Critical Minerals, Critical Conditions: The Struggle of Nickel Mine Workers in Indonesia

A Case Study

"The world's exploding demand for nickel has led companies to disregard the rights of workers and their communities, while workers themselves are so vulnerable they have no choice but to endure exploitation."

INKRISPENA

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This case study explores the challenges workers are facing in Indonesia's nickel industry, spurred by the escalating demand for nickel, which is crucial for Electric Vehicles (EV) production. The passing of the Critical Raw Material Act (CRMA) by the European Union, coupled with Indonesia's strategic efforts to exploit its natural resources and position itself as a leader in the growing EV market, marks a turning point. The CRMA is designed to secure the EU's uninterrupted access to vital minerals by strengthening the Union's strategic autonomy, calling for a balanced response from resource-abundant developing nations like Indonesia. This situation has made it necessary to examine technological, environmental, social,

and governance considerations amidst a complex global interplay between emerging and established economies. The dynamics of raw material demand and supply for the EV market, particularly nickel, could shape the future trajectories of developing countries like Indonesia. Amid these broader supply chain issues, human and labour rights violations cast a shadow over the industry's workers, potentially exacerbating geopolitical tensions, with profound effects on Indonesia's nickel mining industry. This study poses questions about Indonesia's role in this geopolitical landscape, the shared responsibilities and the actions required to guarantee fair working and living conditions for the industry's workers and their communities.



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Global Just Transition: Not Just for (E)U

The following case study has been conducted within the framework of the <u>Global Just</u> <u>Transition: Not Just for (E)U campaign</u>, which calls on the European Union (EU) to promote a socially just transition to a green economy, not only in the EU but also worldwide.

While environmental protection, climate action and social justice are two sides of the same coin, if policies concerning them are not planned and implemented in a coherent and inclusive manner, the European green transition may have environmentally and socially harmful impacts in the Global South. For example, countries in the Global South will need to adapt to new European standards developed within the framework of the European Green Deal (EGD) and cope with the negative spillover effects of European production and consumption patterns. This is why, since 2022, SOLIDAR has been working with its members and partners to compile views and approaches to just transition from civil society organisations in the Global South, including trade unions, indigenous rights defenders and feminist collectives. The Global Just Transition campaign is a joint action of Solidar Suisse, Movimiento por la Paz (MPDL), Olof Palme International Center (OPIC), FOS and SOLIDAR, together with their partners from Africa, Asia and Latin America. Through their different testimonies, the campaign highlights the incoherences and negative consequences of the EGD due to its weak external dimension.

We call on the EU to adopt a Global Just Transition approach in its relations with Global South countries and to turn the current EGD and its successor into a Global Green Deal in order to ensure policy coherence, accelerate the achievement of the 17 Sustainable Development Goals and of the objectives of the Paris Agreement and guarantee a fair distribution of the costs and benefits of the European green transition between Europe and its partner countries.

INTRODUCTION

The global mining sector, particularly mineral mining, is at a critical intersection of economic necessity and environmental and social responsibility. The global push for a sustainable future is boosting the demand for minerals critical to the energy transition, including copper, lithium and nickel. To achieve the Paris Agreement's targets of netzero greenhouse gas emissions by 2050, around 3 billion tons of minerals and metals will be required, calling for an estimated \$1.7 trillion in worldwide mining investment¹. This demonstrates the sector's integral role in promoting economic progress, especially in developing nations with abundant mineral resources. As demand soars, the industry grapples with its historically extractive nature that often leads to social and political dilemmas.

Nickel, as a critical component in electric vehicles (EV) batteries, exemplifies these challenges and opportunities. Global nickel demand is projected to climb from 2.5 million to 3.4 million, while supply is forecasted to fall short, leading to a widening gap between supply and demand². This competition for nickel resources highlights the urgent need for new deposits to meet the demand from the battery production sector. This is where Indonesia enters the big picture.

Being the world's largest producer of nickel, Indonesia has strategically positioned itself as a key player in the global nickel market, particularly in the EV battery sector. The country's decision to ban the export of raw nickel ore in 2020 has further strengthened its role in the value-added supply chain, the aim being to encourage the development of domestic processing facilities whilst enhancing its downstream industries. This move has enabled Indonesia to capture a significant share of the growing demand for battery-grade nickel, essential for the transition to green energy. The ban has also attracted substantial investments

¹ World Bank (2022) "<u>Mineral-rich developing countries can drive a net-zero</u> <u>future</u>".

² This looming shortage is driven by the electrification of the global fleet of passenger cars, with nickel-based battery chemistries poised to dominate the market by 2030 owing to their high energy density. However, the stainless-steel industry currently consumes over 70% of global nickel, leaving the overall battery market with a comparatively small share. From Casey, J. (2021) "Rystad Energy: Nickel demand to outstrip supply by 2024".



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in Indonesia's nickel processing capabilities, aimed at meeting the increasing global demand. With vast reserves and a government keen on maximising the sector's potential, Indonesia's nickel industry is set to play a crucial role in the global transition to renewable energy.

However, Indonesia's race to capture critical minerals comes with several challenges, such as, the complexities of its nickel downstreaming strategy, technological, market and investment challenges, diversifying supply sources, reducing dependency on a single investor country and resolving regulatory challenges. In addition, clashes with powerful international trading partners who have relied on free access to Indonesia's raw materials is also a growing concern. The EU's relation with Indonesia is one significant example of this.

