable energy.
   b. Mechanism: Tax holidays, tax allowances, and import duty exemptions for equipment not produced domestically.

D. **Minister of Energy and Mineral Resources Regulation No. 50 of 2017 on the Utilization of Renewable Energy Sources for Electricity Supply**
   a. Article 5: Establishes an electricity tariff scheme based on production costs to incentivize investment in renewable energy.
   b. Mechanism: Competitive electricity pricing and guaranteed purchase agreements by PLN for renewable energy projects.

E. **Minister of Finance Regulation No. 130/PMK.08/2016 on Government Guarantees for the Acceleration of Renewable Energy Projects**
   a. Article 3: Provides government guarantees for the financial obligations of renewable energy projects that meet specific criteria.
   b. Mechanism: Government-backed risk guarantees to enhance project creditworthiness.

By integrating these incentives with a strong regulatory framework, Indonesia aims to create a conducive environment for investment in its energy sector. The synergy between fiscal policies, strategic collaborations, and regulatory support ensures that Indonesia remains an attractive destination for Chinese investment, contributing to a sustainable and secure global energy transition.

3.2. Policy & Regulatory Gaps

3.2.1 Enforcement of environmental and social safeguards and due diligence requirements

3.2.1.1 Indonesian Environmental Safeguards

A. Mandatory Instruments for Metal Mining

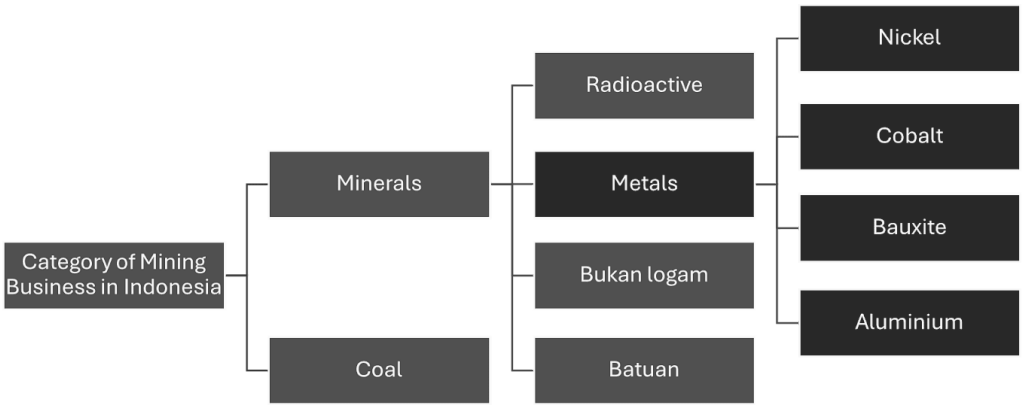
In order to fully comprehend the obligations that mining companies must fulfill when establishing mining operations in Indonesia, it is essential to navigate a complex and comprehensive legal framework. This framework encompasses a wide array of regulations and provisions governing the mining sector in Indonesia, which are designed to ensure sustainable practices, environmental protection, and compliance with national and local laws.[6] Understanding these legal requirements is not only crucial for the successful initiation of mining activities but also for fostering responsible corporate citizenship and promoting long-term sustainability within the industry. By adhering to these regulations, mining companies can contribute to the economic development of Indonesia while simultaneously safeguarding the environment and the rights of local communities.

The ramification of this business process is adjusted to the mining material that is the object of excavation, this grouping has juridical implications for the mining business license granted. Before entering the licensing branch, it is worth knowing in advance the grouping of mining materials in the

[6] Jennifer McKay & Balbir Bhasin, "Mining Law and Policy in Indonesia: Issues in Current Practice that Need Reform," *Journal of Energy & Natural Resources Law*, Vol.19, No.4, pp. 329-343

Indonesian legal constellation, with the following divisions radioactive minerals, metallic minerals, non-metallic minerals, special minerals, rock minerals, and coal.[7]

Figure 1
Category of Mining Business in Indonesia in accordance with Indonesian Government Regulation (GR) Number 96/2021



This report put emphasis on energy transition minerals encompassing bauxite, nickel, and aluminum so that the discussion will be narrowed down to the discussion of metallic minerals because bauxite, nickel, and aluminum are included in the categorization. The metallic minerals mining business has several eligibility criteria which in general are related to 1) administrative requirements; 2) technical requirements; 3) environmental safeguards; 4) financial requirements.[8]

B. General Requirements for Metal Mining Business

Before describing the general mandatory requirements for metallic mining, it is necessary to identify the business phases of mining activities as each of these phases will require different licences. Mining activities can be divided into two broad phases, namely the exploration and the production operation phase.[9] Therefore, the mining law in Indonesia prescribes at least two licenses in mining business: the Exploration Permit (*Izin Usaha Pertambangan Eksplorasi* or IUPE) and the Operating Production Permit (*Izin Usaha Pertambangan Operasi Produksi* or IUPOP). The former consists of activities ranging from the investigation, exploration, and the feasibility study.[10] Prior to the submission, the applicants must be able to demonstrate that their enterprises have won the bid for the Mining Permit Area as a prerequisite to commence exploration activities.[11] As for the latter, the activities encompass construction, extraction, processing (e.g., purification, development, utilization, or smelting), transporting, and sale.[12]

Accordingly, every enterprise that engages in any mining activities falling under the production must possess the IUPOP or the Transporting Permits. Viewed in this sense, each stage of mining production will oblige the operators to have prior approvals in the form of licenses.

[7]Nurul Listiyani, M. Yasir Said, Afif Khalid, "Strengthening Reclamation Obligation Through Mining Law Reform: Indonesia Experience," *Resources* Vol. 12, pp. 1-14
[8] GR Number 96 of 2021, art. 31 jo 36(2).
[9] GR Number 96 of 2021, art 28(1).
[10] GR Number 96 of 2021, art 28(2).
[11] GR Number 96 of 2021, art 29(1).
[12] GR Number 96 of 2021, art 28(3).

Figure 2
The Mining Production Stages in GR Number 96 of 2021

The differentiation made by GR Number 96 of 2021 is also applicable to nickel and bauxite mining. This can be seen through the Standard Classification of Indonesian Business Fields that enlist different types of mandatory permits ranging from the IUPE until the IUPOP.

Initially, the operator commences mining activities by exploring the geological formation and mineral resources in particular landscape. To gain accurate information regarding the location, structure, dimension, distribution, quality of mineral resources, and the environmental and social impacts, the enterprise must carry out a thorough study as part of the exploration stages.[13] The Exploration Permit or IUPE is a prescription for any enterprise that is about to perform the exploration and thorough investigation.

As indicated previously, the authority prescribes at least 4 (four) main conditions that enterprises must satisfy in order to obtain the exploration permit, *inter alia*, 1) administrative requirements; 2) technical requirements; 3) environmental safeguards; 4) financial requirements.[14] Additionally, the GR Number 96 of 2021 envisages that an enterprise is eligible to apply for IUPE on the condition that it has the Mining Business Permit Area (*Wilayah Izin Usaha Pertambangan* or WIUP) which is granted through an auction mechanism.[15] Consequently, in addition to four main conditions above, an enterprise must also meet all necessary requirements applicable to the WIUP application.

As regards the environmental requirements, the competent authority mandates an enterprise to fulfill several mandatory conditions, among others:[16]

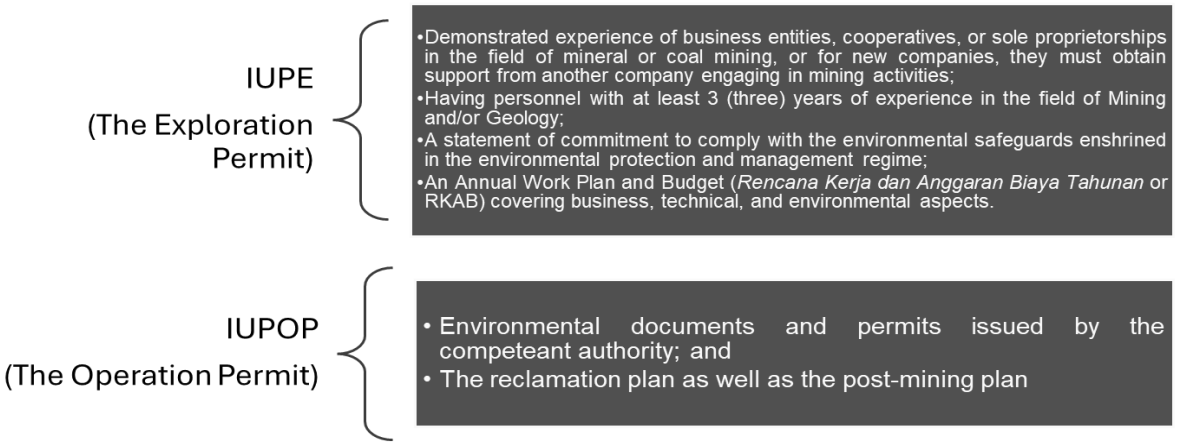
1. Demonstrated experience of business entities, cooperatives, or sole proprietorships in the field of mineral or coal mining, or for new companies, they must obtain support from another company engaging in mining activities;
2. Having personnel with at least 3 (three) years of experience in the field of Mining and/or Geology;
3. A statement of commitment to comply with the environmental safeguards enshrined in the environmental protection and management regime; and
4. An Annual Work Plan and Budget (*Rencana Kerja dan Anggaran Biaya Tahunan* or RKAB) covering business, technical, and environmental aspects.

[13] GR Number 96 of 2021, art 1(17) jo. 1(18).
[14] GR Number 96 of 2021, art 31.
[15] GR Number 96 of 2021, art 29(1).
[16] GR Number 96 of 2021, art 22(3) jo art 34.

These requirements can also be found on the Standard Classification of Indonesian Business Fields website that mentions all compulsory elements above for nickel mining exploration listed with a registration number 07295.[17]

In case the IUPE holder intends to level up its permit to IUPOP, the minister of mineral resource must once again take into account 4 (four) mandatory elements to eventually grant the IUPOP, namely administrative, technical, environment, and financial aspects.[18] An additional requirement turns up in regards to the environmental safeguards that shall be met by the applicant. GR Number 96 of 2021 obliges mining operators to possess environmental documents and permits issued by the competent authority and the reclamation plan as well as the post-mining plan.[19] In its broadest sense, mining operators eventually must comply with mandatory instruments ranging from the information regulation, standards (i.e., effluent or ambient), Environmental Impact Assessment (EIA), and all environmental permits. With respect to the reclamation and post-mining plan, it seems that the regulation will only prescribe the IUPOP holders to draft such a document. This stems from the fact that MEMR Number 7 of 2014 compels the IUPOP and IUPE holders to develop reclamation plans for both exploration and production phase.[20] As GR Number 96 of 2021 appears to be the prevalent regulation over the MEMR Number 26 of 2018, the IUPE holders are no longer obliged to develop reclamation plans. Rather, the IUPE holders remain bound by the obligation to submit a mere statement of commitment to comply with environmental requirements without any duty to develop a reclamation plan. Below is the summary of requirements for IUPE and IUPOP.

Figure 3
Mandatory Environmental Safeguards for the Exploration and the Production in Indonesia's Mining Regulatory Framework



On the question of energy transition minerals, the general environmental safeguards will pretty much be in the same fashion. As the smelting activities fall under the category of processing stage, this indicates that all requirements under the IUPOP will also be applicable to an enterprise constructing smelter installation in its mining operation. Nevertheless, in the next section, this paper presents more detailed mandatory instruments for environmental safeguards that mining enterprises

[17] This can be accessed at <https://oss.go.id/informasi/kbli-detail/fb3ede94-145f-4eb7-b6e6-412af4634d30>
[18] GR Number 96 of 2021, art 36(2).
[19] GR Number 96 of 2021, art 39.
[20] MEMR Number 26 of 2018, art 22(1).

shall comply with. These instruments include standards as a control to air pollution and water pollution. Moreover, the following section also discusses the obligation to deposit reclamation bonds and for IUPOP holders.

C. With Respect to Environment

EPML 2009 (Environmental Protection and Management Law) adopts several types of instruments. They are clustered in several groups covering issues of planning (*perencanaan*), utilization (*pemanfaatan*), control (*pengendalian*), preservation (*pemeliharaan*), supervision (*pengawasan*), and law enforcement (*penegakan hukum*).[21]

If one looks at provisions on control,[22] One could find that EPML 2009 employs two types of regulatory approaches, i.e., Command And Control (CAC) and non-CAC approaches. Under the CAC approach, one could find various instruments such as environmental standards,[23] procedures for environmental impact assessment,[24] and the permit system.[25] Standards, impact assessment, and the permit system are included in the CAC approach because these instruments are closely intertwined with provisions on supervision and law enforcement.[26] For the non-CAC approach, EPML categorizes several instruments under the name "Economic Instruments".[27] This indicates that for EPML, all instruments that do not belong to CAC instruments fall into economic instruments.

3.2.1.2. Environmental Standards

Indonesian environmental law and regulation make a clear distinction between pollution (*pencemaran*) on the one hand, and damage or destruction (*kerusakan*) on the other hand. EPML defines pollution as "the enter or disposal of organisms, substances, energy, and/or other components into the environment through human activities that surpasses environmental quality standards."[28] Meanwhile, environmental destruction is defined as a direct or indirect physical, chemical, and/or biological change, which surpasses the standards for damage/destruction.[29] For simplicity, this contribution will use the term "environmental harms" whenever a provision refers to both *pencemaran* and *kerusakan*, i.e., "*pencemaran dan/atau kerusakan lingkungan hidup*").

[21] Law on Environmental Protection and Management, hereinafter EPML, art. 4. It should be noted that in 2009, the government enacted Law Number 32 of 2009 on Environmental Protection and Management. Later, the 2009 Law was amended by the Omnibus Law on Job Creation (OLJC), i.e., Law Number 11 of 2020 and subsequently Law Number 6 of 2023. We use "EPML 2009" to refer to the original 2009 Law before amendment, and "EPML" to refer to the consolidated text after the OLJC amendments.
[22] EPML, Chapter V, arts. 13-56.
[23] EPML, arts. 20-21.
[24] EPML, arts. 22-35. It should be noted that the there are two separate procedures for environmental impact studies, namely the *analisis mengenai dampak lingkungan* (Amdal), namely impact assessment targeted for environmentally risky projects, and the *upaya pengelolaan lingkungan dan upaya pemantauan lingkungan* (UKL-UPL), namely assessment for less risky projects. For simplicity, we name impact assessment procedures to cover provisions on *Amdal* and *UKL-UPL*.
[25] EPML 2009, arts. 36-41. It should be noted that the 2023 Omnibus Law on Job Creation (OLJC) deleted article 36 of EPML 2009 that required environmental permits for business or activities before obtaining business or activity permit.
[26] Hence, provisions on standards, impact assessment, and permit constitute the "command" part of CAC, while provisions on supervisions and law enforcement are its "control" part.
[27] EPML, paragraph 8, arts. 42-43.
[28] EPML, art. 1, point 14.
[29] EPML, art. 1, point 17.

Further the Law states that environmental pollution will be measured through environmental quality standards.[30] According to these provisions, it could be concluded that pollution occurs when environmental quality standards are exceeded by an activity.

EPML specifies that environmental quality standards include: a. water quality standard; b. wastewater (effluent) standard; c. sea-water quality standard; d. air quality standard; e. emission standard; f. nuisance standard; and g. other standards according to the development of science and technology.[31] Some of these standards were further detailed in separate GR.[32] As a result of OLJC, the government enacted GR Number 22 of 2021 that integrated all previously separated GRs on environmental management, including GRs related to environmental standards.

One serious problem from the EPML provisions on environmental quality standards is the failure to differentiate between standards targeting certain environmental quality from those focusing on the quality of wastes or emissions. All standards are classified as environmental quality standards, as if one could really indicate pollution only from the violation of effluent or emission standards. Such a distinction is theoretically important. In this regard, Kolstad argues:

> *"A polluter generates emissions. These emissions are transformed, possibly in a complex fashion, to ambient concentrations of pollution. Emissions cause no damage; it is ambient concentrations that cause damage. This is an important distinction. The word ambient refers to the world around us. That is its use here. Ambient concentrations are the concentrations of pollution in the air around us or in the water we drink. It is ambient concentrations, not emissions, that should be of concern when we discuss environmental damage."*[33]

Scholars usually distinguish target standards on the one hand, and performance standards on the other hand. Target standards, commonly also referred to as ambient standards, target-based standards, or environmental quality standards, put emphasis on the effects of the standards against specific targets, i.e., certain environmental quality. The targets are usually set by observing the effects of pollutants on specific environmental media, such as water, air, or soil.[34] Thus, environmental quality standards describe certain targeted environmental conditions as well as the extent to which the environment can tolerate the release of polluting materials or wastes. Hence, standards under EPML that could be considered as environmental quality standards are ambient air quality standard, the sea water quality standard, and water quality standards.

On the other hand, performance standards, also referred to as output standards, source-based standards, or emission limit values, establish limits on the quantity or quality of emissions that can be released into the environment. Hence, the standards put emphasis on wastes or emissions

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[30] EPML, art. 20, par. (1).

[31] EPML, art. 20, par. (2).

[32] These GRs are: 1. GR Number 19 of 1999 concerning Sea Pollution and Damage Control, which specified seawater quality standard; 2. GR Number 41 of 1999 concerning Air Pollution Control, which specified national emission standard and national air quality standard; 3. GR Number 82 of 2001 concerning Water Quality Management and Water Pollution Control, which specified national wastewater standard and national water quality standard; and 4. GR Number 101 of 2014 concerning Management of Hazardous Wastes.

[33] Charles Kolstad, *Environmental Economics* (Oxford University Press, 2000), pp. 146-147.

[34] Stuart Bell dan Donald McGillivray, *Environmental Law*, 5th ed. (Blackstone Press, 2001), p. 184.
According to Bell and McGillivray, environmental quality standards can also be prescribed broadly, for example by determining specific targeted habitat conditions, or even humans, that must be protected. Standard targets are also often determined by reference to the prohibition to cause interference (nuisance) or a danger to human health. *Id.* See also: Anthony Ogus, *Regulation: Legal Form and Economic Theory* (Hart Publishing, 2004), p. 208; and Michael Faure and Göran Skogh, *The Economic Analysis of Environmental Policy and Law: An Introduction* (Edward Elgar, 2003), pp. 189-190.

produced and do not directly focus on the effects of the releases on the receiving environmental media.[35] In EPML, these standards include emission, wastewater, and nuisance standards.

The distinction is crucial from a law enforcement standpoint. For example, an action that results in pollution, i.e., surpassing water, air, or seawater quality standards, is punishable according to Articles 98 and 99, while violating emission, wastewater, and nuisance standards is punishable according to Article 100 of EPML. Articles 98 and 99 impose more severe sanctions than those outlined in Article 100.

Another feature of the Indonesian standard setting is the lack of linkage between target-based and source-based standards. A missing link between water quality standards and wastewater standards was discussed in the *Cikijing River* Case (2015). The case was triggered by the granting of permits by several regents that allow several textile factories to dispose of wastewater into the Cikijing River. The river is a tributary of the Citarum River, which in 2013 was included in 10 most polluted rivers in the world.[36] In the *Cikijing River* Case, the Court declared that the permits ignored the fact that the river has been heavily polluted. It further ruled that the defendants (regents) had failed to consider the potential impacts of the permitted discharges to the already polluted river. Interestingly, the Court opinion emerged even though the defendants have shown that each of the companies did not violate the regional emission limit value (ELV).[37] The case indicates that there is no connection between the Indonesian water quality standards and wastewater standards. Hence, wastewater standards did not become stricter although the river was already heavily polluted.[38]

GR Number 22 of 2021 further explains rules governing the prevention of water pollution,[39] air pollution,[40] sea pollution,[41] and pollution and soil contamination from toxic wastes.[42] The GR also provides national water quality standards for rivers and lakes,[43] national ambient (air quality) standards,[44] sea water quality standards,[45] a list of toxic wastes,[46] and mechanism to determine toxic wastes,[47] and a list of registered non-toxic wastes.[48]

In addition to environmental standards, focusing on environmental pollution, EPML also introduces standards of environmental damage/destruction, i.e., the *Kriteria Baku Kerusakan Lingkungan*. From a theoretical point of view, such standards are similar to target-based standards, describing certain

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[35] Bell and McGillivray (2001), *Environmental Law*, p. 185. See also: Faure and Skogh (2003), *The Economic Analysis …*, p. 191.