Recently, the European Union announced the Critical Raw Materials Act (CRMA)³, aiming to ensure a secure and sustainable supply of critical raw materials (CRMs). Adopted in March 2023, the CRMA is crucial for the EU to meet its climate and digital objectives by 2030. These materials, including lithium, cobalt, and nickel, are vital for a range of technologies in strategic sectors, such as renewable energy, digital industry, defense, and space exploration. The Act addresses the EU's dependency on imports from a limited number of countries, a situation that is exacerbated by ongoing geopolitical tensions and supply chain disruptions. It seeks to diversify imports and develop domestic capacities for the extraction, processing, and recycling of CRMs to reduce reliance on external suppliers and enhance the EU's strategic autonomy⁴. This initiative could have material impacts on Indonesia, which need to be anticipated.

³ European Commission (2023) European Critical Raw Materials Act

⁴ Gamboa Figueroa, A. (2024) "Highlight 1/2024 – The EU Critical Raw Materials Act and its geopolitical Implications".

The combination of these international considerations and the rapid expansion of Indonesia's nickel mining sector has profound implications for workers and their surrounding communities. The environmental degradation, deforestation and pollution due to toxic waste and reliance on coal for smelting plants, directly affects workers' health, exposing them to hazardous conditions⁵. Additionally, the labour-intensive nature of the industry raises the potential for increasingly exploitative working conditions, including extended working hours and inadequate safety measures. At the same time, workers and their communities face economic dependency on this volatile sector, placing their livelihoods at the mercy of global market shifts⁶. There is, however, a silver lining, as the sector's growth offers opportunities for skill development and economic diversification, promising better employability and community development, if managed sustainably and ethically⁷.

Ensuring a Just Transition in Indonesia to promote the welfare of workers and their communities in the face of these challenges requires a collaborative approach. This involves international cooperation, government regulation, industry commitment to fair practices and active community engagement. It depends on conducting resource extraction for the energy transition in a socially equitable and environmentally sustainable manner. Furthermore, it prompts deeper reflection on the patterns of 'extractivism': how the world's exploding demand for nickel has led nickel processing companies to disregard the rights of workers and their communities, while the workers themselves are so vulnerable they have no choice but to endure exploitation. These striking questions set the tone of this case study prepared by INKRISPENA – Research Centre for Crisis and Alternative Development Strategy⁸. In this report INKRISPENA exposes the conditions of workers employed in nickel processing factories described in their own words. This paper will highlight the challenges faced by workers and communities in Indonesia's nickel processing sector, worsened by the booming demand of EV in Europe and worldwide. This preliminary report is based on comprehensive desk research, incorporating insights from a variety of reports, statistical data, relevant articles, together with testimonies and an analysis of interviews conducted by INKRISPENA across their different projects. The primary data used in this report spans the period from 2018 to 2022⁹, offering a detailed examination of the evolving landscape in the nickel sector in Indonesia and beyond.

⁵ Habir, M. (2023) "<u>Reassessing Indonesia's nickel downstreaming policy</u>".

⁶ Chan, K. (2023) "The Promise And Pitfalls Of Indonesia's Nickel Boom".

⁷ Ibid.

⁸ INKRISPENA is a research-based organisation working towards development, reinforcement and cultivation of working people's political leadership.

⁹ The use of 2018 as the initial point is because this was the year when countries started to implement the 2015 Paris Agreement, which includes the Just Transition, into their respective industrialisation strategies. In 2018, Indonesia also undertook major development and operation of a metal mineral processing industry directed at the world's 'Green Market'.

2.

CURRENT SITUATION IN INDONESIA'S NICKEL PROCESSING INDUSTRY

As the world's largest nickel producer, with registered reserves of 21 million metric tons (approximately 22% of global totals), Indonesia has emerged as a key player. It has gone from being a major supplier to the stainless-steel industry, to becoming a vital source for the rapidly expanding EV battery markets. Steel production consumed around 70% of nickel in 2020, while the demand for batteries amounted to only 6%. It is, however, predicted to constitute about one-third of the total nickel demand by 2030¹⁰.

Indonesia, recognising the economic opportunities presented by the global shift towards EVs, has positioned itself as a pivotal player in the EV supply chain by attracting investments to enhance its production capacity. The country's production of nickel hit 1 million tons in 2021, reflecting its substantial contribution to the global nickel output. By 2025, Indonesia alone expects to account for around half of the global production growth¹¹. This dominance is poised to intensify, highlighting the significant role Indonesia plays in the future of nickel supply. This could potentially be impacted by physical events or policy changes within and outside the country.

2.1 Indonesia's Response to Booming Global Demand for EVs

Indonesia's nickel strategy, underpinned by the 2009 Mineral and Coal Mining Law¹² and the Making Indonesia 4.0 initiative ¹³, aims to transition from raw material exportation to manufacturing industries like EV batteries. The 2020 export ban on nickel ore is a strategic move to boost domestic processing, attract foreign investment and enhance the value of nickel exports. By July 2023, the growth in smelters reflects Indonesia's expanding influence in the global nickel market and its potential to become an investment hub.

Indonesia's 2018 agreements with key industry players, like the Chinese Tsingshan Industry and the Indonesian PT GEM, support its goal to make 20% of its vehicles electric by 2025. This aligns with the target of manufacturing 400,000 electric vehicles when annual automotive production hits 2 million units. The country's policies are easing regulatory barriers, cutting energy costs, simplifying licensing and providing tax breaks to bolster this transition. Technological developments in smelting have enabled the processing of laterite nickel ore into high-grade nickel for EV battery cathodes.¹⁴ The first High-pressure acid leaching (HPAL) plant, crucial for battery-grade nickel, started in May 2021.

¹⁰ Hoffman, K., Goffaux, N., Azevedo, M. (2020) "How clean can the nickel industry become?".

¹¹ IEA (2021) "The Role of Critical Minerals in Clean Energy Transition".

¹² This law sets out guidance for national policies for the management and control of mineral and coal mining.

¹³ An initiative led by the Indonesian government, aimed at leading the nation into the era of Industry 4.0, encompassing a set of technologies including industrial IoT networks, AI, Big Data, robotics and automation.

¹⁴ Indonesia is advancing its nickel industry from Class 2, used in stainless steel, to Class 1, which is essential for EV batteries. The country's laterite nickel ores, including limonite and higher-grade saprolite, are being upgraded using High-Pressure Acid Leach (HPAL) technology. This process converts laterite ore into mixed hydroxide precipitate (MHP), facilitating the production of Class 1 nickel and simplifying the supply chain for battery cathode manufacturing.



Chinese investments, bolstered by Indonesia's policy shifts and the Belt and Road Initiative, have been pivotal in Indonesia's nickel industry, particularly in downstream operations and industrial park developments, like the Indonesia Morowali Industrial Park (IMIP). This collaboration has led to significant advancements, including partnerships with LG Energy Solution and Hyundai Motor Group, to establish Indonesia's first EV battery cell plant, marking a major leap in the EV supply chain.

Overview of Electric Vehicle Battery Raw Material Supply Chain from Indonesia: The Case of Huayue Nickel Cobalt

In September 2018, the Indonesia Morowali Industrial Park embarked on an ambitious project to construct a plant managed by PT Huayue Nickel Cobalt (PT HYNC). This plant was designed to transform nickel laterite into essential materials for EV battery cathodes. After a temporary halt during the COVID-19 pandemic, construction resumed in 2021.

PT HYNC represents a joint venture between several major companies, and it utilises advanced

technology to extract nickel, cobalt and manganese from laterite nickel ore, optimising resource use and producing mixed hydroxide precipitate (MHP), a vital intermediate product for battery-grade nickel sulfate. This technology supports the increasing demand for nickel sulfate and MHP¹⁵, driven by the global push towards zero emissions and the growth of the electric vehicle sector.

The mining operations of PT HYNC provide essential raw materials for lithium battery production. The ore supply is sourced within the Indonesia Morowali Industrial Park, at market prices. The project's outputs are destined for major buyers which supply components to leading automotive manufacturers, including Tesla, Volkswagen, and Ford, among others.

In June 2023, one of the companies announced its expansion into Europe with a new plant in Hungary¹⁶, aiming to produce cathode materials for 100,000 tons of EV batteries annually. This move not only boosts Hungary's position in the electrified automotive industry, but also raises questions about the supply chain's sustainability and the source of raw materials, highlighting Indonesia's pivotal role in supplying these vital minerals.

¹⁵ Argus Media (2022) "Indonesia's Huayue Nickel-Cobalt eyes December start",

¹⁶ Hungarian Investment Promotion Agency (2023) "Yet Another Chinese Market Player to Join Hungary's E-mobility Ecosystem".

2.2 The Context of the EU Critical Raw Materials Act (CRMA)

There is a complex interplay between the evolving dynamics of Indonesia's trade policies and EU directives under the EU Critical Raw Materials Act (CRMA). This Act seeks to bolster the EU's supply of strategic raw materials, such as lithium and nickel, which are pivotal for the green and digital transitions. It aims to reduce the EU's reliance on external sources, primarily China, by setting ambitious targets for domestic extraction, processing and recycling of these materials.

The CRMA is set to boost domestic production, refining and recycling of Critical Raw Materials (CRMs) within the EU, with the aim of shifting towards self-reliance and sustainability. The goal of the CRMA is to meet at least 10% of the EU's annual consumption requirements for extraction; at least 40% of the EU's annual consumption requirements for recycling. It seeks to ensure that no more than 65 % of the EU's annual consumption comes from a single third country.

This strategic shift by the EU has major implications for Indonesia, a country with vast reserves of critical materials and an ambition of becoming the powerhouse of global EV demand, presenting a series of challenges and opportunities for directing its trade and environmental policies through the EU's evolving regulatory framework.

B DOMESTIC CHALLENGES AND OPPORTUNITIES

Indonesia's stance on nickel mining, characterised by policies of resource nationalism, aims to capitalise on its vast nickel reserves by adding value domestically and supporting the growing EV sector. This approach involves strict regulations on the export of raw nickel ore to encourage domestic processing and refining, as well as attracting foreign investment for the development of a complete supply chain for battery production. However, examination of how these policies align with the principles of a just transition reveals a mixed picture.

3.1 The Complexities of Nickel Mining in Indonesia

Over-Reliance on Foreign Direct Investment (FDI), particularly Chinese investments: The IMIP exemplifies the conflict between Indonesia's development goals and reliance on Chinese investment. While crucial for Jakarta's industrial policies and boosting its global nickel market presence, this dependence has led to a dominance of Chinese firms in Indonesia's nickel processing. The export ban on raw minerals has inadvertently favoured Chinese industrial parks by lowering domestic nickel prices, thus benefiting foreign investors and jeopardising Indonesia's economic autonomy.¹⁷

Nickel Processing: Indonesia faces technological challenges in producing the high-grade Class 1 nickel required for EV batteries. While global nickel supplies are sufficient, the demand for batterygrade nickel may exceed supply. Indonesia's laterite nickel resources are abundant but require advanced processing in order to meet battery manufacturers' needs. The country's commitment to overcoming these complexities reflects its ambition to be a key player in the battery-grade nickel market.¹⁸



17 Habir, M. (2023) "Indonesia's nickel sector can rebound from Tesla EV setback, but Chinese market dominance a concern".