[36] Anonymous, "Citarum, Sungai Paling Tercemar di Bumi", *Tempo.co*, November 7th, 2013, availale at: <https://m.tempo.co/read/news/2013/11/07/173527891/citarum-sungai-paling-tercemar-di-bumi>, accessed in July 2024.

[37] District Administrative Court of Bandung, Decision Number 178/G/2015/PTUN-BDG (2015), *Walhi et al. vs The Regent of Sumedang, et al.*, pp. 233-236.

[38] This problem is addressed in GR Number 22 of 2021, which requires the local government to determine the so-called *Daya Tampung Beban Pencemaran* (DTBP), an Indonesian version of the Total Maximum Daily Loads (TMDLs). In the previous GR, i.e., the GR Number 82 of 2001, the government was allowed to replace DTBP with national wastewater standards. Whether the new provision will be implemented remains to be seen.

[39] GR Number 22 of 2021, arts. 107-162.

[40] GR Number 22 of 2021, arts. 163-219.

[41] GR Number 22 of 2021, arts. 220-271.

[42] GR Number 22 of 2021, arts. 274-470.

[43] GR Number 22 of 2021, Appendix VI.

[44] GR Number 22 of 2021, Appendix VII.

[45] GR Number 22 of 2021, Appendix VIII.

[46] GR Number 22 of 2021, Appendix IX.

[47] GR Number 22 of 2021, Appendices X-XIII.

[48] GR Number 22 of 2021, Appendix XIV.

environmental quality that needs to be protected. Environmental destruction is determined by assessing whether environmental destruction standards have been exceeded or not.[49] GR Number 22 of 2021 briefly describes criteria for environmental destruction.[50]

EPML divides environmental destruction standards into two categories, i.e., ecosystem destruction standard and climate change impact standard.[51] Ecosystem destruction standards are further divided into: soil destruction standards from biomass production, coral reef destruction standards, environmental destruction standards from forest or land fires, mangrove destruction standards, lawn destruction. standards, peatland destruction standards, karst destruction standards, and other standards according to scientific development.[52] For standards related to climate impacts, EPML states that the standards will be based on the increased temperature, sea level rise, typhoons, and drought.[53] These climate-related standards are still however absent.

With respect to metal mining activities, there are several performance standards that the operators must be compliant with. Firstly, obligations to comply with performance standards in the protection of water bodies. In principle, every business operator must treat their wastewater resulting from their activities.[54] The treatment of wastewater can be categorized in three broad approaches, *inter alia*, the re-use of waste water, the application of waste water onto the soil; and/or the release onto the water table or to other environmental mediums.[55] In doing these three approaches, the installation shall take into account the emission limit value or effluent standard set by the Ministry of Environment as the competent authority in this matter.[56] Prior to full commencement of operations, the enterprise must have conducted a thorough assessment on the potential environmental impacts due to the introduction of substances into the water.[57] In addition, there is a strict obligation to comply with the effluent standards.[58]

The Ministry of Environment has issued multiple legislations to set effluent standards for wastewater dedicated to nickel, bauxite, and aluminium notwithstanding the fact that the MoEF issued these legislations after the enactment of the Job Creation Law. Under the MoE Regulation No. 34 of 2009, the MoEF governs the effluent standards for bauxite mining business. The MoEF Regulation No. 34/2009 governs all mining operations that fall under the scope of i) mining activities, ii) washing, iii) production of aluminium, and iv) supporting activities related to metal productions.[59]

[49] EPML, art. 21, par. (1).
[50] GR Number 22 of 2021, arts. 272-273.
[51] EPML, art. 21, par. (2).
[52] EPML, art. 21, par. (3).
[53] EPML, art. 21, par. (4).
[54] GR Number 22 of 2021, art 130(1).
[55] GR Number 22 of 2021, art 130(2).
[56] GR Number 22 of 2021, art 131(1) jo 131(2).
[57] GR Number 22 of 2021, Art 133(1)(b).
[58] GR Number 22 of 2021, Art 133(1)(b).
[59] MoEF Regulation No. 34/2009, art 2.

Figure 4
Regulations on Water and Air Pollution Control for Nickel and Bauxite Mining Activities

3.2.1.3. Environmental Impact Assessments and Permits

Before the amendment through OLJC, EPML 2009 introduced an integrated-permit system through environmental permit.[60] According to EPML 2009, within two years after the enactment of the Law, all permits related to the environment needed to be integrated into environmental permits.[61]

To make environmental permits powerful, EPML 2009 linked up the environmental permit with business permit. The Law ruled that an environmental permit is the prerequisite of a business/activity permit, and hence the business/activity permit is subject to a cancellation if the underlying environmental permit is revoked.[62]

An environmental permit is required for a business/activity considered to have serious impacts to the environment. Here, the permit is linked up to an impact assessment procedure, in the sense that all businesses/activities that have to undertake impact assessment are required to obtain environmental

[60] OECD divides environmental permitting systems into the so-called single-medium permitting and integrated-permitting systems. The former refers to permits granted for every specific environmental medium. Here, for example, every discharge to water, soil, and air will require a specific and different permit. The latter refers to a system whereby all discharges are covered by one permit. See: OECD, "Integrated Environmental Permitting Guidelines for EECCA Countries", 2005, available at: <http://www.oecd.org/env/outreach/35056678.pdf>, accessed in November 2015, p. 12.

[61] EPML 2009, art. 123. It should be noted that the government in fact failed to meet the mandate. In GR Number 27 of 2012 concerning Environmental Permit, rather than integrating all permits into environmental permit, as mandated by the Law, the government created the so-called *Izin Perlindungan dan Pengelolaan Lingkungan Hidup* (environmental protection and management permit). Such a PPLH permit is not an integrated environmental permit, since it is actually a name for a collection of single-medium environmental permits. The difficulties faced by the government to integrate all permits might sign a disturbing picture, namely that permit is actually not a control regulatory instrument but rather a source of revenue or power.

Only in 2018, nine years after the enactment of EPML 2009, was the government able to create an integrated environmental permit through the online single submission (OSS) created by GR Number 24 of 2018 concerning Electronic Integrated Licensing Services. Article 63 of the GR on OSS stated that all single-medium permits, namely permits related to the transport, disposal, treatment, storage, and reuse of toxic wastes, and permits for waste disposal to sea, water, and soil, are integrated into an environmental permit. Emission is not included in article 63, because there was no permit required for emissions.

[62] EPML 2009, art. 40.

permit and that the documents of impact assessment need to be approved before environmental permit is granted.[63]

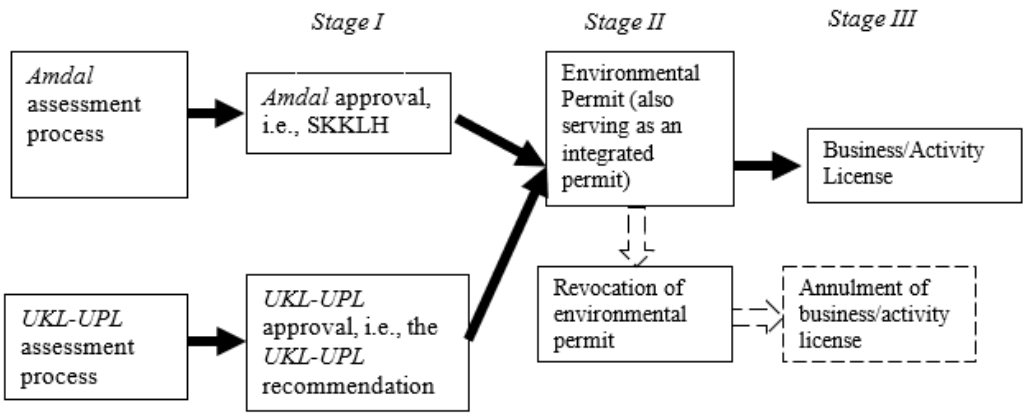
EPML 2009 divides impact assessment into two different assessment procedures. The first one is a procedure for environmentally serious and risky projects. For such projects the so-called *Analisis Mengenai Dampak Lingkungan* (Amdal) is required. MoEF determines which activities are obliged to conduct EIA procedures. These activities will then be subject to tight and strict procedures that are similar to environmental impact assessment (EIA) procedures in many countries. The submitted document will be subject to evaluation by an evaluation commission, *Komisi Penilai Amdal* (KPA), formed by MoEF, governor, mayor, or regent.[64] KPA consists of representatives from the environmental government agency, relevant technical government agency, relevant experts, potentially affected communities, and environmental organizations.[65] The finding and result of KPA's evaluation will be used as the basis for MoEF, governor, mayor, or regent in determining the environmental feasibility of the proposed project.[66] For projects considered to be environmentally feasible, the government will grant the *Amdal* approval in the form of *Surat Keputusan Kelayakan Lingkungan Hidup* (SKKLH), i.e., a decision of environmental feasibility, which subsequently functions as the basis for the government to grant an environmental permit for the proposed project.[67]

The second impact assessment procedures are set for less serious and risky projects, which will be conducted in the form of *Upaya Pengelolaan Lingkungan/Upaya Pemantauan Lingkungan* (UKL-UPL), environmental management and monitoring plan. The local government is mandated to determine which activities have to undergo the UKL-UPL procedures. These are activities that are not *Amdal*-requiring activities but might still have considerable environmental risks. The UKL-UPL procedures are less strict compared to the Amdal ones, and the approval for the procedures will be in the form of *rekomendasi* UKL-UPL (the UKL-UPL recommendation).[68] Similar to SKKLH, the UKL-UPL recommendation also functions as the basis for the government in granting an environmental permit for the proposed project.[69]

For projects that are required to undertake Amdal or UKL-UPL procedures, business licenses can only be granted if their environmental permits have been previously granted.[70] To ensure the procedures are followed by the authorities, EPML 2009 ruled that business/activity licenses granted without the underlying environmental permit and environmental permits issued without the underlying *Amdal* or *UKL-UPL* are subject to cancellation.[71] In addition, EPML 2009 also imposed criminal sanctions for the authorities that issue such an illegal environmental permit and business/activity license.[72] The permitting process under EPML 2009 can be seen in the picture below:

[63] EPML 2009, art. 36.
[64] EPML 2009, art. 29.
[65] EPML 2009, art. 30, par. (1).
[66] EPML 2009, art. 31.
[67] EPML 2009, arts. 36, par. (2).
[68] EPML 2009, arts. 34-35.
[69] EPML 2009, arts. 36, par. (2).
[70] EPML 2009, art. 36, par. (1), and art. 40, par. (1).
[71] EPML 2009, art. 93.
[72] EPML 2009, art. 111.

Figure 5
Three Stages of Environmental Permit System prior to the OJCL



EPML 2009 provisions on Amdal, UKL-UPL, and environmental permits were then detailed in various implementing regulations, such as GR Number 27 of 2012 on Environmental Permit, GR Number 24 of 2018 related to the Online Single Submission (OSS) of permit, MoE Regulation Number P.38/MENLHK/SETJEN/KUM.1/7/2019 on Amdal-requiring business/activity, and the MoE Number 8 of 2013 concerning Procedures for the Assessment and Evaluation of Environmental Documents and Environmental Permit, and MoE Number 17 of 2012 concerning Guidelines for Public Participation in the Process of Amdal and Environmental Permit. One could argue that based on the Law and its implementing regulations, Indonesia had a clear environmental permitting system with solid support for public participation in the decision-making process. Unfortunately, such a system ended as the result of the enactment of Omnibus Law on Job Creation (OLJC) in 2020 and later in 2023.

EPML 2009 not only simplified the environmental permitting system by consolidating all permits into a single environmental permit, but it also placed environmental consideration into the heart of the permitting system by making environmental permits the basis for obtaining business or activity licenses. In addition to such an arrangement, EPML 2009 created a permitting system that respected the importance of public participation in the decision-making process. There are several indications about the high level of public participation in EPML 2009. First, the Law involved the public from the beginning of the process, by making it mandatory for the proponents of Amdal to consider public opinion and objections submitted during the formulation of EIA documents.[73] Second, the term "public" in the Amdal procedures referred to a broad range of parties, namely those who are potentially impacted by the proposed project, environmentally concerned parties, and those who could be affected by any decision in the Amdal process.[74] Third, EPML 2009 also included the public in the Amdal evaluating commission, KPA.[75] By putting the public in KPA, the Law is seemingly willing to encourage a high degree of public participation, at least to a level of placation in the Arnstein's ladder of participation.[76] Fourth, EPML 2009 obliged the relevant authority to make public announcement on a project proposing an environmental permit,[77] to which the public could provide comments and opinions within ten days after the announcement.[78] Lastly, since an environmental

[73] EPML 2009, art. 26, par. (2).
[74] EPML 2009, art. 26, par. (3).
[75] EPML 2009, arts. 29-30.
[76] Sherry R. Arnstein, "A Ladder of Citizen Participation," *Journal of the American Institute of Planners* 35, no. 4 (1969), pp. 219-220.
[77] EPML 2009, art. 39.
[78] GR Number 27 of 2012 concerning Environmental Permit, art. 45, par. (3).

permit could be annulled by a decision of an administrative court,[79] the public had a chance to file a lawsuit against an environmental permit.[80]

One of the objectives of OLJC is to improve the system for investment and business activities.[81] To achieve such an objective, OLJC implements the so-called risk-based business license, simplifies requirements to obtain business license, simplifies the process to obtain business license,[82] and simplifies the requirements for investment.[83]

To implement the risk-based approach for business license, OLJC states that business license will be based on the determination of risk level and the scale of activity. In this regard, activities will be categorized according to the assessment on the level of harms and harm potentials with respect to health, safety, the environment, and the use of natural resources.[84] Based on such an assessment, activities will be categorized into four groups according to their risk potentials: low risk, medium-low risk, medium-high risk, and high risk.[85] Each group will then have different types of business licenses.

For activities with low risk potentials, the business license will be in the form of a business registry number (nomor induk berusaha, NIB).[86] For activities with medium-low risk, the business license comprises two documents, namely the NIB and standard-certificate in the form of self-declaration by the proponent to meet business standards.[87] Activities with medium-high risk will require a business license in the forms of the NIB and a standard-certificate issued by the government after conducting verification to the proponent's self-declaration.[88] If a business has high risk potentials, the business

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[79] EPML 2009, art. 38.

[80] Certainly, the standing to file a lawsuit is given to those who are potentially affected by the environmental permit, or to an environmental organization when the permit has the potential impacts to the environment. In some cases, the absence of participation in the Amdal procedures migh be the reason for courts to annul the challenged permit. In these cases, courts seemed to relax the requirement of legal standing for individuals, by making them a procedural right. See, for example: Administrative Court of Medan (2017), Decision number 166/G/LH/2016/PTUN-MDN, *Farid Wadjdi Ali, dkk. v. Gubernur Sumatera Utara dan P.T. PLN (Persero) Unit Induk Pembangunan II*, pp. 106-110. Similar results can also be found in: Supreme Court (2018), Putusan Kasasi Nomor 448 K/TUN/LH/2018, *Denny Gusmalino, dkk v. Walikota Tangerang Selatan dan PT Ichsan Medical Centre*, pp. 8-9.

[81] OLJC 2023, art. 4a.

[82] It should be noted that OLJC makes a distinction between business license (*perizinan berusaha*) and central or regional government approval (*persetujuan pemerintah pusat atau daerah*). For simplicity, this contribution employs the term business license to refer to both types of approval.

OLJC defines the business license as an approval for a private entity to conduct an activity or business. See: OLJC 2023, art. 1, number 4. Meanwhile, the term "central or regional government approval" has actually no definition in OLJC. GR Number 22 of 2021 even changes the term from "central or regional government approval" into "government approval". See, for example: GR Number 22 of 2021, art. 3, par. (3).

Although OLJC and GR do not provide definition about the government approval, it seems that the term is used as an approval to conduct activity if the activity is carried by the government agency. The term "government approval" is actually a business license for government agencies, which can be seen in various appendices of GR Number 5 of 2022 for activities conducted by government agencies. See, for example: GR Number 5 of 2021, Appendix for Activity Number 59131 regarding the distribution of film, video, and program by state's owned television station.

[83] OLJC 2023, art. 6.

[84] OLJC 2023, art. 7, paras. (1)-(3).

[85] OLJC 2023, art. 7. It should be noted that this article only divides the level of risks of activities into low, medium, and high risk. However, further elaboration in article 9 shows that activities with medium risk are further divided into medium-low and medium-high risks.

[86] OLJC 2023, art. 8.

[87] OLJC 2023, art. 9, paras. (2) and (4).

[88] OLJC 2023, art. 9, paras. (3) and (5).

license will consist of the NIB and permits, namely an approval granted by the government before the activity starts.[89] From such an arrangement, one could see that the so-called business license is in fact not a single document, but rather a bundle of documents. For a high-risk activity, the documents contain the NIB and all kinds of permits. The whole process and authorities for the risk-based permit system is then detailed in GR Number 5 of 2021 concerning the Implementation of Risk-Based Business License. For environment-related matters, the OLJC permitting system is also detailed in GR Number 22 of 2021.

As indicated in the Academic Paper of OLJC, one of the OLJC's objectives is to simplify the process of obtaining business licenses by changing and deleting several provisions related to the environmental permitting system.[90] Some statements in the Academic Paper of OLJC imply that Amdal and public participation could hinder investments.[91] Statements in the Academic Paper, hence, indicate that the existing environmental permitting system has been targeted to have serious changes in order to make the system more investment-friendly.

To make it easier, one could check the OSS website, https://oss.go.id/, to get information about requirements to obtain a business license. From the website one could see that the documents required for obtaining the license are still complicated. In addition to the business license, a series of permits other than environmental permits, are still required before business activities can commence.

As mentioned earlier, OLJC and its implementing regulation, i.e., GR Number 22 of 2021, change the permitting system under EPML 2009. Such changes can be seen in the following arrangements:

A. KPA is replaced by the feasibility test team (Tim Uji Kelayakan, TUK)

Although environmental impact assessment (Amdal) still plays a role in the permitting system, the approval process for the Amdal is changing. The impact assessment is no longer conducted by KPA, but by a team called Tim Uji Kelayakan (TUK), the feasibility test team. In contrast to KPA, which could be formed by the relevant authority depending on the characteristics of the project, TUK is formed by the central government.[92] In addition, the members of TUK only consist of representatives from local and governments and certified experts,[93] without the representatives from affected communities and environmental groups. TUK will conduct the evaluation of the submitted Amdal documents. If the documents are approved, TUK will give recommendations. The relevant governments will grant the decision of environmental feasibility (SKKLH) of a proposed project on the basis of the recommendation given by TUK.[94] Contrary to the permitting system under EPML 2009, in which SKKLH is a prerequisite for an environmental permit, SKKLH under OLJC is an environmental approval.[95] The environmental approval, i.e., SKKLH, is a prerequisite for the issuance of the business license of the proposed project.[96]

[89] OLJC 2023, art. 10.
[90] The Academic Paper of Draft of OLJC, 11 February 2020, p. 155.
[91] Complaints about complicated *Amdal* procedures can be seen in: *Id.*, pp. 157-158. The Academic Paper also embraces opinions that public participation is a barrier for investment. See: *Id.*, pp. 9-10 and 156.
[92] EPML, art. 24, par. (2).
[93] EPML, art. 24, par. (3).
[94] EPML, art. 24, par. (4).
[95] EPML, art. 1, number 35.
[96] EPML, art. 24, par. (5). The GR Number 22 of 2021 clearly states that the SKLLH has dual functions, namely as an environmental approval and a prerequisite for a business license. GR Number 22 of 2021, art. 49, par. (3).