18 Wood Mackenzie (2023) "The rise and rise of Indonesian HPAL - can it continue?".

- The Ripple Effects of Global Market Dynamics, contending with environmental concerns: Indonesia's nickel industry faces environmental scrutiny due to its high carbon footprint from coal dependency. To maintain its market position, Indonesia must decarbonise its nickel sector, set environmental standards and shift towards renewables. The country's commitment to sustainability is showcased by its participation in international efforts like the 'Just Energy Transition Plan' at COP27, aiming for net-zero emissions and ensuring its role in future supply chains.
- The Shift Towards Lithium-Iron-Phosphate (LFP) Batteries: Indonesia's nickel industry may face challenges as EV manufacturers shift towards LFP batteries, which are cheaper and more accessible. This move could reduce nickel demand, even though LFP batteries offer lower energy density and range, especially in cold weather.
- Omnibus Law: Indonesia's Omnibus Law on Job Creation¹⁹, passed in 2020 and revised in 2023, aimed to generate investment, create new jobs and boost the economy by streamlining the licensing process. The law, has, however, faced criticism for compromising labour and indigenous rights and causing environmental harm. The Coal and Mineral Law, passed in 2020, is also controversial, as it expands corporate land control and mining rights, potentially at the expense of sustainable development and equitable resource management.²⁰ Despite these challenges, there are opportunities for advocacy and collaboration to ensure responsible mining practices and uphold safety and health standards.



19 UN Trade&Development (2020) "Omnibus Law on job creation has been enacted".

20 Jong, H. N. (2020) "With new law, Indonesia gives miners more power and fewer obligations".

INTERNATIONAL CHALLENGES AND OPPORTUNITIES

4.1 At Loggerheads with the International Community: EU-Indonesia WTO Dispute

Indonesia's policy of banning raw mineral exports is in direct conflict with international trade norms, particularly those enforced by the EU, which seeks unfettered access to raw materials. The EU's lawsuit against Indonesia at the WTO over nickel export restrictions is a testament to these tensions²¹. The EU argues that such export bans contradict the General Agreement on Tariffs and Trade (GATT), highlighting a clash between Indonesia's right to manage its resources and the principles of free trade.

The Indonesian government's stance has given rise to its own challenges. Legal pushbacks from foreign corporations through mechanisms like the Investor State Dispute Settlement (ISDS) highlight the controversies of Indonesia's policy²². These disputes illuminate the struggle between states seeking to assert control over their resources and multinational corporations aiming to protect their investments. Opposition to Indonesia, including threats of lawsuits, raises questions about the balance of power in the global economic system and the ability of nations to pursue independent industrial policies in the face of international investment agreements.

4.2 Navigating EU Trade and Sustainability Standards

Global trade and industrial policy are at a critical juncture on account of the dynamics between the EU's Critical Raw Materials Act (CRMA) and its implications for Indonesia's nickel sector. The EU's strategy, aimed at diversifying its critical raw materials supply to reduce dependence and boost resilience, clashes with Indonesia's objectives to climb up the value chain in the EV sector.

The pattern of clean-tech production emphasises the outsourcing of lower value-added manufacturing steps to emerging markets. This strategy is economically rational on account of high wages and the need for a significant difference between input and output value. However, it raises concerns about the perpetuation of global value chains that concentrate low value-added manufacturing in countries like Indonesia. The EU spends significantly more on critical raw materials by the time they are integrated into high-tech products than it would on direct raw material imports²³, reflecting a systemic issue in the supply chain, affecting Indonesia's position in the global market.

The Critical Raw Materials Act is opaque regarding international measures. The legislation does not provide specific details on how it will interact or align with international efforts. The vagueness around the implementation of these measures and their implications for non-EU countries could create uncertainties for Indonesia's nickel industry.

²¹ The EU argues that Indonesia's measures contravene the GATT by restricting exports and imposing domestic processing requirements. This resulted in a WTO Panel ruling in favour of the EU as Indonesia's actions were found to be inconsistent with international trade agreements.

²² Hertanti, R. (2023) "Between a mineral and a hard place Indonesia's export ban on raw minerals"

²³ Le Mouel, M., Poitiers, N. (2023) "Why Europe's critical raw materials strategy has to be international".

4.3 Trade-offs in Indonesia-European Union Comprehensive Economic Partnership Agreement (IEU-CEPA) Negotiations

The ongoing IEU-CEPA negotiations highlight the incompatibilities between Indonesia's development objectives and the EU's trade and sustainability standards. The discussions around environmental regulations, market access and investment restrictions illustrate the compromises required for a mutually beneficial agreement. The liberalisation of sectors critical to Indonesia's small and medium industries could have significant implications for local economies and the goal of reducing dependency on raw commodity exports.

The IEU-CEPA also presents investment opportunities, for example, to meet the renewable energy targets in Indonesia and consequently achieve sustainable production of EV batteries. It could include technology transfers, thus accelerating development of Indonesia's domestic industry.

Hence, Indonesia's policies in the nickel mining industry exhibit both alignment and misalignment with the principles of a just transition. While the country's strategy aims to enhance the economic value of its resources and invest in sustainable practices, challenges remain in ensuring environmental protection, worker safety and equitable benefits for local communities. Indonesia must address these challenges if it is to fully align its nickel industry policies with the principles of the just transition.