GR Number 22 of 2021 elaborates the process of evaluation of Amdal documents and the issuance of environmental approval (SKKLH). GR requires that the so-called *persetujuan teknis*, technical approval, be included in Amdal documents.[97] TUK evaluates both the administrative formality and substance of the documents.[98] TUK has 50 days to conclude the substantive evaluation after the submitted documents pass the administrative evaluation.[99] The TUK's findings, i.e., the recommendation of environmental feasibility or unfeasibility, will be used as the basis for central or local government to issue SKKLH, which will be issued within 10 days after the TUK's recommendation is received.[100]

B. The self-declaration is replacing the UKL-UPL recommendation

OLJC dramatically changes the arrangement for obtaining approval regarding activities outside the Amdal-requiring activities. The Law states that activities not having important environmental impacts, i.e., not required to undertake the Amdal procedures, have the obligations to meet the UKL-UPL standards. Such obligations have to be included in the proponents' self-declaration stating their capability to fulfil environmental management, hereinafter referred to as self-declaration, *pernyataan kesanggupan pemenuhan pengelolaan lingkungan*.[101] Such a self-declaration serves as the basis for the central or local government to grant a business license for the proposed project.[102]

In contrast to EPML 2009, which required the UKL-UPL recommendation as the basis for the issuance of environmental permit that in turn also the basis for the issuance of a business license, OLJC only requires a self-declaration of ability to conduct environmental management as the basis for the issuance of business license. GR Number 22 of 2021 further details the process for such a declaration to serve both as an environmental approval and a prerequisite for a business license. According to the GR, the proponents have to fill in the form of UKL-UPL, explaining the description of the proposed project and its relevant technical approvals.[103] UKL-UPL comprises general standards of environmental management and monitoring,[104] as well as specific standards provided by relevant government sectors.[105] Both general and specific standards, along with the proponent's self-declaration,[106] are submitted to MoEF, governor, mayor, or regent depending on the location and characteristics of the proposed project.[107] The documents will then undergo a series of administrative and substantive evaluations.[108] For projects considered to fulfill the requirement for evaluation, MoEF, governor, mayor, and regent grant *Persetujuan Pernyataan Kesanggupan Pengelolaan Lingkungan Hidup* (PPKPLH), the government's approval to the proponent's self-declaration on the

[97] Such a technical approval covers the fulfillment of effluent standards and emission limit value, toxic waste management, and traffic impact assessment. GR Number 22 of 2021, art. 43, paras. (2) and (3).
[98] GR Number 22 of 2021, art. 44.
[99] GR Number 22 of 2021, art. 48.
[100] GR Number 22 of 2021, art. 49, paras. (1) and (2).
[101] EPML, art. 34, paras. (1) and (2).
[102] EPML, art. 34, par. (3).
[103] GR Number 22 of 2021, art. 53, par. (1).
[104] GR Number 22 of 2021, art. 55, par. (1). The general standards of environmental management and monitoring explain the sources, types, and magnitude of potential impacts, the plan and methods to manage and monitor the impacts, as well as the location and period of environmental management and monitoring. See: GR Number 22 of 2021, Appendix III.
[105] GR Number 22 of 2021, art. 55, paras. (2)-(5).
[106] GR Number 22 of 2021, art. 56, par. (3).
[107] GR Number 22 of 2021, art. 57.
[108] GR Number 22 of 2021, arts. 58-62.

ability to conduct environmental management.[109] Similar to SKKLH, PPKPLH also serves both as an environmental approval and a prerequisite of business license.[110]

C. Environmental permit is removed from the permitting system

The striking feature of OLJC is perhaps the removal of environmental permits from the permitting system.[111] OLJC makes the approval of environmental assessment, namely SKKLH and PPKPLH, as the condition for the issuance of business permits.[112] In contrast to EPML 2009 that employed a three-stage permitting system, i.e., the approval of environmental assessment (SKKLH and the UKL-UPL recommendation)—environmental permit—business license, OLJC simplifies the system into two a two-stage one, namely approval of environmental assessment—business license.

At first glance, it seems that OLJC is able to simplify the permitting system through the removal of environmental permits. However, from the practices prior to OLJC, one could see that it is possible for an environmental permit to be issued at the same time as the issuance of SKLLH or the UKL-UPL recommendation.[113] Hence, it could be argued that the removal of environmental permits does not significantly reduce the procedure to obtain a business license.

Another problem, however, arises in relation to disposal permits. As explained earlier, in addition to functioning as the requirement for a business license, the environmental permit also functions to consolidate all environmental management permits, especially those concerning the handling and disposal of wastes and toxic wastes. Such a function as an integrated-permitting system is, perhaps, more important than the function of environmental permit as a prerequisite of business license. With the removal of the environmental permit, one might wonder if waste disposal in Indonesia no longer needs an accompanying permit. In this regard, OLJC states that if a proposed activity needs to manage toxic substances and wastes or to dispose of wastewater to the sea, other sources of water, or soil, or release emissions, the proponent must include such activities in the Amdal or UKL-UPL documents.[114]

In GR Number 22 of 2021, the approval process related to the handling of toxic substances or wastes, emissions, and waste disposals are carried out through the so-called technical approval.[115] In this regard, relevant technical approvals have to be submitted along with the documents of Amdal[116] and UKL-UPL.[117] Together with other documents, the technical approvals will be evaluated by the environmental authorities during the administrative and substantive assessments.[118] The technical

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[109] GR Number 22 of 2021, art. 62, paras. (1) and (4).
[110] GR Number 22 of 2021, art. 64, par. (1).
[111] EPML removes art. 36 and the term "*izin lingkungan*", environmental permit.
[112] EPML, art. 24, paras. (4) and (5), and art. 34, paras. (2) and (3).
[113] GR Number 27 of 2012 concerning Environmental Permit required that the application of environmental permit be submitted along with the submission of *Amdal* documents or the application for the UKL-UPL evaluation. GR Number 27 of 2012, art. 42, par. (2).
In addition, the GR also allows the government to issue environmental permits simultaneously with the issuance of SKKLH or the UKL-UPL recommendation. GR Number 27 of 2012, art. 47, par. (2)(b).
[114] EPML, art. 61A.
[115] It should, however, be noted that the term technical approval does not exist in OLJC. The term is, hence, introduced by the GR Number 22 of 2021. In this case, one might question the legal basis for the GR to introduce such a new type of approval.
[116] GR Number 22 of 2021, art. 43, paras. (2) and (3).
[117] GR Number 22 of 2021, arts. 53, par. (1) and 57, par. (3).
[118] GR Number 22 of 2021, arts. 44-48 for the *Amdal* assessment procedures, and art. 58, par. (2) for the *UKL-UPL* assessment process.

approvals will be included in SKKLH[119] and PKPLH,[120] which means that technical approvals are part of an environmental approval.

Although environmental approval appears to function as an instrument for government control, uncertainty arises as to the legal character for such an approval. The uncertainty has triggered a suggestion that an environmental approval is not justiciable under the administrative court.[121]

No provision in OLJC infers that the government has the authority to control the compliance of the license holders with their environmental approvals. In fact, the government can only control the compliance with business license,[122] but not environmental approval. In addition, no provision the Law provides that the violation of the requirements in environmental approval is subject to sanctions.[123]

The unclear legal character of the environmental approval further leads to the seemingly lack of MoEF's authority in conducting inspection and enforcement. Since control and enforcement only correspond to business licenses, but not to environmental approval, it is unclear how MoEF would conduct inspection and enforcement for business permits granted by other ministers.[124] As such, MoEF has the authority to grant environmental approval, without the authority to control it. As such, MoEF is in fact losing much of its authority.

To avoid such an unclear authority, the GR introduces another arrangement that is absent in OLJC. This arrangement is called "Perizinan Berusaha terkait Persetujuan Lingkungan" (PBPL), literally meaning business license related to environmental approval. By introducing this term, the authority of MoEF to control the compliance with business license, including to give sanction for the non-compliance, is the authority to control environmental approval that is included in the business license.[125]

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[119] GR Number 22 of 2021, art. 49, par. (6)(d).

[120] GR Number 22 of 2021, art. 63 (c).

[121] In *Marlince Sinambela, et al. v. MoEF, et al.* (Administrative Court of Jakarta, 2023), plaintiffs challenged an environmental approval issued by MoEF for a mining company, i.e., PT Dairi Prima Mineral. The plaintiffs argued that the approval was granted without regard to the absence of plaintiffs' participation as the potentially affected parties. The defendants argued that the approval did not fall into an object that can be tried at an administrative court. The Court ruled that the approval was an object and, hence, justiciable at the administrative court. Accordingly, the Court annulled the MoEF environmental approval and ordered MoEF to revoke the approval. The ruling was upheld by the Supreme Court. See: Administrative Court of Jakarta (2023), Decision number 59/G/LH/2023/PTUN.JKT, *Marlince Sinambela*, *et al*. v. *MoEF*, *et al*., pp. 312-314, and pp. 345-346. Also: Supreme Court (2024), Decision number 277 K/TUN/LH/2024, *Marlince Sinambela*, *et al*. v. *MoEF*, *et al*., pp. 6-7, and p. 9.

The Court ruling that considers environmental approval as a decision that can be tried by an administrative court is in line with the Supreme Court Regulation Number 1 of 2023 (SC Regulation 2023). According to the SC Regulation, an environmental approval is justiciable in an administrative court. See: SC Regulation 2023, art. 13, par. (3).

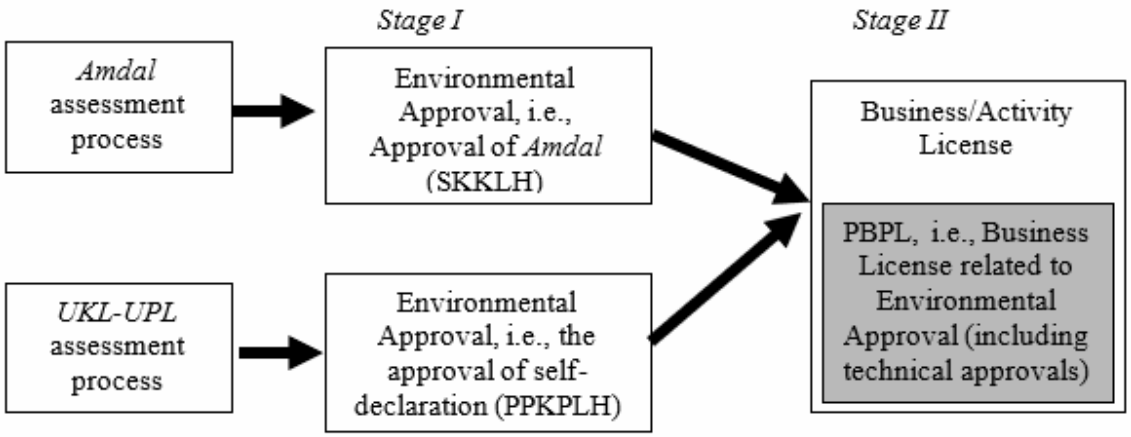
[122] EPML, arts. 72-73.

[123] OLJC only punishes the violation of business license, but not the violation of environmental approval. See: EPML, arts. 76, 82A, and 82B.

[124] It should be noted that the majority of permits will be granted by sectoral ministries, and not MoEF. GR Number 5 of 2021 explains detailed authorities responsible to grant business licenses.

[125] GR Number 22 of 2021, art. 492, *et seq*. (for authority to conduct inspection) and art. 501, par. (1) *et seq*. (for authority to give sanction).

Figure 6
Two-Stage Environmental Permitting System after the OLJC



The introduction of PBPL might solve the problem of lack of clarity in the legal character of environmental approval and the authority of MoEF regarding inspection and law enforcement related to the approval. However, some of the problems about clarity with respect to law enforcement remain. This will further be discussed in the section on law enforcement.

d. Serious regression for public participation in the environmental decision-making process

After the enactment of OLJC, public participation in environmental decision-making suffered serious setbacks. There are several indications to support this conclusion. First, in contrast to EPML 2009, where the public can participate in the formulation of *Amdal* documents, the evaluation of Amdal documents, and during the process of the environmental permit, OLJC allows the public to participate only during the formulation of Amdal documents.[126] Another provision that might be considered as public participation is the obligation for the government to make public announcements about the issuance of environmental approval, i.e., SKKLH.[127] Second, by making the membership of the *Amdal* evaluation team (TUK) exclusive for government representatives and experts,[128] OLJC practically removes the possibility of the public having representatives in the team. Third, OLJC limits the definition of public to "those directly affected by the proposed business or activity."[129] This is a severe limitation compared to the provision in EPML 2009, which allows potentially affected people and environmental organizations to be involved in the decision-making process.[130]

Reduction of public participation in the environmental decision-making process is a serious regression. In this regard, one could refer to Craik who argues that "if the identification of alternatives is the heart of the EIA process, then public participation is its soul."[131]

[126] EPML, art. 26, par. (2).
[127] EPML, art. 39, par. (1).
[128] EPML, art. 24, par. (3).
[129] EPML, art. 26, par. (2).
[130] EPML 2009, art. 30, par. (1).
[131] Neil Craik, *The International Law of Environmental Impact Assessment: Process, Substance and Integration* (Cambridge University Press, 2008), p. 32

GR Number 22 of 2021 seems to strive to reduce the damage created by OLJC on public participation. The GR opens up the possibility of participation not only during the formulation of *Amdal* documents, i.e., through public announcement and consultation,[132] but also during the evaluation process by TUK to which the public is allowed to give suggestions, opinions, and responses.[133] With respect to UKL-UPL, GR Number 22 of 2021 also allows the public to give comments and opinions concerning environmental documents submitted for the evaluation and approval of UKL-UPL documents.[134] In addition, GR Number 22 of 2021 extends the term public to also include environmental observers and other interested parties having submitted relevant suggestions, opinions, and responses during the formulation of the *Amdal* document.[135]

The Ministry of Law and Human Rights (Kemenkumham) also believes that when talking about AMDAL, there is a right to participate and make decisions. Currently, there is more talk about substantive human rights, such as the right to life, the right to property, and the right to health. However, attention to the rights of prosecutors also needs to be considered, namely regarding correct information, correct participation, correct decision-making, and also access to justice. Currently, this is not really accommodated in the Job Creation Law. Therefore, it is important for future due diligence, to include these elements in the due diligence standards in Indonesia.

3.2.1.4. With Respect to Land Law

In order to carry out mineral and coal mining business carried out by mining companies, business actors need to have legal basis regarding land rights from the land to be cultivated. Referring to article 134 of the Indonesian Mining Law, that WIUP offered through an auction mechanism by the state, does not include land rights to the earth's surface, so it implies that the party who wins the IUP auction needs to complete the approval of land rights from the land rights holder above the WIUP.[136] This provision is also further explained in article 135 by stating that the Exploration IUP Holder or Exploration IUPK can only carry out its activities after obtaining the approval of the land rights holder, thus the IUP owner must settle his relationship with the land rights holder first to obtain approval, so that he can carry out mining activities.[137]

This provision is then derived through Government Regulation Number 96 of 2021 concerning the Implementation of Mineral and Coal Mining Business Activities, that IUP holders are obliged to provide compensation to land rights holders in resolving land rights problems, the compensation is calculated based on the area of the land and all objects on it without taking into account the potential value of mineral or coal commodities.[138] It is also emphasized that the settlement is handed over first to the IUP holder by requiring through the consensus deliberation mechanism, if consensus deliberation is not achieved, then the central government has the obligation to resolve the problem with a mediation mechanism coordinated by the minister by involving local governments.[139] This provision is a crucial provision in a series of mining activities.

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[132] GR Number 22 of 2021, art. 33, par. (1).
[133] GR Number 22 of 2021, art. 35, paras. (4)-(6), also art. 45, par. (3).
[134] GR Number 22 of 2021, art. 57, par. (6).
[135] GR Number 22 of 2021, art. 45, par. (3)(e).
[136] Indonesia Mining Law, Article 134
[137] Indonesia Mining Law, Article 135
[138] Government Regulation Number 96 of 2021 concerning the Implementation of Mineral and Coal Mining Business Activities article 175 number 3
[139] Government Regulation Number 96 of 2021 concerning the Implementation of Mineral and Coal Mining Business Activities article 176 number 2

3.2.1.5. With Respect to Forestry

Forestry in Indonesia is being regulated by Law Number 41 of 1999 on Forestry (Forestry Law), especially the licensing. The Forestry Law is also revised by the Job Creation Law so there are some major changes in the licensing mechanism related to forestry. But, before knowing the licensing mechanism about forestry, it is mandatory to know the instrument related to forestry. Forestry management according to Forestry Law consists of some activities including: 1) forestry planning and the preparation of forestry management plans; 2) forestry utilization and forest area use; 3) forest reclamation and rehabilitation; and 4) protection and conservation.

Related to mineral mining, there is a mandatory compliant rule in utilization and forest area use. Forest utilization and area activities are allowed in every forest area except nature reserve forest as well as the core zone and wilderness zone in the national park. For mineral mining, it is using forest area use in Article 38 Forestry Law as a development interest outside forestry activities. Also, there is an exception, for open mining activities are not allowed in protected forest areas. The detailed obligation to mineral mining activities in the forest area are regulated in Government Regulation Number 23 of 2021 on Forestry Management (GR 23/2021).

Forest area use is related to development interests outside forestry activities, which included mineral mining. There are some obligations related to doing these activities in the forestry area. Article 92 GR 23/2021 states that mineral mining can be conducted in production forest area and protected forest area. Conducting mineral mining activities in production forest areas by open or underground method are allowed but open mining methods are prohibited to do in protected forest areas. But there are some other prohibitions to the protected forest area, which are prohibited to: 1) create land subsidence; 2) create permanent change in the primary function of the forest area; 3) create groundwater aquifer damage. Although, this provision or prohibition has some flexibility, if in the environmental impact assessment or AMDAL have stated it will have some impact to three points of prohibition then is allowed for the mining activities conducted at protected forest area.

Also, in Article 103 paragraph 1b GR 23/2021, it is prohibited to use mercury for mining activities in used forest areas. The next question is how does the government enforce this law? In forest area use, business mineral mining activities needed to have forest area use approval. This approval is requested by the Ministry of Forestry and granted by the ministry to or by the governor. Approval instruments can be used to have supervision for mineral mining activities in forest areas. If the business is conducting wrong doing based on the provisions before, the government can take administrative sanction to the business mineral mining activities. There are other consequences for the forest area use approval, which have an obligation to do forest protection.The activities are included: 1) securing its working area concerning forests, forest areas, and forest products, including flora and fauna; 2) preventing forest damage caused by human activities and livestock, forest fires, pests, diseases, and natural forces; 3) taking the necessary initial actions against forest security disturbances in its working area; 4) reporting any occurrence of legal violations in its working area to the nearest forestry authority; and 5) providing facilities and infrastructure, as well as forest security personnel according to needs. If the business does not do the following activities, the government can take an administrative sanction to them.

3.3. ESG as a Voluntary Instrument in Indonesia: At A Glance

Environmental, Social, and Governance (ESG) refers to the three central factors that are used to measure the sustainability and societal impact of an investment in a company or business. ESG criteria serve as a framework for investors to evaluate potential investments based on corporate

policies and practices that align with ethical and sustainable standards.[140] The primary goals of ESG are to promote sustainable practices, enhance social responsibility, and strengthen governance within organizations.In Indonesia, the adoption of ESG principles is increasingly recognized as essential for sustainable development. While there are regulatory frameworks in place, many companies engage in voluntary ESG practices to enhance their reputation and attract investment. This includes sustainability reporting, where numerous Indonesian companies voluntarily disclose their ESG performance and commitments. Additionally, financial institutions are offering green financing options, such as green bonds and loans, to support projects that meet ESG criteria. Among them is the Financial Services Authority Regulation (POJK) Number 51/POJK.03/2017 which regulates the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies. OJK supports the transition to clean energy which includes standards for issuing financial institutions and public companies to prepare sustainable reports. OJK has regulated technical guidelines on how sustainability reports should be prepared and what information should be included in sustainable reports intended for companies, including banking, multifinance, capital markets, and so on. In addition, OJK also includes requirements regarding sustainability action plans, sustainable finance principles, and other relevant matters. OJK is also currently collaborating with the Indonesian Accounting Association (IAI) to develop sustainable reporting standards, although it is currently under construction. OJK will refine the sustainability reporting obligations for financial institutions, public companies, and issuers with existing trends, as well as ESG regulations that apply in the world that will be adopted in the Indonesian context.Various sectors, including mining and agriculture, are also developing voluntary ESG guidelines to promote responsible practices and improve stakeholder engagement.[141] Overall, the integration of ESG principles in Indonesia aims to align economic growth with environmental sustainability and social equity, contributing to the country's long-term development goals.

The existence of holding companies for SOEs engaged in the mining sector in Indonesia makes Indonesia's ESG references fragmented towards holding companies with the official name of Mining Industry Indonesia (MIND ID) consisting of PT ANTAM Tbk, PT Bukit Asam Tbk, PT Freeport Indonesia, PT INALUM, and PT Timah Tbk. In the realization of ESG, the indicators are referred to as sustainability pathways, which consist of six pillars,[142] with environmental, social, and governance aspects including:

A. Environmental Pillar

a. Biodiversity & Conservation

I. Law Number 5 of 1990 concerning the Conservation of Biological Natural Resources and Their Ecosystems;
II. Law Number 6 of 2023 concerning the Stipulation of Government Regulations in Lieu of Law Number 2 of 2022 concerning Job Creation into a Law amending Law Number 26 of 2007 concerning Spatial Planning;
III. Law 32 of 2009 concerning Environmental Protection and Management;
IV. Law Number 6 of 2023 concerning the Stipulation of Government Regulations in Lieu of Law Number 2 of 2022 concerning Job Creation into a Law amending Law 32 of 2009 concerning Environmental Protection and Management;
V. Law Number 41 of 1999 concerning Forestry;

[140] Ting-Ting Li, Kai Wang, Toshiyuki Sueyoshi, Derek D. Wang. "ESG: Research Progress and Future Prospects. *Sustainability Vol. 13.* Page 1-28
[141] Isrianit Anis & Vera Avrilia. Analyzing Impact of ESG Principles on Performance : A Perspective From Sustainability Balanced Scorecard. "*Jurnal Akuntasi dan Keuangan Indonesia Vol.21.* Page 85-106
[142] MIND ID "*Sustainability Report 2023: Continuing to Explore, Contributing More*" MIND ID Report, Page. 10

VI. Presidential Regulation Number 111/2022 on the Implementation of the Achievement of Sustainable Development Goals;
VII. Government Regulation Number 79 of 2014 concerning National Energy Policy;
VIII. Government Regulation Number 26 of 2020 concerning Forest Rehabilitation and Reclamation;
IX. Government Regulation Number 5 of 2021 concerning the Implementation of Risk-Based Business Licensing;
X. Government Regulation Number 21 of 2021 concerning the Implementation of Spatial Planning;
XI. Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management;
XII. Government Regulation Number 23 of 2021 concerning Forestry Implementation;
XIII. Regulation of the Minister of Energy and Mineral Resources Number 11 of 2021 concerning the Implementation of Electricity Businesses;
XIV. Regulation of the Minister of Environment and Forestry Number 7 of 2021 concerning Forestry Planning, Changes in the Designation of Forest Areas and Changes in the Function of Forest Areas, and the Use of Forest Areas;
XV. Regulation of the Minister of Agrarian and Spatial Planning/Head of the National Land Agency Number13 of 2021 concerning the Implementation of the Suitability of Space Utilization Activities and the Synchronization of Space Utilization Programs

b. Water and Air

I. Law Number 6 of 2023 concerning the Stipulation of Government Regulations in Lieu of Law Number 2 of 2022 concerning Job Creation into a Law amending Law Number 17 of 2019 concerning Water Resources;
II. Government Regulation Number 42 of 2008 concerning Water Resources Management;
III. Regulation of the Minister of Public Works and Public Housing Number 1 of 2016 concerning Procedures for Licensing of Water Resources and Water Resources Use.Regulation of the Minister of Environment and Forestry Number 4 of 2014 concerning Muti Emission Standards for Immovable Sources.

c. Decarbonization

I. Law Number 32 of 2009 concerning Environmental Protection and Management;
II. Presidential Regulation Number98 of 2021 concerning the Implementation of Carbon Economic Value for the Achievement of Nationally Determined Contribution Targets and Control of Greenhouse Gas Emissions in National Development;
III. Regulation of the Minister of Environment and Forestry Number 4 of 2014 concerning Quality Standards for Non-Moving Emissions;
IV. Regulation of the Minister of Environment and Forestry Number 71/2017 on the Implementation of the National Registry System for Climate Change Control;
V. Regulation of the Minister of Environment and Forestry Number 72/2017 Guidelines for the Implementation of Measurement, Reporting and Verification of Climate Change Control Actions and Resources;

VI. Regulation of the Minister of Environment and Forestry Number 73/2017 Guidelines for Implementation and Reporting

d. National Greenhouse Gas Inventory;

I. Regulation of the Minister of Environment and Forestry Number 13 of 2021 concerning Continuous Industrial Emission Monitoring Information System;
II. Regulation of the Minister of Energy and Mineral Resources Number 16/2022 concerning Procedures for the Implementation of Carbon Economic Value of the Power Plant Subsector.
III. Intergovernmental Panel on Climate Change (IPCC) guidelines for national greenhouse gas inventories
IV. GHG Protocol for Corporate Accounting (WBCSD/WRI), Ministry of Energy and Mineral Resources
V. ISO 14064

e. Responsible Production

I. Law 32 of 2009 concerning Environmental Protection and Management;
II. Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management;
III. Regulation of the Minister of Environment and Forestry Number 74 of 2019 concerning the Emergency Program for the Management of Hazardous and Toxic Materials and/or Hazardous and Toxic Waste;
IV. Regulation of the Minister of Environment and Forestry Number5 of 2021 concerning Procedures for the Issuance of Technical Approvals and Operational Feasibility Letters in the Field of Environmental Pollution Control;
V. Regulation of the Minister of Environment and Forestry Number 6 of 2021 concerning Procedures and Requirements for B3 Waste Management;
VI. Regulation of the Minister of Environment and Forestry Number 19 of 2021 concerning Procedures for the Management of Non-Hazardous and Toxic Waste.
VII. Presidential Regulation Number 129/2022 Ratification of the Amendment to The Montreal Protocol on Substances That Deplete the Ozone Layer, Kigali, 2016;
VIII. Regulation of the Minister of Environment and Forestry Number 70/2017 Procedures for Reducing Emissions from Deforestation and Forest Degradation, Role of Conservation, Sustainable Management of Forest and Enhancement of Forest Carbon Stocks;
IX. Regulation of the Minister of Environment and Forestry Number 168/2022 Indonesia's Forestry and Other Land Use (FOLU) Net Sink 2030 for Climate Change Control;
X. Regulation of the Minister of SOEs Number: Per-01/MBU/03/2023 concerning Special Assignments and Social and Environmental Responsibility Programs for State-Owned Enterprises.

2. Social Pillar

a. Community Investment Programs

I. Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Companies, 2011;
II. Organization for Economic Co-operation and Development (OECD) Guidelines, Risk Awareness Tools for Multinational Companies in Zones with Weak Governance, 2006;
III. Law Number 32 of 2009 concerning Environmental Protection and Management;
IV. Law Number 6 of 2023 concerning the Stipulation of Government Regulations in Lieu of Law Number 2 of 2022 concerning Job Creation into a Law amending Law Number 32 of 2009 concerning Environmental Protection and Management;
V. Regulation of the Minister of Energy and Mineral Resources Number 11 of 2021;
VI. Regulation of the Minister of Agrarian and Spatial Planning/Head of the National Land Agency Number 13 of 2021 concerning the Implementation of Suitability of Space Utilization Activities and Synchronization of Space Utilization Programs;
VII. Regulation of the Minister of Energy and Mineral Resources Number 26/2018 concerning the Implementation of Good Mining Rules and Supervision of Mineral and Coal Mining
VIII. Regulation of the Minister of SOEs Number: Per-01/MBU/03/2023 concerning Special Assignments and Social and Environmental Responsibility Programs for State-Owned Enterprises Decree of the Minister of Energy and Mineral Resources Number 1827 K/30/MEM/2018 concerning Guidelines for the Implementation of Good Mining Engineering Principles.

b. Human Rights

I. United Nations (UN) Convention, 'International Covenant on Civil and Political Rights', 1966;
II. United Nations (UN) Convention, 'International Covenant on Economic, Social and Cultural Rights', 1966;
III. United Nations (UN) Declaration, 'Declaration on the Rights to Development', 1986;
IV. United Nations (UN) Declaration, 'Universal Declaration of Human Rights', 1948.
V. ILO Convention Number 105 concerning the Elimination of Forced Labor Systems;
VI. ILO Convention Number 182 on the Prohibition and Immediate Action for the Elimination of All Forms of Worst Work for Children"
VII. Law Number 13 of 2003 concerning Manpower
VIII. Law Number 8/2016 on Persons with Disabilities
IX. Government Regulation Number 35 of 2021 concerning Work Certain Hours, Outsourcing, Working Time and Rest Time and Termination of Employment;Government Regulation Number 19 of 1973 concerning Safety Regulation and Supervision in the Mining Sector.
X. Government Regulation Number 55/2010 concerning the Development and Supervision of the Implementation of the Management and Implementation of Mineral and Coal Mining Business;

XI. Government Regulation Number 36 of 2021 concerning Wages
XII. Government Regulation Number 37/2021 on the Implementation of the Job Loss Insurance Program;
XIII. Regulation of the Minister of Energy and Mineral Resources Number 26/2018 concerning the Implementation of Good Mining Rules and Supervision of Mineral and Coal Mining.
XIV. Decree of the Minister of Energy and Mineral Resources Number 1827 K/30/MEM/2018 concerning Guidelines for the Implementation of Good Mining Engineering Principles.
XV. Decree of the Minister of Energy and Mineral Resources Number 1824 K/30/MEM/2018 concerning Guidelines for the Implementation of Community Development and Empowerment.

c. Stakeholder Engagements

I. Law Number 6/2023 Implementation of Perpu 2/2022 Job Creation
II. Presidential Regulation Number 111/2022 Implementation of the Achievement of Sustainable Development Goals
III. Decree of the Minister of Manpower Number KEP.15A/MEN/1994 concerning Guidelines for the Settlement of Industrial Relations Disputes and Termination of Employment at the Company and Intermediary Level.
IV. AA1000 Stakeholder Engagement Standard 2015

3. Governance Pillar

a. **Leadership & Decision Making**

I. Law Number 19 of 2003 concerning State-Owned Enterprises as amended by Law Number 6 of 2023 concerning the Stipulation of Government Regulations in Lieu of Law Number 2 of 2022 concerning Job Creation into Law
II. Regulation of the Minister of State for State-Owned Enterprises Number PER-2/MBU/03/2023 concerning Guidelines for the Governance and Activities of Significant Corporations of State-Owned Enterprises, as well as the Regulation of the Minister of State for State-Owned Enterprises Number PER-3/MBU/03/2023 concerning Organs and Human Resources of State-Owned Enterprises.
III. Regulation of the Minister of State-Owned Enterprises Number PER-2/MBU/03/2023 concerning Guidelines for Governance and Significant Corporate Activities of State-Owned Enterprises
IV. Law Number 19 of 2003 concerning State-Owned Enterprises as amended by Law Number 6 of 2023 concerning the Stipulation of Government Regulations in Lieu of Law Number 2 of 2022 concerning Job Creation into Law
V. Regulation of the Minister of State for State-Owned Enterprises Number PER-2/MBU/03/2023 concerning Guidelines for the Governance and Activities of Significant Corporations of State-Owned Enterprises, as well as the Regulation of the Minister of State for State-Owned Enterprises Number PER-3/MBU/03/2023 concerning Organs and Human Resources of State-Owned Enterprises.

b. **Transparency & Accountability**

I. Law Number 40 of 2007 concerning Limited Liability Companies as amended by Law Number 6 of 2023 concerning the Stipulation of Government Regulations in Lieu of Law Number 2 of 2022 concerning Job Creation into Law
II. Regulation of the Minister of State for State-Owned Enterprises Number PER-09/MBU/2012 concerning amendments to the Regulation of the Minister of State for State-Owned Enterprises Number PER-02/MBU/2011 concerning the Implementation of Good Corporate Governance in State-Owned Enterprises
III. Regulation of the Minister of State-Owned Enterprises Number PER-1/MBU/03/2023 concerning Special Assignments and Social and Environmental Responsibility Programs for State-Owned Enterprises
IV. Regulation of the Minister of State-Owned Enterprises Number PER-2/MBU/03/2023 concerning Guidelines for Governance and Significant Corporate Activities of State-Owned Enterprises
V. Regulation of the Minister of State-Owned Enterprises of the Republic of Indonesia Number PER-3/MBU/03/2023 concerning Organs and Human Resources of State-Owned Enterprises

c. Business Ethics & Compliance

I. Law Number 31 of 1999 concerning the Eradication of Corruption;
II. Law Number 20 of 2001 concerning Amendments to Law Number 31 of 1999 concerning the Eradication of Corruption;
III. Law Number 19 of 2019 concerning the Second Amendment to Law Number 30 of 2002 concerning the Corruption Eradication Commission; Law Number 8 of 2010 concerning the Prevention and Eradication of Money Laundering;
IV. Law Number 7 of 2017 concerning General Elections
V. Organization for Economic Co-operation and Development (OECD), Good Practice Guide on Internal Controls, Ethics, and Compliance, 2010.;
VI. Organization for Economic Co-operation and Development (OECD), OECD Guidelines for Multinational Enterprises, 2011;
VII. KPU Regulation 5/2017 Campaign Funds for Participants in the General Election of Governor and Deputy Governor, Regent and Deputy Regent, or Mayor and Deputy Mayor
VIII. ISO 37001:2016 Anti-Bribery Management System.

d. Risk Management

I. Law Number 6/2023 on Job Creation
II. Principles of Enterprise Risk Management and ISO 31000:2018

3.3.1. Sustainable Development Goals (SDGs)

Indonesia had a commitment to achieving its Sustainable Development Goals (SDGs) and the targets set under the Paris Agreement. The country's efforts toward meeting the SDGs are detailed in Voluntary National Reviews (VNR), which was submitted to the United Nations in 2019. For climate

goals, Indonesia submitted its first Nationally Determined Contribution (NDC) to the UN in November 2016, outlining its plans for climate change adaptation and mitigation. These efforts are considered essential strategies for building climate resilience in key sectors such as food, water, and energy. But, later Indonesia updated its NDC to Enhanced NDC (ENDC) in September 2022, upgrading some climate strategies and the target itself. Consequently, the Indonesian government must embed the SDGs into its own planning and policies at every level, from the highest national level to subnational entities. Also, Indonesia's 2015 NDC (updated by ENDC) sets emissions reduction targets of 29% by 2030 (or up to 41% with international support) over business-as-usual scenarios. Here are the commitment according to VNR and Paris Agreement:

SDG 13 and Paris Climate Agreement

SDG 13: Take urgent action to combat climate change and its impacts	Strengthen **resilience and adaptive capacity** to climate-related hazards and natural disasters in all countries.
	Integrate climate change measures into national policies, strategies and planning.
	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.
Paris Agreement	To strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

Other related SDGs for energy transition mineral mining are SDG 7 for acces, affordable, reliable, sustainable, and modern energy. In its efforts to achieve SDG 7 (see Table 6), the Indonesian government prioritizes two key challenges. First, the limited and uneven distribution of energy services, such as natural gas and electricity, particularly affecting households in central and eastern regions. Second, the urgent demand for new and renewable energy sources due to the country's heavy dependence on fossil fuels and declining reserves. As a result, expanding access to energy services and promoting renewable energy use are among the government's nine priority areas for future initiatives.

Indonesia has made notable progress in tackling both poverty reduction and achieving universal electricity access under SDG 7. Since 1999, the country has successfully halved its poverty rate and expanded energy access to over 98% of the population. However, significant challenges persist, as 25.1 million Indonesians—out of a total population of 267.3 million—still live below the poverty line. With electricity demand projected to grow by 6.8% annually in the coming years and around 30

million people still lacking reliable access to electricity, Indonesia faces major hurdles in expanding its electrification efforts.

Although 21 provinces report nearly universal electricity access (over 90%), several provinces still struggle with significantly lower electrification rates. This disparity hampers their economic growth potential, particularly in relation to poverty alleviation.

SDG 7: Ensure Access to Affordable, Reliable, Sustainable & Modern Energy for All

By 2030, ensure universal access to affordable, reliable and modern energy services
By 2030, increase substantially the share of renewable energy in the global energy mix
By 2030, double the global rate of improvement in energy efficiency
By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries…

The empowerment of women and girls under SDG 5 is closely linked to SDG 7, which focuses on ensuring access to affordable energy services (see Table 2). Limited access to energy, particularly electricity, makes it difficult for marginalized groups, such as underprivileged women, to break free from poverty and build more resilient livelihoods. Research on the gender impacts of electricity access has highlighted several key benefits for women and girls.

One major advantage is the ability to generate more income, as women—especially in the Global South—often face significant time constraints. With electric lighting, their productive hours can be extended, enabling them to earn more from home-based activities while also managing traditional responsibilities like housework and childcare. Additionally, improved street lighting enhances perceptions of safety, encouraging greater school enrollment among girls by making travel to and from school feel more secure.

Furthermore, expanding access to education and information through schooling and media plays a crucial role in empowering women and girls. This increased access to knowledge is arguably one of the most significant benefits of electrification, fostering greater independence and opportunities for women.

SDG 5: Achieve Gender Equality & Empower All Women and Girls

Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate

Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws
Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women

3.3.2. Chinea Environmental and Social Safeguards

3.3.2.1. Environmental Social and Governance

In China, the regulation of environmental safeguards for mining enterprises through Environmental, Social, and Governance (ESG) frameworks is an evolving area, influenced by both domestic regulations and international standards. Here's an overview of how ESG principles apply to mining enterprises in China, particularly with respect to environmental safeguards:

3.3.2.2. Environmental Regulations and Standards

China has implemented several key regulations and standards that directly impact mining operations in terms of environmental protection. The first regulation is the Environmental Protection Law. This is the cornerstone of China's environmental governance. It requires enterprises, including mining companies, to reduce environmental impacts, mitigate pollution, and promote sustainable practices.[143] The second regulation is the Mineral Resource Law. This law governs the exploration, extraction, and management of mineral resources in China. It includes provisions that encourage mining enterprises to conduct their activities in an environmentally responsible manner.[144]

Third regulation is the several pollution control laws in China. Mining activities can produce significant pollution, including water and air contamination, as well as solid waste. China has laws in place (e.g., Air Pollution Control Law, Water Pollution Control Law) that require mining companies to monitor and limit emissions.[145] Enterprises are mandated to adopt cleaner production techniques and technologies, as well as install pollution control devices.[146] Fourth regulation is the Environmental Impact Assessment (EIA). Mining projects must undergo an EIA to assess potential environmental impacts before they are approved.[147] The EIA process is designed to prevent or mitigate harm to the environment from mining operations. It includes evaluation of soil, water, and biodiversity impacts.[148]

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[143] *Environmental Protection Law of the People's Republic of China*, Article 6 paragraph 2, 40 paragraph 2, 42 paragraph 1, and 43 paragraph 1.
[144] *Mineral Resource Law of the People's Republic of China*, Article 15, 21, and 32.
[145] *Prevention and Control of Atmospheric Pollution Law of the People's Republic of China*, Article 7, 18, 20, and 24; *Prevention and Control of Water Pollution Law of the People's Republic of China,* Article 20 paragraph 2, 22 paragraph 1, and 24 paragraph 1.
[146] *Prevention and Control of Atmospheric Pollution Law of the People's Republic of China*, Article 34 paragraph 2 and 43; *Prevention and Control of Water Pollution Law of the People's Republic of China,* Article 43.
[147] *Environmental Impact Assessment Law of the People's Republic of China,* Article 3.
[148] *Environmental Impact Assessment Law of the People's Republic of China,* Article 8 and 17.

3.3.2.3. ESG Reporting and Corporate Governance

While ESG reporting in China is in the process of transformation, there has been significant progress in integrating environmental concerns into corporate governance frameworks. Key developments include Guidelines for ESG Reporting and Green Finance Policies. China's Securities Regulatory Commission (CSRC) and Shanghai Stock Exchange (SSE) have issued guidelines requiring listed companies, including mining enterprises, to disclose ESG information.[149] This encourages mining companies to provide transparency on their environmental practices, emissions data, waste management, and other environmental metrics. At the same time, The Chinese government has promoted green finance initiatives to encourage investment in environmentally friendly projects, including mining. The Green Bond Guidelines and Green Credit Policies incentivize businesses, including miners, to adopt sustainable practices by providing favorable financial support for projects that meet environmental criteria.[150]

3.3.2.4. Social and Governance Considerations

In addition to the environmental aspect of ESG, mining companies in China are increasingly being held accountable for their social and governance practices, such as social license to operate, labor rights and safety, and corporate governance. Mining enterprises are expected to engage with local communities and ensure that their operations do not disrupt local livelihoods, and that the local population benefits from the economic activity (e.g., through job creation, infrastructure development, and corporate social responsibility programs).[151]

Mining companies also must ensure that workers are treated fairly, their health and safety are protected, and labor conditions comply with national labor laws.[152] This is part of the "Social" component of ESG. In addition, transparent governance, anti-corruption measures, and the implementation of best practices in decision-making and compliance are essential to meet ESG expectations.[153] As China seeks to align with international standards, there is a growing emphasis on improving governance structures within the mining sector.[154]

3.3.2.5. China's Evolving Approach to Global Sustainability: SDGs, GDI, and the Paris Agreement

China has increasingly positioned itself as a key actor in global sustainable development, aligning its domestic policy frameworks with international norms such as the United Nations Sustainable

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[149] Shanghai Stock Exchange, *Guide No.4 for Self-Regulatory Supervision on Listed Companies of the SSE — Compilation of Sustainable Development Reports* (Shanghai: Shanghai Stock Exchange, 2025); Shanghai Stock Exchange, *Guide No.13 for Self-Regulatory Supervision on Listed Companies of the SSE STAR Market—Compilation of Sustainable Development Reports* (Shanghai: Shanghai Stock Exchange, 2025); Shanghai Stock Exchange, *Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report* (Shanghai: Shanghai Stock Exchange, 2025).