5 SOCIAL COSTS OF THE TRANSITION

This section explores the conflicting interests of industrial development and local community welfare, illustrated by Indonesia's IMIP in Central Sulawesi. Here, the rapid expansion of the nickel processing industry has presented many challenges to the local communities. These include environmental degradation, health crises and violations of labour rights. These issues, while seemingly disparate, are, in fact, the consequences of political-economic maneuvering to leverage Indonesia's mineral resources for global energy transition initiatives. The resulting impacts-ranging from occupational hazards to community health dilemmas-underscore the direct impacts of these policies at grassroots level. The ensuing testimonies, derived from comprehensive fieldwork conducted by INKRISPENA between 2018 and 2022, offer an insight into the challenges faced by communities and workers. These testimonies demonstrate the need to improve safety measures and highlight the systemic neglect of worker safety and health standards in the industry. They reflect the perspectives of our participants, whose identities have been carefully anonymised to protect their confidentiality.

5.1 Occupational Safety and Health (OSH) Concerns

Employees in the Morowali Industrial Park are subjected to perils such as toxic gas leakage and spills from over-processing grinding machines without adequate warning systems. The most prevalent OSH case involves the leakage of Sulphuric Gases and inhalation of SO2 gas by many workers in the vicinity of the leak site. On December 24, 2023, a catastrophic incident occurred when a smelter furnace exploded in the Morowali Industrial Park, which resulted in a halt in operations and calls for accountability. The accident claimed the lives of 21 individuals, including 8 Chinese migrant workers, and left 44 others, including 11 Chinese nationals²⁴, with minor to serious injuries. On the day of the incident, the company coerced workers into silence, forbidding the dissemination



Credits: INKRISPENA

²⁴ A union leader in Morowali (SPIM-Morowali Industrial Workers' Union) reported during a public webinar on 5 January 2024 that the death toll was 21. On the day of the incident, it was stated that the death toll was 18. "*Death toll rises to 18 in furnace explosion at Chinese-owned nickel plant in Indonesia*", The Standard, December 26, 2023.



of news and documentation related to the smelter furnace explosion²⁵. Following the tragedy, the Central Sulawesi Regional Police took decisive action, halting the operations of PT ITSS until the finalisation of the investigation results²⁶. After the incident, a new collective force emerged. On December 26, 2023, several national organisations and unions united in a press statement to denounce the episode and demand accountability from the company. When the government officials from Central Sulawesi scrutinised the safety standards by examining ITSS documents, it was found that the occupational health and safety management system (OSHMS) audit had not been completed²⁷. This incident has once again focused global attention on the inhumane working conditions in the Morowali Industrial Park, portrayed as the

leading industrial area in Indonesia. Its audit has raised serious concerns about the lack of commitment to workers' safety, as well as non-compliance with government regulations by massive companies.

5.2 Environmental and Community Health Impacts

Environmental degradation and its negative effects on community health highlight the broader ecological crisis resulting from nickel mining operations, which directly impact local communities and their economic activities.

The severe impact on the population of the mining area is primarily attributable to dust, from coal

²⁵ Sulawesi Network (2023) "Hilirisasi Nikel Disebut Tidak Semanis Omongan, Hingga Larangan Penyebaran Informasi Kecelakaan Kerja Oleh Perusahaan".

²⁶ BBC News Indonesia (2023) "Polisi tetapkan dua pekerja China sebagai tersangka kasus ledakan tungku smelter di Morowali yang menewaskan 21 orang".

²⁷ Tenggara Strategics (2024) "Safety standards under scrutiny after explosion in Morowali".

used for power generation and mining operations. The multifaceted problem of dust extends beyond environmental concerns, causing respiratory diseases in the local population, and increasing the burden of homemakers, whose workload has increased because of the relentless need to clean household dust.

"An ongoing problem between the community and the company is dust. Dust accumulation is so bad that residents must sweep and mop the floor four to five times a day. Even during mealtimes, residents have to wash dishes before eating because of the dust settling on cutlery."²⁸

Furthermore, there are health implications, particularly affecting women, who are exposed to dust and polluted water bodies while carrying out their domestic chores, and children. Women in the Family Welfare Programme of Fatufia village reflect on these problems in a Focus Group Discussion: "For women, the biggest concern is coal dust [...] this dust causes a health issue that cannot be fixed with money. Its negative impact on health exacerbates existing diseases. In the pre-mining era, residents suffered from seasonal respiratory ailments, but they could usually be treated with medicine. Now, because of coal dust, persistent year-round coughing has become commonplace. What's more, there has been an alarming increase in infectious diseases, including cases of diphtheria and dengue fever."²⁹

Besides health implications, nickel mining operations also have negative impacts on local activities. For example, fishermen around the mine suffer the impacts of industrial waste, specifically slag sludge, with repercussions on their livelihoods and work.

Waste disposal from nickel mining processing operations damages coastal areas, impacting the livelihoods of fishermen and leading to widespread



²⁸ Testimony from SYF, a resident of Fatufia Village, dated 25 August 2019

²⁹ From a Focus Group Discussion with women of the Family Welfare Programme of Fatufia Village, conducted on 31 August 2019.

unemployment. Owing to increasing sludge and sedimentation at the river mouth, fishermen are unable to fish and are forced to find alternative means of sustenance. A., a fisherman from Fatufia Village says:

"The worst problem faced by fishermen in Fatufia Village is the accumulation of mud at the beach mouth, which means boats cannot dock along the shoreline. Although we have submitted a dredging proposal to the company, the Enviro team (the Company's environmental management team) cannot start the dredging because they are worried their heavy equipment might sink in the mud. Consequently, numerous fishermen have to seek employment elsewhere, or sail to sea in areas unaffected by the south wind. Many have even taken up different professions, because being a fisherman no longer guarantees a secure income. In the premining era, Fatufia boasted 40-50 fishing families; however, the mining company has reduced this number to seven."30

Another major issue for communities residing in the villages around the mine is the frequent incidence of flash floods, caused by the alteration of river courses by the mining companies.