[150] China Banking and Insurance Regulatory Commission, *Guidelines for Green Finance in the Banking and Insurance Industries* (Beijing: China Banking and Insurance Regulatory Commission, 2022); China Green Bond Standards Committee, *China Green Bond Principles* (Beijing: China Green Bond Standards Committee, 2022).

[151] Sapna A. Narula, Muneer A. Magray, and Anupriya Desore, "A sustainable livelihood framework to implement CSR project in coal mining sector," *Journal of Sustainable Mining,* Vol. 16 (2017), page. 83-93.

[152] *Labour Law of the People's Republic of China,* Article 41, 54, and 78.

[153] United Nations, *China's Successful Practices on its Public and Transparent Anti-Corruption Campaign* (New York: United Nations Headquarters, 2016), page 1-7.

[154] Raphael Deberdt, Jessica DiCarlo, and Hyeyoon Park, "Standardizing "green" extractivism: Chinese & Western environmental, social, and governance instruments in the critical mineral sector", *The Extractive Industries and Society*, Vol. 19 (2024).

Development Goals (SDGs) and the Paris Climate Agreement. Since 2016, China has systematically integrated the SDGs into its Five-Year Plans, emphasizing inclusive development, green growth, and innovation. Central to this vision is the philosophy of *Ecological Civilization*, which was enshrined in the Constitution in 2018 and underpins a suite of environmental governance reforms.

At home, China's regulatory toolkit has expanded to support SDG implementation and climate goals. The Environmental Protection Law (2015 revision) mandates all levels of government to prioritize environmental integration in policymaking, while specific laws on air,[155] water,[156] and soil pollution[157] tighten standards in line with SDGs 6 (Clean Water) and 13 (Climate Action). The country's national emissions trading scheme, grounded in the 2023 Interim Regulations on Carbon Emissions Trading, furthers transparency and accountability under its "Dual Carbon" goals: peaking emissions by 2030 and reaching carbon neutrality by 2060 — key commitments under the Paris Agreement.

China's efforts have yielded tangible outcomes. The elimination of extreme rural poverty, officially declared in 2020, marked a major milestone under SDG 1. Meanwhile, China has emerged as a global leader in renewable energy investment, advancing its goals under SDG 7 and reinforcing its role in global climate governance.

This domestic agenda is increasingly reflected in China's foreign engagements. Through South-South cooperation, it has pledged over US$3 billion to development projects abroad. While the BRI initially faced criticism over environmental and social impacts, recent efforts to "green" the BRI — including through the Green Investment Principles (GIP) — signal a shift in approach.

Most notably, China launched the Global Development Initiative (GDI) in 2021 to reinvigorate SDG progress globally. Backed by the China International Development Cooperation Agency (CIDCA) and a GDI Projects Pool, this initiative emphasizes poverty reduction, digital inclusion, green transition, and capacity building — all framed as a response to the uneven recovery from COVID-19 and setbacks to the 2030 Agenda.

For countries like Indonesia, the GDI could be transformative. Indonesia is both a strategic development partner and a frontline actor in the global energy transition. Chinese-backed nickel processing hubs in Morowali and Weda Bay are central to Indonesia's EV battery ambitions — but they've also triggered concerns over labor rights, community impacts, and environmental degradation.

The GDI provides a framework for addressing these concerns more systematically. It encourages alignment with Indonesia's own policy frameworks, including the National Action Plan on Human Rights (RAN-HAM), environmental permitting laws, and its electric vehicle strategy. Through the GDI, China could help pilot more just, inclusive, and climate-aligned models of cooperation — moving beyond transactional investment to partnerships built on shared sustainability goals.

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[155] Atmospheric Pollution Prevention and Control Law of the People's Republic of China, FAOLEX Database:https://www.fao.org/faolex/results/details/en/c/LEX-FAOC144719/

[156] Water Pollution Prevention and Control Law of the People's Republic of China, Ministry of Ecology and Environment: https://english.mee.gov.cn/Resources/laws/environmental_laws/202012/t20201211_812662.shtml

[157] Law of the People's Republic of China on Prevention and Control of Soil Contamination, Ministry of Ecology and Environment: https://english.mee.gov.cn/Resources/laws/environmental_laws/202011/t20201113_807786.shtml

As China's development financing and overseas operations continue to grow, initiatives like the GDI — grounded in the SDGs and Paris Agreement — offer a path toward strengthening environmental and social safeguards while deepening mutually beneficial cooperation with countries like Indonesia.

It is important to note that things started to change a lot after 2021. In July 2021, China's Ministry of Ecology and Environment (MEE), and Ministry of Commerce (MOFCOM) released the Guidelines for the Green Development of Foreign Investment & Cooperation.

Regarding environmental and social standards, if such laws and regulations are not available in the host country, or the standards for environmental protection standards are insufficient, Chinese companies are encouraged to adopt international of Chinese standards, whichever are highest for investment and cooperation activities.

In January 2022, the MEE and the MOFCOM jointly released another set of updated guidelines, urging Chinese companies to be vigilant with environmental protection throughout the life cycle of their overseas operations.

The table below highlights China's existing outbound investment regulations, which are largely voluntary and incorporate principles or specific provisions related to social responsibility, environmental protection, climate change, and sustainability.

Table 5
China's existing outbound investment regulations

No./Year	Title	Relevant items	Issuing Authority	Level
1. 2008	Further Regulating the Foreign Investment Cooperation on Chinese Enterprises[1]	"*Must earnestly fulfil the necessary social responsibilities*"; "*For enterprises that violate laws and regulations and cause serious consequences, the Ministry of Commerce, the Ministry of Foreign Affairs, and the State-owned Assets Supervision and Administration Commission will deal with them or punish them in accordance with relevant regulations*"	MOFCOM, MFA, State-owned Assets Supervision and Administration Commission of the State Council (SASAC)	Ministerial/ departmental rules
2. 2009	The Joint Annual Inspection of Overseas Investment[2]	"*whether there have been any problems or disputes in quality, safety, environmental protection, labor relations, etc. in the*	MOF, SAFE	Ministerial/ departmental rules

No./Year	Title	Relevant items	Issuing Authority	Level
		operation of overseas enterprises."		
3. 2013	Measures for Bad Credit Records in the Fields of Foreign Investment Cooperation and Foreign Trade[3]	"*Destroy the local ecological environment and threaten local public safety* "; "*Major losses in the project caused by enterprise decision-making mistakes or poor management, etc., causing adverse effects*"[4]	MOFCOM, MFA,MPS, MHURD, GAC, SAT, GAQSIQ, SAFE	Ministerial/ departmental rules
4. 2013	The Provisions on Regulating Competitive Behaviours in the Fields of Foreign Investment Cooperation[5]	"*shall abide by the laws and regulations of the country (region) where the project is located, respect local customs and habits, attach importance to environmental protection, safeguard local labor rights, actively participate in local public welfare undertakings, and perform necessary social responsibilities.*"	MOFCOM	Ministerial/ departmental rules
5. 2017	Measures for the Administration of Overseas Investment of Enterprises[6]	Article 41:"… *perform necessary social responsibilities, pay attention to ecological protection, and establish a good image of Chinese investors.*"	NDRC	Ministerial/depar tmental rules
6. 2017	Measures for the Supervision and Administration of Overseas Investments by Central Enterprises[7]	Article 29: "…*If a central enterprise violates the provisions of these Measures, fails to perform or fails to perform its investment management responsibilities and*	SASAC	Ministerial/depar tmental rules

No./Year	Title	Relevant items	Issuing Authority	Level
		causes loss of state-owned assets and other serious adverse consequences, it shall comply with the State-owned Assets Law of the People's Republic of China and General Office of the State Council on the establishment of state-owned enterprises Opinions on the Accountability System for Violation of Operation and Investment"		
7. 2017	Guidance on Promoting Green Belt and Road[8] The Belt and Road Initiative Eco-Environmental Cooperation Plan was also released together with the guidance.	"…*Promote companies to comply with international economic and trade rules and the laws, regulations, policies and standards of the host country's ecological and environmental protection*, ..."	MEE, MFA, NDRC, MOFCOM	Ministerial/departmental rules

3.3.2.6. Environmental Corporate Due Diligence

China has implemented several measures to regulate sustainability safeguards for mining enterprises through corporate sustainability due diligence. A key initiative is the Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains (hereafter, the due diligence), introduced in December 2015 by the China Chamber of Commerce of Metals, Minerals, and Chemicals Importers and Exporters (CCCMC).[158] The due diligence applies to "[a]ll Chinese companies which are extracting, trading, processing, transporting, and/or otherwise using mineral resources and their related products and are engaged at any point in the supply chain of mineral resources and their related products."[159]

These guidelines aim to align Chinese companies' practices with international standards, such as those established by the OECD, promoting responsible sourcing and mitigating risks associated with

[158] China Chamber of Commerce of Metals, Minerals, and Chemicals Importers and Exporters, *Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains* (Beijing: China Chamber of Commerce of Metals, Minerals, and Chemicals Importers and Exporters, 2015), pp. 15-18.
[159] *Ibid*., p. 10.

conflict minerals and human rights abuses.[160] The CCCMC guidelines apply to all Chinese companies involved in extracting or using mineral resources, emphasizing risk-based supply chain due diligence to prevent engagement with materials that may have funded or fueled conflict.[161] They also encourage companies to observe the UN Guiding Principles on Business and Human Rights throughout the mining project's life cycle.[162]

The due diligence mandates at least 5 (five) steps to comprehensively identify risk in supply chain, among them are: 1) establish strong company risk management systems; 2) identify and assess risk in the supply chain; 3) design and implement a strategy to respond identified risks; 4) carry out independent third-party audit at identified choke points in the supply chain (as indicated in the Audit Protocols); 5) report on the process and results of supply chain risk management.[163]

In addition to these guidelines, China is developing unified corporate sustainability disclosure standards, with basic standards and climate-related disclosure standards expected by 2027 and full implementation aimed for by 2030.[164] This phased approach allows for gradual adoption, extending from listed to non-listed companies and from voluntary to mandatory disclosures.[165] Furthermore, the Shenzhen Stock Exchange (SZSE) and Shanghai Stock Exchange (SSE) have issued Corporate Sustainability Reporting Guidelines. These require designated listed companies to prepare and publicly disclose sustainability reports covering the calendar year 2025 by 30 April 2026. The guidelines outline 21 topics to be addressed, providing a comprehensive roadmap for corporate sustainability reporting.[166]

While these initiatives represent significant progress, challenges remain. As of now, China lacks national regulations governing supply chains, and supply chain controls are still under discussion without concrete legislation. This has led to difficulties for Chinese suppliers in meeting international due diligence requirements, particularly in the mining industry.[167] Overall, China's efforts to regulate sustainability safeguards for mining enterprises through corporate sustainability due diligence are evolving, with ongoing developments aimed at enhancing transparency, accountability, and alignment with global standards.

To summarize the discussion on SDGs, the due diligence and ESG, below is the table showcasing elements that set these instruments apart.

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[160] *Ibid*., pp. 15-18.
[161] *Ibid*., pp. 12-21.
[162] *Ibid*., p. 3.
[163] *Ibid*., p. 13.
[164] The State Council of the People's Republic of China, "China charts path to unified sustainability disclosure by 2030", https://english.www.gov.cn/news/202405/28/content_WS6655152bc6d0868f4e8e78b8.html, accessed on 24 March 2025.
[165] Institute for China Studies, "China Developing Unified Corporate Sustainability Disclosure Standards by 2030", https://china-studies.org/china-developing-unified-corporate-sustainability-disclosure-standards-by-2030/, accessed on 24 March 2025.
[166] Clifford Chance, *China Issues Guidelines on Corporate Sustainability Reporting* (London: Clifford Chance, 2024), pp. 1-9.
[167] PwC, "Connecting the Dots ESG Regulations in China and the EU", https://www.pwc.de/en/international-markets/german-business-groups/china-business-group/connecting-the-dots-esg-regulations-in-china-and-the-eu.html, accessed on 24 March 2025.

Table 6
Summarizing Chinese Environmental Safeguards Instruments

	Sustainable Development Goals (SDGs)	Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains	Environmental Social and Governance (ESG) Report
Nature	Policy & Planning Measures	Self-regulation	Information regulation
Scope of Entities	State-level	Companies	Companies
Bindingness	Not legally binding on state and companies	Binding on all chinese mining companies	Mandatory for state-owned enterprise and listed companies
Strengths	• Deliberate in a more detailed way on what the Sustainable Development really entails	• Co-regulating with command and control regulation.[168]	• Incentivize companies to promote sustainability by governing the shareholders.[169]
Shortcomings	• No legal consequences if violations take place; • Clear obligations for companies are non-existent.	• Applicable to limited number of companies; • No immediate sanctions once the due diligence is violated.	• Self-claim which potentially leading to greenwashing if not coupled with robust verification; • It does not ameliorate the externality as an environmental problem. It focuses on information asymmetry.

The table outlines three Chinese environmental safeguard instruments designed to promote sustainability and corporate responsibility. The first instrument, the Sustainable Development Goals (SDGs), is a policy and planning measure that focuses on broader global sustainability objectives. It primarily targets state-level actions and is not legally binding on either the government or companies. While it is detailed in its outline of what sustainable development entails, it lacks legal

[168] Neil Gunningham and Darren Sinclair, "Regulatory Pluralism: Designing Policy Mixes for Environmental Protection," *Law and Policy* 21, no. 1 (1999), p. 66.
[169] For further discussion, see: Thilo Kuntz, 'ESG Demand-Side Regulation–Governing the Shareholders,' in Jens-Hinrich Binder, Klaus J. Hopt, and Thilo Kuntz (eds.), *Corporate Purpose, CSR, and ESG: A Trans-Atlantic Dialogue* (Oxford University Press, forthcoming).

consequences for violations, and there are no clear obligations for companies to follow, limiting its effectiveness.

The second instrument, the Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains, is a self-regulation measure aimed at ensuring responsible sourcing practices within the mining sector. This guideline is binding for all Chinese mining companies, making it more specific and enforceable within the industry. However, it only applies to a limited number of companies and lacks immediate sanctions if violations occur, which could undermine its long-term impact.

The third instrument, the Environmental Social and Governance (ESG) Report, is an information regulation tool that mandates companies, particularly state-owned and listed enterprises, to disclose their environmental, social, and governance performance. This report incentivizes companies to promote sustainability by focusing on shareholder governance and transparency. However, the reliance on self-reporting can lead to greenwashing if the information is not verified, and the instrument fails to directly address the environmental problems created by companies, focusing primarily on information asymmetry instead.

3.4. Landscape Green Economy in Indonesia

This analysis is based on the Lab 45 report in 2022 which discusses the Green Economy in Indonesia's Vision 2045. Although there is no definite definition of a green economy, Indonesia through the Ministry of National Development Planning defines a green economy adapted from the United Nations Environment Programme (UNEP), namely an economic development model that focuses on investment, capital, infrastructure, skills, and jobs to support sustainable development that can achieve a sustainable environment and social welfare. The Paris Agreement (Paris Agreement) is a mitigation initiative implemented multilaterally by developed and developing countries, one of which is Indonesia as a developing country. Through green economy practices, Indonesia tries to carry out a series of strategies as a step in mainstreaming sustainable development, namely:

1. Evaluation of green economy development;
2. Creation of challenges faced by Indonesia;
3. Strategy and recommendations;
4. Preparing projections for Indonesia's future development.

In reality, Indonesia has only utilized a small part of the existing New and Renewable Energy (EBT) potential. In 2023, only 12.3% of Indonesia's energy production came from EBT and 16% of Indonesia's energy consumption came from EBT. The Green Growth Index and the Sustainable Regional Competitiveness Index show that Indonesia is still experiencing an environmental trade-off with the environment. The cause is the existence of three major challenges in developing a green economy in Indonesia:

1. Regulation
   The challenges in terms of regulation in Indonesia are not yet increasing the bargaining power of the green economy, legal threats, and the government's political commitment.
2. Institutional
   The challenges in terms of institutions in Indonesia are coordination between Ministries/Institutions (K/L), the active role of K/L that are trusted in several agencies, and weak integration between stakeholders.

3. Funding
   The challenges in terms of institutions in Indonesia are allocations that compete with other sectors, weak public trust in EBT financing, limited financial transparency, and limited Human Resources (HR).

Cooperation between Indonesia and China can answer various challenges faced in achieving a green economy in Indonesia. This can be seen in 2024, based on the China Belt and Road (BRI) Investment Report 2024, Indonesia became one of the largest recipients of investment for BRI projects, amounting to USD 9.3 billion or more than IDR 150 trillion. This investment can help develop green BRI projects that have an impact on reducing emissions. This is because Indonesia is one of the largest recipients of investment. Therefore, BRI-funded projects can be prioritized in renewable energy investments, development of clean energy supply chains, substitution of fossil fuel power plants, and manufacturing of clean energy technology, so that it can increase opportunities for a green economy in Indonesia (IESR, 2025).

4. China's Sustainability Commitments and Policy Implications for Indonesia

4.1. China's Key Sustainability Policies & International Commitments

China's commitment to sustainability has evolved significantly in recent years, shaping both its domestic policies and its approach to overseas investments. These policy shifts hold important implications for Indonesia, particularly given the strong economic and investment ties between the two countries. As China pursues a more sustainable development trajectory, its regulatory frameworks, green finance mechanisms, and environmental guidelines are increasingly influencing Chinese companies operating in Indonesia's energy and transition minerals sectors.

China's sustainability policies are driven by its commitment to achieving peak carbon emissions by 2030 and carbon neutrality by 2060. These commitments have led to an increasingly stringent regulatory environment for industries operating within and outside of China, particularly those with ties to the BRI. Key commitments such as the cessation of overseas coal financing, the strengthening of due diligence in supply chains, and new environmental, social, and governance (ESG) reporting requirements for Chinese companies signal a shift toward responsible investment practices. Furthermore, the upcoming 15th Five-Year Plan (2026-2030) is expected to introduce additional measures aimed at enhancing sustainability governance. China is also considering a new Overseas Investment Law to particularly address the challenges and concerns and even dsiputes as a result of China's growing overseas investment.

For Indonesia, this means greater scrutiny of industrial emissions, potential restrictions on financing for high-carbon projects, and a stronger emphasis on sustainable investment in green infrastructure, renewable energy, and responsible supply chains. Indonesian industries that depend on Chinese capital and export markets will need to align with China's new regulatory frameworks to remain competitive. Companies involved in coal-based energy production, high-carbon nickel processing, and other emission-intensive industries face potential funding limitations and increased regulatory compliance requirements. Conversely, businesses engaged in renewable energy and low-carbon industrial practices may benefit from enhanced investment opportunities and stronger trade relations with China.

This chapter outlines China's key sustainability policies and international commitments, highlighting their relevance to Indonesia. It also provides a structured overview of Chinese government regulations and guidelines concerning overseas investments, emphasizing provisions related to ESG and environmental safeguards. These insights are essential for understanding how China's sustainability policies could shape investment trends, influence regulatory harmonization, and contribute to Indonesia's own energy transition efforts.

The table below summarizes the most relevant clauses of China's major sustainability policies and guidelines relevant to its overseas investments, including their implications for Indonesia:

4.1.1 Summary of China's Sustainability-Related Regulations and Commitments

Table 7
Summary of China's Sustainability-Related Regulations and Commitments

Policy/Guideline	Key Provisions	Key Clauses	Implications for Indonesia
15th Five-Year Plan (2026-2030) *Issuing Authority:* National Development and Reform Commission (NDRC) 国家发展和改革委员会	Expected to enhance sustainability policies, with increased focus on green finance and carbon neutrality.		Could drive further investment in Indonesia's renewable energy sector.
Belt and Road Green Development Guidelines *Issuing Authority:* Various Agencies 各相关机构	Encourages green investment practices in BRI projects.		Supports sustainable infrastructure development in Indonesia.
Green Development Guidelines for Overseas Investment *Issuing Authority:* Ministry of Commerce (MOFCOM), Ministry of Ecology and Environment (MEE) 商务部、生态环境部	Encourages Chinese enterprises to integrate green development throughout investment processes.	Encourages companies to embed green development principles into their overseas investments.	Promotes sustainable infrastructure and energy projects in Indonesia.