"...Another major concern in the relationship between companies and residents is the recurrent incidence of heavy floods currently impacting Morowali. These flash floods happen because the company alters the river's course to meet its water supply requirements. This redirection disrupts the natural flow, leading to uncontrolled overflow when there is too much water discharge. I firmly believe the company is responsible for dredging along the river, yet it has never taken any action to put the matter right."³¹

It is essential to reevaluate industrial development strategies compatible with the livelihoods and economic activities of the community, to incorporate environmental justice principles.



30 Testimony from A., a fisherman of Fatufia Village, on 26 August 2019 31 Testimony from Syf, a resident of Fatufia Village, on 25 August 2019.

5.3 Labour Rights and Industrial Relations

These testimonies highlight systemic issues with industrial relations, including a disregard for local labour laws and the rights of workers. These concerns are aggravated by general problems within the company, for example, below-minimum wages or job insecurity for both permanent and casual workers and working days exceeding 12 hours, with no breaks and insufficient time to rest at night.³²

Trade unions are at the source of other problems faced by community groups. There are numerous industrial relations cases within the nickel processing industry. Industrial relations issues, such as those illustrated below, have never received serious attention from company management. Attempts to revindicate rights are often met with sanctions, furthermore the company lacks mechanisms for resolving grievances and complaints

The precarious nature of their jobs means the workers have no job security whatsoever, as pointed out by a union activist:

"(The company conducts) layoffs and efficiency measures following losses, it is a constant struggle to obtain information about the company's financial losses, as they consistently refuse to disclose it. Layoffs are often carried out without clear rules or a structured process."³³

Conflicts arise when companies impose regulations that contravene existing laws, creating confusion and tensions between local and migrant workers. For example, the company regulations established by IMIP to govern industrial relations in the area contain frequent contradictions. On one hand, workers are obliged to adhere to the rules set by IMIP, yet, simultaneously, the management of the respective tenant companies imposes work rules regarding daily production. These companies are predominantly overseen by Chinese management, creating a dualistic dynamic that often leads to conflicts between local and Chinese workers. This situation causes confusion among local workers about which regulations are officially recognised and enforced, exacerbated by the language barrier.

The dual strategies employed by Chinese investment companies in the IMIP area, described as 'two coins of labour management,' are a strategic approach, described by Huang Weifeng. He presented 'Six Practical Tips for Building Qingshan Industrial Estate in Indonesia,' one of which advocates separating the management 'inside the wall'³⁴ from the management 'outside the wall.' This is a deliberate attempt to evade accountability and avoid resolving social and public relations issues. The primary objective of Tshingsan in establishing a park management company is to align the construction and operating conditions in PT IMIP with those in China. Hence, resolution of complex social and public relations matters is delegated to the park management company.

5.4 Community Grievances and Company-Community Relations

Companies' failure to address environmental and social issues and their superficial engagement with community leaders stand in the way of constructive dialogue. Companies are hesitant about addressing environmental and social issues stemming from their operations. Rather than fostering meaningful participation, they opt for ingratiating themselves with community leaders by providing facilities and issuing bribes. Exposing the power imbalance and prevailing corrupt practices, SA, Secretary of Fatufia village states.

^{32 &}quot;Mining for a Nickel and a Dime: How Worker Rights Are Undermined at IMIP" Mind the Gap, December 5, 2022, https://www.mindthegap.ngo/mining-for-a-nickel-and-a-dime/

³³ MSL, union activist, 16 June 2022.

³⁴ Tsingshan Iron & Steel's Indonesian business has jumped to second place in the world in less than five years. How did it do it?, https://www.etsingshan.com/Art/Art_13/Art_13_62.aspx, 11 September 2018



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"During disputes with residents, the company frequently invites them to Palu or even Jakarta for socialisation purposes. With all expenses paid, villagers receive an additional IDR 400,000 as "happy money" and a one-way allowance of IDR 1.5 million. This pattern exposes the company's strategy of entertaining community leaders to ensure they accept the company's proposed solutions, rather than engaging in honest and open dialogues for the common interest."³⁵

Residents in the mining area refuse to remain silent. They continue to fight for space for public participation in mining governance in their region. A. shares his account:

"At times, our pursuit of rights has led to violent confrontations, and I've faced legal challenges involving both Marine Police and Navy officers stationed at the port. The first incident occurred when I had to cut some ropes holding piles³⁶ together, because they obstructed boat passages across the water's surface. I was apprehended by local police officers and interrogated at the company office. [...] fortunately, the case did not go to court."³⁷

The union activists also highlighted the negative impact on the indigenous peoples of the community. During the Focus Group discussion, they raised this point:

"When the mining companies arrived, they made promises to prioritise the employment of indigenous people. However, the stark reality is that numerous workers were recruited from migrant populations. In response, local youths formed the SORAK alliance, advocating for the appointment of a Human Resources Director (HRD) from the resident community." (Testimony from a Focus Group Discussion with union activists, conducted on 3 June 2021).

³⁵ Testimony from SA, Secretary of Fatufia Village Office, on 25 August 2019.

^{36 &#}x27;Piles' refers to support pillars used during the construction process of building the loading and unloading port jetty at IMIP. These interconnected support pillars are tied together with large ropes, obstructing the entrance and exit routes of fishing boats at the river estuary.

³⁷ Testimony from A., a fisherman from Fatufia Village, dated 26 August 2019.



Residents' attempts to voice concerns are often met with silence or superficial remedies. The prevailing "business as usual" mindset reveals central government's disregard for the need to strengthen the capacities of government apparatus in the regions surrounding the mines. One example of this negligence is observed in the persistently ignored pleas from the community health centre (Puskesmas) for better facilities³⁸. Speaking about these issues, MRS, a worker at Bahodopi Community Health Centre says:

"...Currently, the lack of adequate equipment is a constant challenge for the health centre. We do not have crucial diagnostic tools, such as ultrasound and X-ray, and there is a shortage of health personnel. The health centre relies on just two resident doctors—a general practitioner and a pediatrician. Worse still, a nurse also has to assume the role of ambulance driver. The health centre operates with only two ambulance units. For emergency situations, there are only two ambulance crews, who also serve as caretakers, and one additional health worker. The ambulance is limited to transporting basic medical supplies, including anchors, oxygen cylinders, infusion devices, sterilisation fluids and first aid equipment. This means emergency personnel are ill-equipped to manage severe accident cases requiring intricate medical treatment. While the health centre provides emergency and outpatient services, it lacks hospitalisation facilities. Minor surgery can be performed, but major surgical cases require referrals to the hospital in the district capital of East Bungku, 50 kilometres from Bahodopi."³⁹

Not only have public health service institutions advocated for better facilities, but governmental bodies too, including village officials, often find themselves powerless in addressing the challenges faced by their constituents. Disregard for the Village Government's capacity to address on-the-ground issues risks perpetuating problems. Fieldwork

³⁸ For almost 10 years of operation, PT IMIP, which employs more than 70 thousand workers, only started construction of the hospital in mid-May 2022 in Padabaho village on an area of 1,337.76 square metres, located in the south of the industrial area. The construction of the hospital is funded through the company's CSR programme and will be managed by the Morowali Regency Government. "PT IMIP Builds Hospital in Morowali" (PT IMIP Bangun Rumah Sakit di Morowali), <u>https://sultengterkini.id/2022/05/13/pt-imip-bangun-rumah-sakit-di-morowali</u>/, 13 May 2022.

³⁹ Testimony from MRS, a worker at Bahodopi Community Health Centre, on 26 August 2019

shows that local governments often find themselves powerless against company actions, particularly those with environmental and social impacts. Consequently, social problems accumulate, paving the way for potential social upheaval that would stand in the way of a Sustainable Transition.

There is a significant breakdown in effective communication and engagement between mining companies and affected communities. This situation calls for greater community participation in decisionmaking processes and more investment in local infrastructure and services to mitigate the adverse impacts of mining operations.

5.5 Awareness and Self-Organisation

There seems to be an increasing awareness of the need for self-organisation among both workers and

women, reflecting a greater understanding of labour rights. An important development in Morowali is the tangible rise in worker awareness of unionisation, although it comes with its own set of challenges. In a Focus Group Discussion, union activists reflected:

"Numerous large unions have set up branches in Morowali, including the National Workers Union (SPN), the Federation of Mining and Energy Confederation of Indonesian Prosperous Labour Unions (FPE-KSBSI), the Indonesian Prosperous Labour Union (SBSI), several Company Level Unions and the Morowali Industrial Workers' Union (SPIM). So far, only the leaders have attended union meetings. However, these gatherings are not regular, and there is a lack of long-term cooperation among the unions. Joint efforts have thus far been confined to sectoral minimum wage struggles."⁴⁰



40 Insights from a Focus Group Discussion with union activists, conducted on 3 June 2021.

Recognising the constraints of advocating only within their sector, trade unions in Central Sulawesi are actively seeking partnerships with other civil society organisations (CSOs) in the region.

"We, from the undisclosed union, have consistently welcomed collaboration with any CSO. In fact, we advocate for on-site training activities to be conducted in Morowali, promoting collective efforts."⁴¹

Community women also started taking initiatives to promote health and wellbeing, indicating progress, self-organisation and solidarity. Women's awareness of the need for self-organisation has surfaced, challenging traditional conservative norms. A palpable sense of solidarity has developed among local housewives, although challenges do persist. This came across in the Focus Group Discussion with women on the Family Welfare Programme of Fatufia Village, where they stated:

"To address the health issues in our village, we organise weekly gymnastic activities aimed at promoting general wellbeing. To conduct these sessions, we invite an instructor from the kecamatan to one of the houses, as the village provides neither funding nor a dedicated space. The entire programme is self-funded, and often these activities are held discreetly, without the knowledge of our husbands, as we are concerned, they may disapprove of exercises involving limb movement. It is particularly difficult for female boarders to participate in our activities, as they focus primarily on childcare and Quranic recitals."⁴² These narratives highlight a critical gap between the emerging self-awareness among community members and the structural support needed to fully harness this potential. Addressing this gap requires not only recognition of these selforganisational efforts by external entities, such as the government and international bodies, but also tangible investments in community infrastructure and programmes that support collective action and dialogue.

⁴¹ AB, union activist, 16 June 2022.

⁴² Insights from a Focus Group Discussion with women of the Family Welfare Programme of Fatufia Village, conducted on 31 August 2019.