Policy/Guideline	Key Provisions	Key Clauses	Implications for Indonesia
Guidelines for Ecological and Environmental Protection in Overseas Investment and Cooperation Construction Projects (2022) *Issuing Authority:* Ministry of Ecology and Environment (MEE) 生态环境部	Requires compliance with host country laws and encourages higher international or Chinese standards.	Companies should comply with local environmental laws and strive to meet higher Chinese or international environmental standards.	Strengthens environmental compliance expectations for Chinese-funded projects in Indonesia.
Guidelines for Ecological and Environmental Protection in Overseas Investment and Cooperation Construction Projects (2022) *Issuing Authority:* Ministry of Ecology and Environment (MEE) 生态环境部	Requires compliance with host country laws and encourages higher international or Chinese standards.	Companies should comply with local environmental laws and strive to meet higher Chinese or international environmental standards.	Strengthens environmental compliance expectations for Chinese-funded projects in Indonesia.
Green Investment Principles for the Belt and Road Initiative *Issuing Authority:* China Development Bank, International Finance Institutions 国家开发银行、国际金融机构	Emphasizes ESG risk management, green finance tools, and environmental disclosures.	Commitment to integrating sustainability into corporate strategy and governance, with a focus on ESG risks.	Encourages Indonesian firms collaborating with Chinese companies to adopt similar sustainability governance practices.
Opinions on Promoting Green Development in the Joint Construction of the "Belt and Road"	Regulating Corporate Environmental Behavior Overseas: Strengthens the primary responsibility	Enterprises should be responsible for their overseas environmental performance and	Indonesian companies partnering with Chinese investors should expect compliance with local

Policy/Guideline	Key Provisions	Key Clauses	Implications for Indonesia
Initiative (2022) *Issuing Authority:* National Development and Reform Commission (NDRC) 国家发展和改革委员会	of enterprises for their environmental behavior overseas.	comply with host country environmental laws.	environmental laws but may also see influence from Chinese environmental standards.
Order No. 35 - Measures for the Supervision and Administration of Overseas Investment by Central Enterprises *Issuing Authority:* SASAC 国务院国有资产监督管理委员会	Central enterprises' overseas investments should adhere to the principle of compliance with laws and regulations of both China and the host country.	Chinese state-owned enterprises must follow the laws of both China and the host country for overseas investments.	Reinforces the importance of legal compliance for Chinese state-owned enterprises operating in Indonesia.
Notice on the Issuance of the "Code of Conduct for Overseas Investment and Operations of Private Enterprises" (2017) *Issuing Authority:* National Development and Reform Commission (NDRC) 国家发展和改革委员会	Avoid Involvement in Domestic Affairs of Other Countries: Private enterprises should avoid disputes in local political and economic matters	Private enterprises investing overseas should avoid political entanglements in the host country.	May reduce political risks in Indonesia by ensuring Chinese private enterprises remain neutral in local political matters.
Ending Overseas Coal Financing (2021) *Issuing Authority:* Chinese Government Announcement 中国政府公告	Prohibits financing of new overseas coal power projects.	China will no longer fund new overseas coal-fired power plants.	Impacts Indonesia’s coal export market and energy sector diversification.

Policy/Guideline	Key Provisions	Key Clauses	Implications for Indonesia
Due Diligence Standards for Transition Minerals *Issuing Authority:* Various Ministries 各部委	Strengthens environmental and labor due diligence in supply chains.	Companies must conduct enhanced environmental and labor due diligence in mineral supply chains.	Affects mining operations and export standards for Indonesian minerals.
ESG Reporting Requirement (from 2026) *Issuing Authority:* CSRC 中国证券监督管理委员会	Mandates ESG disclosures for listed Chinese companies.	Companies must publicly report on their ESG performance, including climate risks and social impact.	May influence sustainability reporting standards for Chinese firms operating in Indonesia.
Belt and Road Green Development Guide - Phase II Handbook *Issuing Authority:* Belt and Road Initiative Green Development Coalition (BRIGC)	Provides guidelines for businesses and financial institutions on implementing green development principles in BRI projects.		Helps Indonesian companies engaged in BRI projects align with China's green investment standards.
Belt and Road Green Development Guide - Baseline Research Report *Issuing Authority:* BRIGC	Offers foundational research on the environmental and social impacts of BRI projects.		Informs sustainable investment strategies for BRI-related projects in Indonesia.
Belt and Road Green Development Guide - Phase III *Issuing Authority:* BRIGC	Further refines environmental and social impact standards for BRI projects.		Strengthens green compliance in Indonesia's BRI-linked infrastructure projects.

NB The above table includes China's existing, new and expected sustainability-related regulations and commitments

4.1.2. Details of the Key Clauses

Opinions on Promoting Green Development in the Joint Construction of the "Belt and Road" Initiative Issued by the National Development and Reform Commission and other departments Document No. 408 [2022][170]

III. Coordinated Promotion of Green Development in Overseas Projects

(13) Regulating Corporate Environmental Behavior Overseas:

Strengthen the primary responsibility of enterprises for their environmental behavior overseas. Guide enterprises to strictly comply with the ecological and environmental laws, regulations, and standards of the host country. Encourage enterprises to refer to international common standards or higher Chinese standards for environmental protection work. Enhance the capacity of enterprises to operate in accordance with laws and regulations, and encourage enterprises to regularly publish environmental reports. Guide relevant industry associations and chambers of commerce to establish codes of conduct for corporate environmental behavior in overseas investments, and use industry self-regulation to guide enterprises in standardizing their environmental behavior.

National Development and Reform Commission and other departments

Opinions on promoting the green development of the "Belt and Road"

Development and Opening-up [2022] No. 408

III. Coordinated promotion of green development of overseas projects

(XIII) Standardize the environmental behavior of enterprises overseas. Strengthen the main responsibility of enterprises for overseas environmental behavior, guide enterprises to strictly abide by the host country's ecological and environmental protection laws, regulations and standards, and encourage enterprises to carry out environmental protection work in accordance with international standards or higher standards in China. Strengthen the construction of enterprises' legal and compliant operating capabilities, and encourage enterprises to publish environmental reports regularly. Guide relevant industry associations and chambers of commerce to establish environmental behavior codes for enterprises' overseas investment, and guide enterprises to standardize environmental behavior through industry self-discipline.

Notice on the Issuance of the "Code of Conduct for Overseas Investment and Operations of Private Enterprises" Issued by the National Development and Reform Commission, Foreign Investment Department Document No. 2050 [2017]
https://www.ndrc.gov.cn/xxgk/zcfb/tz/201712/t20171218_962621.html

(19) Avoid Involvement in Domestic Affairs of Other Countries: Private enterprises should avoid getting involved in the disputes of local political and economic interest groups and should not participate in local political faction activities.

(21) Respect Cultural Traditions: Personnel dispatched overseas by private enterprises should strive to adapt to the social environment of the host country (region) and respect local culture, religion, and customs. Private enterprises should actively engage in cultural exchanges between China and foreign countries, learn from each other, and enhance mutual understanding.

[170] https://www.ndrc.gov.cn/xxgk/zcfb/tz/202203/t20220328_1320629_ext.html. Last accessed 27 March 2025

Order of the State-owned Assets Supervision and Administration Commission of the State Council No. 35 Measures for the Supervision and Administration of Overseas Investment by Central Enterprises[171]

Article 6: Central enterprises' overseas investments should adhere to the following principles: (2) Compliance with Laws and Regulations: Comply with the laws, regulations, business rules, and cultural customs of both China and the host country (region), operate in compliance, and develop in an orderly manner.

Article 14: In principle, central enterprises should not engage in non-core business investments overseas. If there are special reasons that necessitate non-core business investments, they should be submitted to the SASAC for review and approval, and carried out in cooperation with central enterprises that have relevant core business advantages.

Article 17: Central enterprises should regularly track and analyze overseas investment projects during implementation and operation, and make timely decisions based on changes in the external environment and the project itself. If there are significant adverse changes that affect the achievement of investment objectives, they should consider initiating suspension, termination, or exit mechanisms. If the re-decision of major overseas investment projects involves adjustments to the annual investment plan, the adjusted annual investment plan should be submitted to SASAC.

Article 25: Central enterprises' overseas investment projects should actively introduce state-owned capital investment and operation companies, private investment institutions, local investors, and international investment institutions as shareholders. This leverages the advantages of various investors who are familiar with the project, have strong investment risk control capabilities, and public relations coordination abilities, thereby reducing overseas investment risks. For particularly significant overseas investment projects, central enterprises should establish a risk assessment system before investment decisions, and commission independent third-party qualified consulting agencies to conduct a comprehensive assessment of the political, economic, social, cultural, market, legal, and policy risks of the host country (region). Central enterprises included in SASAC's debt risk control should not increase their debt ratio levels due to overseas investments.

Article 28: Central enterprises should establish a correct view of interests and righteousness, adhere to the principle of mutual benefit and win-win, strengthen public relations with the government, media, enterprises, and communities of the host country (region), actively fulfill social responsibilities, focus on cross-cultural integration, and create a favorable external environment.

Green Investment Principles for the "Belt and Road" Initiative[172]

Principle 1: Integrate Sustainability into Corporate Governance: We commit to integrating sustainability into our company strategy and corporate culture. The board of directors and senior management will closely monitor sustainability-related risks and opportunities, establishing effective management systems. We will also assign professionals to identify, analyze, and manage these risks and opportunities, and closely monitor the potential impacts of our investment and operational activities in countries along the "Belt and Road" on climate, environment, and society.

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[171] http://www.sasac.gov.cn/n2588035/n2588320/n2588335/c20164457/content.html. Last accessed 24 March 2025.

[172] https://asiasociety.org/sites/default/files/inline-files/2018_Green%20Investment%20Principles%20for%20the%20Belt%20and%20Road_C.pdf. Last accessed 25 March 2025.

Principle 2: Fully Understand ESG Risks: We will better understand the social, cultural, environmental standards, and laws and regulations related to our industry and the host country. We will incorporate Environmental, Social, and Governance (ESG) factors into our decision-making process, conduct thorough environmental and social due diligence, and, when necessary, develop risk prevention and management plans with the support of third-party institutions.

Principle 3: Fully Disclose Environmental Information: We will carefully analyze the environmental impacts of our investment activities, including energy consumption, greenhouse gas emissions, pollutant emissions, water resource utilization, and forest degradation. We will actively explore how to use environmental stress tests in investment decisions. We will continuously improve and refine our environmental and climate-related information disclosure based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Principle 4: Strengthen Communication with Stakeholders: We will establish a stakeholder information-sharing mechanism to enhance effective communication with government departments, environmental organizations, media, local community residents, civil society organizations, and other stakeholders. We will also establish conflict resolution mechanisms to promptly and appropriately resolve disputes with communities, suppliers, and customers.

Principle 5: Fully Utilize Green Financial Instruments: We will proactively use green bonds, green asset-backed securities (ABS), YieldCo (yield companies), emission rights financing, and green investment funds to finance green projects. We will also actively explore the use of green insurance, such as environmental liability insurance, catastrophe insurance, and green building insurance, to effectively mitigate environmental risks in project operations and asset management.

Principle 6: Adopt Green Supply Chain Management: We will incorporate ESG factors into supply chain management and learn and apply best international practices in our investment, procurement, and operational activities, including greenhouse gas emission accounting methods, rational water resource use, supplier "white lists," performance indicators, information disclosure, and data sharing.

Principle 7: Build Capacity through Multilateral Cooperation: We will establish special funds and assign professionals to actively cooperate with multilateral international organizations, research institutions, and think tanks to enhance our professional capabilities in policy implementation, system construction, and tool development related to the principles.

4.1.3. China's Domestic Energy Policies

China’s Regulatory Shift on Captive Power Plants

Over the past decade, China has undertaken a series of regulatory reforms aimed at restricting the development of coal-fired captive power plants and promoting renewable energy alternatives. In 2017, the State Council, together with 16 other departments, issued directives prohibiting the construction of new coal-fired captive power plants in key regions such as Beijing-Tianjin-Hebei, the Yangtze River Delta, and the Pearl River Delta. These efforts seek to address persistent issues of overcapacity, reduce air pollution, and advance China's decarbonization agenda.

National policies from the National Development and Reform Commission (NDRC) and the National Energy Administration (NEA) have since further tightened controls by suspending new approvals for coal captive projects, requiring the closure of non-compliant plants, integrating captive plants into public power markets, and imposing standardized environmental and financial obligations. Provinces such as Guangdong have gone even further by banning the construction and expansion of all

coal-fired power plants, including captive ones, and by mandating the decommissioning of existing units at the end of their operational lifespans.

Parallel to these restrictions, China has aggressively promoted the use of renewable energy in captive power systems. Driven by strong policy support and cost competitiveness, China's renewable energy capacity—especially wind and solar—has expanded rapidly, reaching 1,482 GW in early 2025 and surpassing fossil fuel-based power generation capacity. Through these combined measures, China is reshaping its industrial energy base toward a cleaner and more sustainable future.

4.2. Implications for Indonesia

China's sustainability commitments have several key implications for Indonesia:

Impact on the Energy Sector
The coal exit policy limits new Chinese-backed coal power projects in Indonesia, creating both challenges and opportunities for the country's energy transition (Aurelia, 2025). The coal exit policy, which seeks to phase out coal power dependency, significantly limits the establishment of new Chinese-backed coal power projects in Indonesia. This measure is pivotal as it not only restricts the influx of foreign investment in traditional energy sectors but also ushers in a transformative shift towards renewable energy sources. The immediate challenge lies in addressing the potential shortfall in energy supply that could arise from reduced coal projects. This transition necessitates substantial investment in alternative energy infrastructure, which may strain Indonesia's financial and technological resources. Conversely, this policy presents a unique opportunity for Indonesia to innovate and diversify its energy portfolio. By fostering the development of renewable energy initiatives, the country can enhance its energy security and align with global sustainability goals. In doing so, Indonesia could position itself as a regional leader in clean energy, attracting new investments and partnerships.

ESG Compliance Expectations
Chinese companies operating in Indonesia will face increasing pressure to meet higher ESG standards, improving transparency and accountability (IEEFA, 2024). Chinese companies operating in Indonesia will encounter escalating pressure to adhere to enhanced Environmental, Social, and Governance (ESG) standards. This shift is indicative of a broader trend towards increased accountability and transparency within international business operations, particularly in emerging markets. As regulatory frameworks evolve, companies will be expected to implement robust ESG practices that not only comply with local laws but also align with global standards. This encompasses comprehensive reporting on environmental impacts, social responsibility initiatives, and governance structures. The heightened focus on ESG compliance necessitates a reevaluation of operational strategies. Companies must invest in sustainable practices, engage in transparent reporting, and foster stakeholder relationships to build trust and credibility. Failure to meet these standards could result in reputational damage and potential financial repercussions.

Opportunities for Stronger Environmental and Social Safeguards
Indonesia can leverage China's sustainability commitments to push for stricter safeguards in projects involving Chinese investors (Inclusive Development International, 2019). Indonesia stands at a pivotal point where it can capitalize on China's sustainability commitments to advocate for more stringent environmental and social safeguards in projects involving Chinese investors, especially in the current geopolitical landscape with the US withdrawing its support for sustainability and climate related projects, with China expected to fill the gaps. This strategic leverage is essential in ensuring that

investments align with Indonesia's developmental goals while safeguarding its ecological and social landscapes. By engaging with Chinese stakeholders, Indonesia can articulate specific expectations that reflect its commitment to sustainable development. This includes improving its own environmental assessments, community engagement processes, and adherence to international labor standards. Moreover, Indonesia can utilize existing frameworks, such as bilateral agreements and international partnerships, to embed these safeguards into the investment processes. This proactive approach not only protects local communities and ecosystems but also fosters a more responsible investment climate that can enhance Indonesia's international standing.

Aligning China's Overseas Energy Investments with Domestic Policy Trends

China's tightening restrictions on coal-fired captive power plants at home carry significant implications for its overseas investments, particularly in developing countries such as Indonesia. As part of its broader commitment to peaking carbon emissions before 2030 and achieving carbon neutrality before 2060, China is increasingly expected to ensure that its overseas energy projects reflect the same environmental standards and transition priorities it upholds domestically.

However, in markets like Indonesia, Chinese companies have historically been heavily involved in developing coal-based captive power projects, particularly to support energy-intensive industries such as mineral processing and industrial parks. Given China's evolving domestic stance, a growing expectation is emerging—from both Chinese regulators and international stakeholders—that overseas investments must prioritize renewable energy solutions, avoid locking host countries into carbon-intensive infrastructure, and enhance the overall sustainability of bilateral cooperation.

Ensuring coherence between China's domestic policy reforms and its foreign energy investments is critical not only for maintaining China's global environmental credibility, but also for supporting Indonesia's own energy transition goals. Joint initiatives to promote renewable energy-based captive power systems, share technical expertise, and align financing criteria with low-carbon standards offer a pathway to more responsible and mutually beneficial cooperation.

Sector-Specific Impact Analysis

1. Energy Sector

A. China's push for greener energy will likely reduce financing for Indonesian coal power projects, impacting Indonesia's coal exports and domestic coal-fired power plants.
B. Chinese companies may shift focus to gas and renewable energy projects in Indonesia.
C. Green bond regulations and decarbonization goals could limit future investment in fossil fuel-based energy projects.

2. Nickel Mining and Processing/Smelting

A. Chinese companies are the largest investors in Indonesia's nickel industry. Stricter Chinese carbon regulations could lead to higher environmental standards for nickel mining and processing operations.
B. Smelters reliant on coal-based energy may need to transition to renewable sources or face challenges in exporting nickel products to China.
C. Compliance with China's green finance policies could become a requirement for securing investment in new nickel projects.
D. China's increased focus on low-carbon industrial materials may push Indonesian nickel producers to adopt cleaner production methods, potentially influencing global nickel supply chains.

3. Renewable Energy Sector

A. China's renewable energy expansion aligns with Indonesia's goals of increasing clean energy capacity.
B. More Chinese investments in Indonesia's solar, wind, and hydro projects are expected as part of the Belt and Road Initiative.
C. Green financing regulations may provide opportunities for Indonesian renewable energy developers to access Chinese capital.
D. Technological advancements in China's renewables sector could facilitate the transfer of expertise and cost-effective clean energy solutions to Indonesia.

China's sustainability policies will shape Indonesia's energy and resource industries. While stricter environmental standards may challenge coal and high-emission nickel processing, they also present opportunities for Indonesia to attract more investment in renewable energy and green industrial transformation. Businesses and policymakers in Indonesia must proactively align with these evolving regulations to maintain competitiveness and ensure sustainable growth in the long term.

5. Environmental and Social Safeguarding Risks and Opportunities in China's Investments

This chapter explores the Environment and Social Safeguarding risks and opportunities associated with Chinese investments in Indonesia, focusing on environmental, social, and governance challenges. These risks include resource exploitation, high carbon emissions, labor rights violations, community displacement, weak regulatory compliance, and lack of transparency. The negative consequences of these issues threaten Indonesia's long-term sustainability goals, particularly in achieving its commitment to Net Zero Emissions (NZE) by 2060 and fostering inclusive economic growth.

Despite these challenges, Chinese investments also present opportunities to promote sustainable development in Indonesia. Through collaboration in renewable energy projects, implementation of sustainable investment initiatives, and adoption of higher labor and governance standards, China and Indonesia can work together to improve ESG performance. Strengthening regulatory frameworks, diversifying investment partnerships, and enhancing community engagement are essential strategies to maximize the benefits of Chinese investments while mitigating their adverse impacts.

By examining both the risks and best practices associated with ESG factors in Chinese investments, this chapter aims to provide a comprehensive understanding of how Indonesia can navigate its investment landscape more sustainably. The insights presented will highlight the importance of balancing economic growth with responsible environmental and social governance to ensure long-term prosperity.

5.1. Risks to Chinese Investments

Levels of risks for China's overseas investments can be catergorized into the following levels:

1. Highest risk: Risks to China's global reputation.
2. Secondary risk: risks to cause tension and disputes, especially any possibility to disturb regional peace, therefore undermining China's UN peace commitment.
3. Tertiary risk: financial risks.

Despite China's sustainability policies, several environmental and social risks remain in its investments in Indonesia:

5.1.1 Environmental Risks

Based on the literature review, the 3 main impact points of Chinese investment in the energy and mineral sector include:

a. Deforestation and biodiversity loss due to nickel mining and industrial park expansion (GIS Reports, 2025).
b. Water pollution and soil degradation from mining waste and industrial activities (South China Morning Post, 2022).
c. Greenhouse gas emissions from coal power plants linked to mineral processing (IEEFA, 2024).

Various environmental impacts of China's investment activities in the energy and mineral sectors have also been studied by multiple NGOs and think tanks. A report by Aksi Ekologi dan Emansipasi Rakyat (AEER) highlights agrarian conflicts due to land acquisition and river flow manipulation, which have led to flooding and environmental degradation resulting from activities at the Sumsel 1 coal-fired power plant (PLTU) in Tanjung Village. Residents around the Simpang Belimbing Sumsel 1 and Sumsel 8 mine-mouth power plants have experienced increased dust pollution after the power plants began operations. Additionally, flooding has worsened following the conversion of forests into coal mining areas to supply the power plants, and the productivity of rubber plantations has declined. This decline is suspected to be due to contaminated air and water being absorbed by rubber plants, inhibiting their optimal growth.

Meanwhile, Dzikrillah et al. (2022) revealed that wastewater from the Paiton coal-fired power plant in East Java negatively affects the aquatic ecosystem, causing increased temperatures in artificial coral reefs, lower salinity levels in coral reefs, a rise in Planktosphaeria Gelatinosa a bioindicator of nitrogen (N) and ammonia (NH) pollution—and disturbances in benthic conditions categorized as mild.

The environmental impacts of China's investment in the energy sector are also evident at the Simpang Belimbing mine-mouth power plant, where annual flooding occurs due to coal plant activities near the Penimur River. Another impact is the material losses suffered by affected residents, with approximately 15 hectares of farmland rendered unusable due to flooding. The proximity of the power plant to homes and plantations has resulted in coal dust pollution, disrupting the comfort of nearby residents (Traction Energy Asia, 2023).

Further research by CELIOS (2024) using economic modeling (Interregional Input-Output) and air pollution modeling (atmospheric modeling) indicates that Indonesia's marine and forest biodiversity, particularly in the Sulawesi and Maluku archipelagos, is at risk of contamination. Some of the most affected protected areas include Aketajawe Lolobata National Park, Murhum/Nipa-Nipa Grand Forest Park, Tokobae Island Marine Park, and Lasolo Bay Marine Park (CELIOS, 2024). Residents in Southeast Sulawesi, North Maluku, Central Sulawesi, and Southeast Sulawesi are expected to bear the economic damage and long-term health impacts of exposure to toxic air pollution (CELIOS, 2024).

5.1.2 Social Risks

The social impacts of China's investment activities in ESG broadly include:

a. Labor rights violations, including unsafe working conditions and exploitation of migrant workers (Nikkei Asia, 2024).
b. Displacement of indigenous and local communities due to land acquisition for energy and mining projects (AEER, 2019).

Regarding the case study of China's investment in Indonesia's energy and mineral sectors, there is a contradiction between the stated objectives and the actual implementation of employing foreign workers from China. The goal of Foreign Direct Investment (FDI) is to create job opportunities for the local community; however, the influx of Chinese foreign workers has raised concerns among locals due to the low absorption of local labor. Additionally, a negative impact of FDI under the BRI in the coal-fired power plant (PLTU) sub-sector in Muara Enim Regency has been labor conflicts due to wages being set below South Sumatra's minimum wage.

For instance, in 2019, the Minimum Wage for Muara Enim Regency (Upah Minimum Kota - UMK) was IDR 2,910,587, while workers were paid only IDR 2,840,000, following the Provincial Minimum Wage (Upah Minimum Provinsi - UMP) instead of the regency-level wage. This practice violated Article 90, Paragraph (1) of Law No. 13 of 2003 on Manpower (Centre for Strategic and International Studies - CSIS, 2019; AEER, 2019).

Another case occurred at the mine-mouth PLTU in Muara Enim Regency, which is owned by a Chinese company and was built by a Chinese contractor. Workplace accidents occurred due to poor construction quality, indicating a lack of workplace safety and social protection—responsibilities that should be upheld by the company. A similar situation was reported at PLTU Sumsel 8, where workers, especially daily laborers, were not provided with social security benefits. When they fell ill or suffered work-related injuries, they had to pay for their own medical treatment. Though job opportunities were available, workers who took sick leave were considered absent and did not receive wages (AEER, 2019).

A report by WALHI Central Sulawesi investigated PT Indonesia Morowali Industrial Park (IMIP), PT Indonesia Huabao Industrial Park (IHIP), and PT Stardust Estate Investment (SEI). China's nickel investment in Indonesia has resulted in several negative impacts, including inhumane wage systems, unilateral layoffs, inadequate health and occupational safety protections, and power imbalances between Chinese and local workers. The development of the PT IHIP industrial zone has led to the loss of livelihoods for farmers and fishers, as well as unilateral land acquisition.

Additionally, workers' equipment remains substandard. For example, at IMIP's PT Dexin Steel Industry, workers were provided with plastic helmets, an insufficient supply of masks forcing them to spend IDR 2,000 (ca. US$ 0.12) to buy their own and inadequate protective gloves. Welders also complained that the gloves provided were made of rubber, which tore easily and became uncomfortably hot, while welding glasses were made of plastic with fragile rubber straps. Another issue was reported at PT Huayoue Nickel Cobalt, where workers noted that company vehicles were in poor condition, making them unsafe to use due to issues such as frequent skidding (WALHI, 2024).

A recent case was in 2023, a smelter explosion occurred at a facility owned by PT Indonesia Tsinghan Stainless and PT Gunbuster Nickel Industry which resulted in the deaths of 21 workers (Tenggara Strategics, 2024). Trend Asia also added that there were 53 deaths of workers from 2015 to 2022 due

to fires and explosions at the smelter. This indicates that safety standards for workers are still neglected due to negligence in audits and work standards (Handayani, 2024).

5.1.3 Governance Challenges

One of the main governance challenges in Chinese investments in Indonesia's mineral and energy transition sector is the lack of transparency in investment agreements and business permits. According to a report by the Carnegie Endowment for International Peace (2023), many agreements between Chinese companies and government or private entities in Indonesia are conducted behind closed doors and are difficult for the public or other stakeholders to access.

This lack of transparency presents several risks, including ambiguity regarding the terms of agreements, the distribution of economic benefits, and the environmental and social obligations that investors must fulfill. In some cases, this lack of transparency also extends to the issuance of business permits, which do not go through an open and accountable process. The rapid and poorly supervised permitting process increases the risk of natural resource exploitation without adequate sustainability considerations, as seen in several nickel mining projects in Sulawesi and Maluku. Furthermore, PT IHIP in Bungku Barat District has not been accommodated under regulations such as Coordinating Minister for Economic Affairs Regulation (Peraturan Menteri - Permen) No. 7 of 2021 regarding amendments to the list of National Strategic Projects (*Proyek Strategi Nasional - PSN*), in which PT IHIP is absent from the PSN development list (WALHI, 2024).

The second identified challenge is the limited public participation in decision-making processes for large-scale projects involving Chinese investments. According to a report by Dialogue Earth (2024), many large-scale projects in Indonesia’s mineral and energy transition sector are planned and approved without adequate consultation with local communities and other key stakeholders.

This lack of public participation or the absence of the Free, Prior, Informed, Consent (FPIC) can lead to various negative consequences, such as social conflicts between companies and local communities and weak accountability mechanisms in the implementation of ESG standards. For instance, in several Chinese-funded nickel smelter projects, there have been reports of community complaints regarding environmental impacts, such as water and air pollution, which have not been adequately addressed by either the government or investors.

Moreover, in some cases, communities that attempt to voice concerns or seek involvement in decision-making face intimidation or restricted access to information. This contradicts the principles of good governance in sustainable investment, which should prioritize inclusivity and transparency. Additionally, the development of PT IHIP does not comply with Sustainable Food Crop Land (Lahan Pertanian Pangan Berkelanjutan - LP2B) of Regional Regulation (*Peraturan Daerah - Perda*) No. 7 of 2019 on the Regional Spatial Plan (*Rencana Tata Ruang dan Wilayah - RTRW*) of Morowali for 2019–2039 and Sustainable Agricultural Food Area (Kawasan Pangan Pertanian Berkelanjutan - KP2B) of Regional Regulation No. 1 of 2023 on the RTRW of Central Sulawesi Province for 2023–2042. Furthermore, it is also inconsistent with Articles 24, 25, 26, and 27 of Regional Regulation No. 1 of 2015 concerning the protection of sustainable agricultural land (WALHI, 2024).

5.2. Environmental and Social Safeguards: Best Practices and Opportunities

In the face of a global energy transition, the demand for minerals essential to renewable energy technologies—such as electric vehicle batteries and energy storage systems—has risen significantly. However, alongside this immense potential, there are considerable challenges regarding the environmental and social impacts caused by mining and processing these minerals. As a result, the implementation of environmental and social safeguards has become increasingly crucial to ensure that the energy transition proceeds in a sustainable and inclusive manner.

This paper will explore the best practices adopted by various companies, as well as opportunities for enhancing environmental and social protection in mining operations. Efforts to reduce negative impacts, such as waste management, the use of environmentally friendly technologies, and improving the social well-being of local communities, are integral to company strategies aimed at ensuring operational sustainability.

Through case studies focusing on Chinese enterprises investing in energy transition minerals, this paper will examine how these challenges are being addressed and how companies can contribute to achieving sustainable development goals. The primary focus is on the importance of applying stricter standards and the opportunities to optimize existing policies and practices for better sustainability outcomes in the future.

5.2.1 Case Study on Chinese Enterprises Investing in Energy Transition Minerals

5.2.1.1. Zhejiang Huayou Cobalt Corporation Limited

Zhejiang Huayou Cobalt Corporation Limited (Huayou) is a leading Chinese manufacturer of cobalt, nickel, and lithium materials, primarily used in lithium-ion batteries. Founded in 2002 and headquartered in Tongxiang, Zhejiang, the company has grown into a vertically integrated supplier for the global electric vehicle (EV) battery industry, with operations across Africa, Southeast Asia, and Europe.[173] Huayou listed on the Shanghai Stock Exchange on 29 January 2015 with stock code 603799.[174] In Indonesia, Huayou has a subsidiary called PT Zhejiang Huayou Cobalt Corporation Limited Indonesia, also known as Huayou Indonesia, a company in the new energy lithium-ion battery material and cobalt materials industries, focusing on research, development, and manufacturing.[175]

PT Huayou Indonesia has made significant strides in Indonesia's nickel industry, particularly in sustainability, community engagement, and industrial development. Huayou Indonesia has implemented eco-friendly practices, such as using 65 km slurry pipelines to transport nickel ore, reducing carbon emissions compared to traditional trucking methods.[176] In addition, Huayou Indonesia planted 200 mangrove saplings in Pomalaa, Kolaka Regency, as part of their commitment

[173] Huayou Cobalt, “About”, https://www.huayou.com/en/about/leadership-speech, accessed on 17 April 2025.
[174] Shanghai Stock Exchange, “Zhejiang Huayou Cobalt Co.”, http://english.sse.com.cn/markets/equities/list/overview/?COMPANY_CODE=603799&STOCK_CODE=603799, accessed on 17 April 2025.
[175] Huayou Indonesia, “Tentang Kami”, https://huayouindonesia.com/id/indonesia/, accessed on 17 April 2025.
[176] Aldhi Chandra, “Huayou Indonesia Unveils ESG Implementation Steps in the Nickel Processing Industry Chain”, https://indonesiaminer.com/directory/detail-news/2024-08-21095912-huayou-indonesia-unveils-esg-implementation-steps-in-the-nickel-processing-industry-chain, accessed on 21 April 2025.

to environmental conservation.[177] Huayou Indonesia also received RMI certification, acknowledging their responsible mineral supply chain management and ESG governance.[178]

While PT Huayou Indonesia has reported various achievements in environmental and social governance, its operations have also faced significant challenges and criticisms related to labor conditions, environmental impacts, and community relations. At the Indonesia Morowali Industrial Park (IMIP), workers have reported hazardous conditions. Employees have described working up to 15 hours a day with minimal rest, earning less than $25 daily—below Indonesia's median salary. Many suffer from respiratory issues due to inadequate protective gear, and industrial accidents, including falls and electrocutions, have been reported.[179]

In addition, Huayou Indonesia's operations have been linked to significant environmental concerns. In Morowali, extensive land clearing for mining and industrial activities has led to deforestation, contributing to annual flash floods that damage homes and infrastructure.[180] In Kurisa Village, residents report that waste from IMIP has polluted the sea, destroying fish populations and affecting local livelihoods.[181] In Weda Bay, Central Halmahera, operations by PT Indonesia Weda Bay Industrial Park (IWIP), associated with Huayou, have allegedly polluted rivers vital to local communities, impacting water sources and agriculture.[182]

Huayou Indonesia's expansion also has led to tensions with local communities. In Weda, residents accuse IWIP of seizing community lands used for agriculture, leading to loss of livelihoods and cultural sites.[183] Labor disputes escalated into violent protests at IMIP in January 2023, resulting in two deaths and numerous arrests, when workers cited poor conditions and lack of safety measures as key grievances.[184] These issues highlight the complex challenges PT Huayou Indonesia faces in balancing industrial growth with environmental stewardship and social responsibility.

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[177] Huayou Indonesia, “Huayou and Vale Witness the Completion and Handover of the Cinta Project Phase Two”, https://huayouindonesia.com/en/practice/, accessed on 21 April 2025.
[178] Huayou, “Establishing a Foundation for Sustainable Development: Huayue Nickel-Cobalt (Indonesia) Co., Ltd. Receives Responsible Minerals Initiative Certification”, https://www.huayou.com/en/news/corporate-news/286, accessed on 21 April 2025.
[179] WIRED, “Workers are Dying in the EV Industrys ‘Tainted’ City”, https://www.wired.com/story/workers-are-dying-in-the-ev-industrys-tainted-city/, accessed on 21 April 2025.
[180] JATAM, “Sufferings of Residents and Environment Behind the Business Transactions of Tesla and Chinese Companies in Indonesia”, https://jatam.org/id/lengkap/sufferings-of-residents-and-environment-behind-the-business-transactions-of-tesla-and-chinese-companies-in-indonesia, accessed on 21 April 2025.
[181] Silvanah, “Nickel Smelter Industry Activity in South Sulawesi Generates Public Protests - OpEd”, https://www.eurasiareview.com/09012023-nickel-smelter-industry-activity-in-south-sulawesi-generates-public-protests-oped/, accessed on 21 April 2025.
[182] JATAM, “Sufferings of Residents and Environment Behind the Business Transactions of Tesla and Chinese Companies in Indonesia”, https://jatam.org/id/lengkap/sufferings-of-residents-and-environment-behind-the-business-transactions-of-tesla-and-chinese-companies-in-indonesia, accessed on 21 April 2025.
[183] JATAM, “Sufferings of Residents and Environment Behind the Business Transactions of Tesla and Chinese Companies in Indonesia”, https://jatam.org/id/lengkap/sufferings-of-residents-and-environment-behind-the-business-transactions-of-tesla-and-chinese-companies-in-indonesia, accessed on 21 April 2025.
[184] WIRED, “Workers are Dying in the EV Industrys ‘Tainted’ City”, https://www.wired.com/story/workers-are-dying-in-the-ev-industrys-tainted-city/, accessed on 21 April 2025.

5.2.1.2. Xiamen Xiangyu Corporation Limited

Xiamen Xiangyu Corporation Limited (XMXYG) is a Chinese company focused on industrial investment and specialized operations, particularly in supply chain management and logistics, with businesses including commodity supply chain, urban development, financial services, and more.[185] XMXYG Corporation is a state-owned business group under Xiamen Municipal Government.[186] In addition, XMXYG Corporation was listed on Shanghai Stock Exchange (stock code: 600057) on 29 August 2011.[187] In Indonesia, XMXYG Corporation has a subsidiary called PT Obsidian Stainless Steel (OSS), a company that specializes in nickel ore smelting and stainless steel production.[188]

There have been several positive contributions during XMXYG's existence through PT. OSS' operations in Indonesia. PT. OSS was awarded the prestigious title of "2024 Outstanding Corporate Social Responsibility (CSR) Company" on December 14, 2024 at the "Shaping a New Chapter, Opening a New Era, Embarking on a New Journey: 2024 Member Meeting" organized by the Chinese Chamber of Commerce in Indonesia.[189] PT OSS is known to be quite active in conducting CSR, such as distributing 75 cows for sacrificial animals ahead of the 1444 H Eid al-Adha celebration in 2023.[190] PT OSS also has a commitment to care for employees, one of which is by providing health insurance to employees.[191] PT Obsidian Stainless Steel also received appreciation from the Regent of Konawe, Kery Saiful Konggoasa for the contribution made by PT OSS to Regional Original Revenue.[192]

However, there are several problems experienced by PT OSS. First, the operation of PT OSS's steam power plant, which is used to support the electrical power needs of the nickel ore processing plant in producing stainless steel, has caused dust pollution that threatens the environment.[193] The dust pollution is very disturbing to the community around the factory.[194] As a result, PT. OSS was sued in

[185] Bloomberg, "Xiamen Xiangyu Corporation Limited", https://www.bloomberg.com/profile/company/600057:CH, accessed on 24 March 2025.
[186] Xiamen Xiangyu Corporation Limited, "About Us", http://www.xiangyu-newenergy.com/en/about.html, accessed on 24 March 2025.
[187] Xiamen Xiangyu Corporation Limited, "Corporate Profile", http://www.xiangyu.cn/eng/about.aspx, accessed on 24 March 2025.
[188] PT Obsidian Stainless Steel, "Beranda", https://oss.co.id/id/beranda/, accessed on 24 March 2025.
[189] PT Obsidian Stainless Steel, "Good News: OSS Wins the 2024 Outstanding Corporate Social Responsibility Award from the Chinese Chamber of Commerce in Indonesia", https://oss.co.id/id/good-news-oss-wins-the-2024-outstanding-corporate-social-responsibility-award-from-the-chinese-chamber-of-commerce-in-indonesia/, accessed on 24 March 2025.
[190] PT Obsidian Stainless Steel, "Nickel Industry Companies PT Obsidian Stainless Steel (OSS) and PT Virtue Dragon Nickel Industry (VDNI) Continue to be Committed to Making a Real Contribution to the Community Around the Mine in Konawe", https://oss.co.id/id/nickel-industry-companies-pt-obsidian-stainless-steel-oss-and-pt-virtue-dragon-nickel-industry-vdni-continue-to-be-committed-to-making-a-real-contribution-to-the-community-around-the-mine-in-konaw-3/, accessed on 24 March 2025.
[191] PT Obsidian Stainless Steel, "Caring for Employees is a Commitment that Continues to be Maintained by PT Obsidian Stainless Steel (OSS)", https://oss.co.id/id/caring-for-employees-is-a-commitment-that-continues-to-be-maintained-by-pt-obsidian-stainless-steel-oss/, accessed on 24 March 2025
[192] PT Obsidian Stainless Steel, "PT Obsidian Stainless Steel Mendapatkan Apresiasi dari Bupati Konawe", https://oss.co.id/id/pt-obsidian-stainless-steel-mendapatkan-apresiasi-dari-bupati-konawe-2/, accessed on 24 March 2025.
[193] La Ode Muhlas, "Petaka Degradasi Kesehatan di Kawasan Pabrik PT. OSS", https://walhi-sultra.or.id/category/lingkungan-hidup/, accessed on 24 March 2025.
[194] Suhardiman Sawali, "PT. OSS Cemari Warga dengan Polusi Debu Batu Bara", https://bumisultra.com/daerah/read/5567-pt-oss-cemari-warga-dengan-polusi-debu-batu-bara, accessed on 24 March 2025.

the District Court of Unaaha, Konawe Regency, Southeast Sulawesi for its activities that polluted the environment, where PT. OSS admitted that it had polluted the environment.[195]

Second, PT OSS uses a lot of foreign labor in its operations and reduces opportunities for local labor to contribute to the company. The presence of foreign workers, most of whom come from China, is carried out in large numbers and is a manual labor that can be replaced by local workers.[196] This creates jealousy for local workers and the surrounding community.[197] In addition, PT OSS also killed the local economy by opening stalls in the factory area, so that the company's workforce did not buy merchandise from the community around the factory.[198]

Third, PT OSS has faced several strikes due to dissatisfaction from its own workers. The first strike occurred on 15 March 2023, where hundreds of company workers who are members of the Alliance of Trade Unions of the Management of Workers Units (Pimpinan Unit Kerja - PUK) of the National Union of Trade Unions (Konfederasi Serikat Pekerja Nusantara - KSPN) went on strike due to the many inequalities that occurred in the company, ranging from wages, working hours, stealth warning letters, social inequality, public deception and other problems.[199] Unfortunately, the strike ended in chaos and received little response from the company on the grounds that the strike was not in accordance with applicable laws and regulations.[200] The second strike in 2025 is still under discourse, but was voiced by factory workers if the demands for salary increases were not met by the company.[201]

In addition to environmental issues, foreign labor, and strikes, PT OSS also faces several other problems. These include a work accident in which a company worker was hit by the dynamo of a crane machine.[202] The accident shows that PT OSS still does not meet occupational safety and health

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[195] WALHI Sulawesi Tenggara, "Sidang ke-4 Gugatan Lingkungan, PT. OSS Benarkan Terjadi Pencemaran Lingkungan di Wilayah Operasi Perusahaan di Morosi", https://muarasultra.com/sidang-ke-4-gugatan-lingkungan-pt-oss-benarkan-terjadi-pencemaran-lingkungan-di-wilayah-operasi-perusahaan-di-morosi/, accessed on 24 March 2025.

[196] Permata Adinda, "Alasan di Balik Kedatangan 500 TKA Asal China", https://asumsi.co/post/59165/alasan-di-balik-kedatangan-500-tka-asal-cina/, accessed on 24 March 2025.

[197] Denyi Risman, "Terungkap PT OSS Tega Pecat Tenaga Lokal, TKA Justru Diistimewakan", https://sultranesia.com/terungkap-pt-oss-tega-pecat-tenaga-lokal-tka-justru-diistimewakan/, accessed on 24 March 2025.

[198] Faktual.net, "Kebijakan PT. OSS Diduga Matikan Ekonnomi Masyarakat Sekitar Pabrik di Morosi", https://faktual.net/kebijakan-pt-oss-diduga-matikan-ekonomi-masyarakat-sekitar-pabrik-di-morosi/, accessed on 24 March 2025.

[199] Muara Sultra, "Pekerja PT. VDNI dan OSS Bakal Mogok Kerja, Ini Alasannya", https://muarasultra.com/pekerja-pt-vdni-dan-oss-bakal-mogok-kerja-ini-alasannya/, accessed on 24 March 2025.

[200] Nyia Clarity, "Perusahaan Buka Suara Soal Aksi Mogok Kerja Serikat Pekerja VDNI dan OSS yang Berujung Ricuh", https://mediakendari.com/perusahaan-buka-suara-soal-aksi-mogok-kerja-serikat-pekerja-vdni-dan-oss-yang-berujung-ricuh/125720/, accessed on 24 March 2025.

[201] Pena Faktual, "Ribuan Karyawan PT VDNI-OSS Ancam Mogok Total Bila Gagal di Mediasi Tripartit", https://penafaktual.com/ribuan-karyawan-pt-vdni-oss-ancam-mogok-total-bila-gagal-di-mediasi-tripartit/, accessed on 24 March 2025.

[202] Kendari Info, "Karyawan Alami Kecelakaan Kerja, WALHI Sultra Minta PT OSS Diberi Sanksi", https://kendariinfo.com/karyawan-alami-kecelakaan-kerja-walhi-sultra-minta-pt-oss-diberi-sanksi/, accessed on 24 March 2025.

standards.[203] PT OSS also received allegations of criminal practices of lab analysis leaked by its employees, where nickel ore levels were deliberately played for the benefit of the company.[204] All of these issues are matters for PT OSS to resolve.

5.2.1.3 C. Lygend Resources Technology Corporation Limited

Lygend Resources & Technology Corporation Limited (Lygend) is a China-based company focused on the nickel industry chain, engaging in trading, production, and equipment manufacturing, with a focus on nickel products for steel and new energy vehicles. Lygend is a private company and it's a leading nickel industry chain services provider, focusing on trading and production of nickel products, with operations in China and Southeast Asia.[205] Lygend was successfully listed on the Main Board of the Hong Kong Stock Exchange (HKSE).[206] In Indonesia, Lygend has a subsidiary called PT. Halmahera Persada Lygend (HPL), pioneer producer of electric car battery raw materials in Indonesia.[207]

There have been several positive contributions during Lygend's existence through PT. HPL' operations in Indonesia. PT HPL received an award in the category of Bonded Zone Company with the Largest Export Earnings in 2023.[208] In addition, PT HPL is also committed to supporting local communities and regions through various activities, such as vaccine programs for communities and employees, transportation facilities for residents to referral hospitals at the district level, and other assistance.[209] PT HPL also conducts various environmental conservation programs, including mangrove planting and artificial coral reefs in the waters around the operational area on Obi Island.[210] As proof of PT HPL's seriousness in implementing ESG, PT HPL has regularly issued sustainability reports since 2021 until now.[211]

However, there are several problems experienced by PT HPL. Nickel mining operations on Obi Island by PT HPL and other nickel companies have caused deforestation and increased the chances of

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[203] Kendari Info, "Karyawan PT OSS Konawe Tewas Tertimpa Dinamo Mesin Crane, Kemenaker Temukan Pelanggaran K3", https://kendariinfo.com/karyawan-pt-oss-konawe-tewas-tertimpa-dinamo-mesin-crane-kemenaker-temukan-pelanggaran-k3/, accessed on 24 March 2025.

[204] Wajah Sultra, "Karyawan PT OSS Beberkan Dugaan Praktek Kejahatan Analis Lab, Kadar Ore Nikel Dimainkan", https://wajahsultra.com/karyawan-pt-oss-beberkan-dugaan-praktek-kejahatan-analis-lab-kadar-ore-nikel-dimainkan/, accessed on 24 March 2025.

[205] Lygend Resources & Technology Corporation, "About Us", https://www.lygend.com/about.html, accessed on 24 March 2025.

[206] Investing, "Lygend Resources & Technology Corporation", https://www.investing.com/equities/lygend-resources-tech, accessed on 24 March 2025.

[207] PT Halmahera Persada Lygend, "About Us", https://hpalnickel.com/about-us, accessed on 24 March 2025.

[208] Halmahera Post, "Harita Nickel Buktikan Kualitasnya, Menang Dua Penghargaan di Bea Cukai Ternate Award 2024", https://halmaherapost.com/2024/09/14/harita-nickel-buktikan-kualitasnya-menang-dua-penghargaan-di-bea-cukai-ternate-award-2024/, accessed on 24 March 2025.

[209] PT Halmahera Persada Lygend, "Hak Asasi Manusia", https://hpalnickel.com/keberlanjutan/hak-asasi-manusia#navgreen-selector, accessed on 24 March 2025.

[210] PT Halmahera Persada Lygend, "Perubahan Iklim", https://hpalnickel.com/keberlanjutan/perubahan-iklim#navgreen-selector, accessed on 24 March 2025.

[211] PT Halmahera Persada Lygend, "Laporan Keberlanjutan", https://hpalnickel.com/keberlanjutan/keberlanjutan#navgreen-selector, accessed on 24 March 2025.

flooding and other disasters in the area.[212] In addition, waste from the nickel mining is damaging residents' clean water sources and marine ecosystems.[213] Workplace accidents are also common during the company's operations, indicating a lack of occupational health and safety standards at the company.[214] All of these issues are matters for PT HPL to resolve.

5.2.1.3 Findings and Gaps Comparison Indonesia Regulatory Framework and China Regulatory Framework

Table 8
Findings and Gaps Comparison Indonesia Regulatory Framework and China Regulatory Framework

No.	Environmental Safeguards	Indonesian Regulatory Framework	China Regulatory Framework
1	General Environmental Law: Environmental Protection Law		
1a	*environmental permit*	Integrated in the Business Permit.	A standalone permit.
2	General Mining Law: Mineral Resource Law		
2a	*mining permit*	Divided into: ● Exploration Permit ● Operation-Production Permit Each permit has different conditions to be granted. Exploration permits provide more lenient requirements as it allows an exploration to commence if the enterprise	It is not entirely clear in the ESG framework. However, one could argue that the Chinese Government still obliges Chinese enterprises to comply with international economic and trade rules as well as laws and regulations from the host country. This is in accordance with the Guidance on Promoting Green Belt and Road.

[212] Christ Belseran and Irfan Maulana, "Marak Industri Nikel di Halmahera Berujung Bencana", https://www.mongabay.co.id/2024/08/11/marak-industri-nikel-di-halmahera-berujung-bencana/, accessed on 24 March 2025.
[213] Rabul Sawal and Christ Belseran, "Mereka Suarakan Kerusakan Pulau Obi Dampak Industri Nikel", https://www.mongabay.co.id/2023/04/16/mereka-suarakan-kerusakan-pulau-obi-dampak-industri-nikel/, accessed on 24 March 2025.
[214] Trend Asia, "Masyarakat Sampaikan Laporan Fakta Kerusakan Lingkungan di IPO Perdana Anak Usaha Harita Group", https://trendasia.org/masyarakat-sampaikan-laporan-fakta-kerusakan-lingkungan-di-ipo-perdana-anak-usaha-harita-group/, accessed on 24 March 2025.

No.	Environmental Safeguards	Indonesian Regulatory Framework	China Regulatory Framework
		has submitted a mere commitment. This also applies to the reclamation bond and post-mining measures.	Therefore, this will not impose companies from China to scale-up the environmental safeguards as the hosting country could have different environmental thresholds depending on its political decision. **This paper therefore contends that this could be a looming gap to be jointly addressed by China and Indonesia.**
2b	permit for processing (smelter) (separated from mining permit?)]	Integrated in the IUPOP or the Operation-Production license.	The Basic Standard is in China.
2c	[link between mining permit and environmental permit]	If an environmental permit is revoked, this does not lead to an automatic removal of mining permit.	
3	Air Pollution Control Law		
3a	specific permit for emissions (from nickel)?	Yes, releasing air pollutants requires a technical permit.	The Basic Standard is in China.
3b	emission limit value (specific for Nickel)	Yes, the Indonesian	There is a duty to disclose its emission performance in the ESG report.
3c	GHG emission limitation?	No incorporation of Greenhouse Gas (GHG) Emission	There are duties to provide GHG emissions data in ESG Reporting including GHG Emissions.[215]

[215] Giulia Interesse, 'China Unveils Its First Set of Basic Standards for Corporate Sustainability (ESG) Disclosure,'<https://www.china-briefing.com/news/china-unveils-basic-standards-for-corporate-sustainability-esg-disclosure/>.

No.	Environmental Safeguards	Indonesian Regulatory Framework	China Regulatory Framework
4	Water Pollution Control Law		
4a	[specific permit for wastewater (from nickel)?	Yes, releasing wastewater requires a Technical Permit.	The Basic Standard is in China.
4b	[effluent standards (specific for Nickel)]	Yes, the Indonesian regulatory framework provides a specific emission limit value for wastewater from nickel processing activities. There is also specific regulation on wastewater However, it was enacted back in 2006 and probably is already outdated. An amendment is necessary.	The Basic Standard is in China.
5	Environmental Impact Assessment (EIA):		
5a	Impacts to be studied under EIA: impacts of the proposed activity on soil, water, and biodiversity		The Basic Standard is in Chinese
5b	The linkage between EIA and permit (environmental permit, or mining/smelter permit?	It is mandatory for IUPOP to carry out EIA before receiving an environmental approval. As for IUPE, one could bypass the EIA with a statement of commitment to comply.	The Basic Standard is in Chinese.
5c	When EIA need to be conducted	Prior to operation for IUPOP. Yet, it is permissible to carry out EIA during the operation insofar as the operators have declared a commitment to	The Basic Standard is in Chinese.[216]

[216] This can be accessed through the following link: https://kjs.mof.gov.cn/zhengcefabu/202412/P020241216565879245839.pdf

No.	Environmental Safeguards	Indonesian Regulatory Framework	China Regulatory Framework
		comply with the environmental requirements.	
5d	EIA study also includes GHG emissions from the project	It is not explicitly mentioned in any legislation. However, a case law from Bandung Administrative Court provides an extensive interpretation on EIA to also take into account GHG emission from coal-fired power plants. This decision was ruled in 2022.	The Basic Standard is in Chinese.
6	Environmental, Social, Governance (ESG) Report		
6a	ESG Report: Mandatory or Voluntary?	Voluntary	Mandatory for listed companies of the SSE 180 Index, Star 50 Index, SZSE 100 Index, and ChiNext Index

6. Summary, Conclusions and Recommendations

6.1 Summary

China's investment in Indonesia's energy and transition minerals sectors is rapidly reshaping the country's industrial and environmental trajectory. While these investments—especially in coal-fired power, nickel smelting, and infrastructure—have significantly contributed to Indonesia's economic growth and downstream industrialisation goals, they have also magnified long-standing environmental and social governance (ESG) risks.

This report demonstrates how Indonesia's ambitions to lead in the global electric vehicle and clean energy transition are deeply intertwined with Chinese capital and technology. However, the absence of strong regulatory enforcement, coupled with limited policy alignment between the two countries, poses serious challenges to sustainable development.

China has introduced ambitious domestic ESG and green finance frameworks. Yet, a critical gap remains in translating these standards into its overseas investments, especially in jurisdictions with weaker environmental and social safeguards, such as Indonesia. Meanwhile, Indonesia's underdeveloped ESG policies, lack of institutional accountability, and weak incentives for renewables have left affected communities with little recourse and reduced the country's appeal for responsible investors.

6.2 Conclusions

China's investment has had profound economic, environmental, and social implications for Indonesia:

1. Strategic Importance of Chinese Investment: China has played a central role in financing key segments of Indonesia's energy and mining sectors. Investments in nickel smelting have enabled Indonesia to advance its downstream ambitions, moving the country up the global value chain.

2. Environmental and Social Risks: These economic gains have come at a cost. Chinese-funded projects have frequently been linked to deforestation, pollution, labor violations, and displacement. Many of these developments occur in a regulatory vacuum, with limited transparency or public participation.

3. Evolving Regulatory Landscape: China's evolving green policy landscape—including carbon neutrality goals, ESG disclosure mandates, and the promotion of green finance—offers an important window of opportunity. However, enforcement of these policies remains uneven, particularly in overseas operations.

4. Policy Misalignment and Gaps: Indonesia has yet to develop the policy ambition and governance infrastructure necessary to mainstream ESG. ESG is still treated as voluntary rather than essential, with limited oversight and institutional incentives to raise standards.

5. Opportunities for Green Transition: If approached strategically, China's sustainability agenda and Indonesia's clean energy goals can be brought into alignment. Chinese financial institutions are increasingly receptive to green financing standards, which Indonesia can leverage to attract higher-quality, lower-risk investments.

Indonesia's Growing Risk of Being Left Behind

Indonesia's slow progress in developing and implementing robust environmental and social safeguards poses significant risks. In a global investment environment increasingly shaped by ESG standards and green finance requirements, countries that delay aligning with these norms will lose out. Without credible ESG frameworks, Indonesia risks missing substantial opportunities to attract higher-quality, lower-risk investors — particularly in the fast-growing renewable energy and green technology sectors. The economic cost of failing to act is considerable: delayed adoption of strong ESG measures will reduce Indonesia's competitiveness, deter responsible international investors, and undermine its long-term growth prospects.

Missed Opportunity to Lead, Falling Behind Regional Peers

While Indonesia prioritizes industrial downstreaming and short-term economic gains, it has barely begun to develop effective environmental and social safeguarding systems, let alone institutionalize them. By contrast, China, despite persistent challenges, has made significant strides in embedding ESG into national policy and financial regulation frameworks. Without a strategic course correction, Indonesia risks falling behind not only China but also regional peers who are moving faster to integrate sustainability into their investment climates. Raising the quality and credibility of Indonesia's ESG standards is not just about mitigating risk — it is essential to enhancing Indonesia's attractiveness as a global investment destination and securing its position in the future green economy.

6.3 Final Thoughts

China's investment in Indonesia's energy and transition minerals sectors is at a pivotal juncture. Without realignment, the ESG gaps between policy and practice will deepen. The failure to act risks not only ecological degradation and social harm, but also reduced competitiveness and missed investment opportunities for Indonesia.

However, responsible investment, backed by enforceable safeguards and cross-border collaboration, offers a pathway forward. Strengthening regulatory frameworks, ensuring corporate accountability, and empowering local communities and civil society actors will be key to achieving a just, inclusive, and sustainable energy transition.

For countries like Indonesia, the GDI could be transformative. Indonesia is both a strategic development partner and a frontline actor in the global energy transition. Chinese-backed nickel processing hubs in Morowali and Weda Bay are central to Indonesia's EV battery ambitions — but they've also triggered concerns over labor rights, community impacts, and environmental degradation.

The GDI provides a framework for addressing these concerns more systematically. It encourages alignment with Indonesia's own policy frameworks, including the National Action Plan on Human Rights (RAN-HAM), environmental permitting laws, and its electric vehicle strategy. Through the GDI, China could help pilot more just, inclusive, and climate-aligned models of cooperation — moving beyond transactional investment to partnerships built on shared sustainability goals.

As China's development financing and overseas operations continue to grow, initiatives like the GDI — grounded in the SDGs and Paris Agreement — offer a path toward strengthening environmental and social safeguards while deepening mutually beneficial cooperation with countries like Indonesia.

6.4 Recommendations

1. Strengthen ESG Standards in China–Indonesia Investments

- Harmonize China's Green Investment Principles and BRI Green Development Guidelines with Indonesia's Environmental Protection and Management Law (Law No. 32/2009) and relevant sectoral regulations.
- Coordinate with key ministries and regulatory agencies in both countries to push for **mandatory** ESG due diligence and enforcement, particularly in high-risk sectors.
- Support case-based advocacy to highlight ESG non-compliance and inform regulatory and policy reforms.
- **Frame ESG strengthening not only as a social and environmental necessity, but as an economic imperative for Indonesia to remain competitive in attracting high-quality, low-risk investments.**

2. Institutionalize Monitoring, Transparency, and Accountability

- Establish a **joint Indonesia–China ESG Monitoring and Oversight Body**, with public disclosure requirements and meaningful civil society participation.
- Strengthen grievance mechanisms, including confidential reporting channels for workers and communities, and ensure timely resolution processes.

- Publish independent, publicly accessible ESG scorecards for all major projects involving Chinese stakeholders.
- **Use transparent ESG monitoring to signal Indonesia's investment readiness to global green investors and financial institutions.**

3. Leverage China's National Sustainability Frameworks and the Global Development Initiative (GDI)

- Frame ESG enforcement in Indonesia as fully aligned with China's domestic sustainability priorities, including the "Ecological Civilization" agenda, the SDGs, and the GDI principles.
- Engage Chinese regulatory bodies and policy think tanks to advocate for the **application of China's domestic ESG and green finance standards** in overseas projects.
- Utilize the GDI as a platform for piloting climate-aligned, socially inclusive cooperation models in Indonesia's energy and minerals sectors.
- Partner with Chinese financial institutions and development agencies to promote green financing standards and **accelerate Indonesia's shift from coal to clean energy, enhancing its global competitiveness.**

4. Build Civil Society Coordination and Advocacy Capacity

- Establish a **China–Indonesia Civil Society Working Group** to coordinate advocacy, share intelligence, and build collective leverage on ESG issues.
- Facilitate training and exchanges to build capacity among Indonesian NGOs, labor unions, and affected communities on Chinese ESG frameworks, grievance systems, and investment oversight strategies.
- Partner with international ESG and human rights networks to amplify local voices and hold both Indonesian and Chinese investors accountable to global sustainability standards.

5. Roadmap for Implementation

- **Phase 1: Foundation Building**
  - Develop partnerships with Chinese think tanks and civil society organizations.
  - Publish bilingual (Bahasa Indonesia–Mandarin) policy briefs and ESG risk assessments, clearly highlighting the economic and competitiveness benefits of stronger safeguards.

- **Phase 2: Oversight and Accountability**
  - Launch independent monitoring initiatives and public reporting platforms.
  - Engage Chinese banks and SOEs to incorporate green finance and ESG lending criteria into cross-border operations, positioning Indonesia as a regional leader in sustainable investment.

- **Phase 3: Institutionalization**
  - Advocate for mandatory ESG screening and risk mitigation for all China-linked investments in Indonesia's energy and mining sectors.
  - Institutionalize joint regulatory mechanisms and secure formal, high-level commitments to sustainable and socially responsible investment practices under the GDI framework.

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