CONCLUSION

The global surge in demand for EVs and the critical role of nickel in EV battery production spotlight Indonesia's strategic maneuvering within the international nickel supply chain. Indonesia, leveraging its vast nickel reserves, has positioned itself to capitalise on the booming EV market by transitioning from a primary exporter of raw nickel ore to a leading supplier of high-value nickel products. This pivot, fueled by largescale foreign investment, particularly from China, and advancements in processing technology, underscores Indonesia's intent to use its natural resources for economic advancement. However, this ambition is not without its complexities, including environmental sustainability issues, the carbon-heavy footprint of nickel production and a deep-seated reliance on coalpowered energy.

At the national level, Indonesia faces multiple challenges, including occupational safety and health concerns, labour rights infringements and environmental degradation, all of which are exacerbated by the rapid expansion of its nickel industry. These issues are symptomatic of broader problems within global supply chains, where economic aspirations often clash with the requirements of environmental stewardship, human and labor rights protection, and social justice. The testimonies from workers and impacted communities underscore an urgent need for Indonesia to implement enhanced safety protocols, enforce stringent environmental standards and foster meaningful dialogues with those affected by the nickel industry's operations.

Internationally, the European Union's CRMA introduces both opportunities and challenges for Indonesia. The CRMA, aiming to decrease the EU's reliance on external sources for essential materials like nickel, requires Indonesia to align its practices with the EU's sustainability and supply security standards. The contrast between Indonesia's ambitions and the EU's regulatory framework stresses the need for strategic, sustainable and equitable solutions to navigate the complex landscape of the global nickel supply chain.

To realise its full potential and sustain its strategic position in the EV battery market, Indonesia must address these layered challenges through holistic policymaking, technological innovation and international cooperation. It must ensure a future where economic development, environmental integrity and social equity co-exist in harmony. But what might that mean in concrete terms and how can different actors take responsibility?

Drawing from INKRISPENA's four-year experience in conducting research and fostering knowledge and empowerment among worker communities in Central Sulawesi's nickel ore processing sector, and considering the challenges posed by the externalisation of CRMA and Just Transition policies from a grassroots perspective, INKRISPENA proposes the following recommendations:

6.1 National Demands

- Enhanced Safety and Environmental Standards: Implement enhanced safety protocols, enforce stringent environmental standards and ensure meaningful dialogue with community members, workers and everyone impacted by the nickel industry's operations. This includes comprehensive risk assessments, regular safety audits and transparent reporting mechanisms.
- Policy Coherence: Address inconsistencies in national policies, such as the implications of the Omnibus Law, to mitigate social impacts and align legal frameworks with sustainable development

goals. This should include revising or amending laws that currently pose risks to environmental integrity and social equity.

- Industry Diversification and Stability: Diversify the nickel industry roadmap to combat volatility in nickel prices and the shift towards LFP batteries. Strategies should include investment in research and development for alternative uses of nickel and enhancing the resilience of the nickel sector to global market shifts.
- Promotion of Just Transition and Mineral Justice Debates: Encourage and support public and academic debates on Just Transition and Mineral Justice in Indonesia. This involves funding research initiatives, organising public forums and integrating these concepts into policies to increase understanding and commitment to equitable resource management.

6.2 Regional Demands

- Protection of Migrant Workers' Rights: Ensure that the rights of migrant workers, including those from China, are fully protected. This includes legal protection against company retaliation, both within Indonesia and in their home countries, and ensuring fair labour practices are upheld.
- Nationalistic Economic Strategies: Adopt more state-controlled and nationalistic strategies for managing the nickel economy, balancing national interests with the avoidance of monopsony situations. This approach should ensure competitive and sustainable regional development.

6.3 International Demands

- Trade Policy and Investment Support: The EU should foster a trade-policy environment and support concrete investments in the Indonesia-EU CEPA negotiations that diversify supply chains and promote renewable energy investments. This includes facilitating access to renewable technologies and financing projects that transform the nickel sector from carbon-intensive to sustainable energy sources.
- Prioritise Just Transition: The EU must prioritise Just Transition principles in its engagements with developing countries like Indonesia. This involves moving away from practices that perpetuate resource imperialism in favour of policies and investments that promote sustainable development and equitable resource use.
- Capacity Development: Facilitate capacity development in Indonesia for technological advancement, meeting environmental standards and enhancing human and labour rights. This should encompass technical assistance, training programmes and knowledge exchange initiatives.

TOWARDS A GLOBAL JUST TRANSITION

Despite its efforts, the EU is lagging behind on the implementation of the 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals,⁴³ while some of its strategies and policies, like the European Green Deal, risk jeopardising partner countries' capacity to achieve the SDGs.

While environmental and climate action and social justice are two sides of the same coin, if not planned and implemented in a coherent and inclusive manner, the European green transition can result in environmentally and socially harmful impacts in the Global South.

Therefore, the <u>Global Just Transition Campaign</u> calls upon the European Union's institutions, including the future members of the European Parliament and the new European Commission, to ensure the next European Green Deal is equipped with a strong external dimension.

In this framework, the EU and its representatives shall:

✓ Lead on the implementation to the 2030 Agenda for Sustainable Development through a comprehensive EU sustainable development strategy and ensure Policy Coherence to tackle the potentially negative impacts of the EU policies, programmes, and actions on partner countries. They should conduct in-depth sustainability impact assessments (ex-ante and ex post) of its policies, programmes and actions to assess and address the external economic, social, environmental and political impacts of EU policies, especially on the most marginalised communities;

- Revise its trade policy and economic relations to incorporate sanctions on infringements of labour and environmental standards. Ensure that all EU business enterprises respect human rights; address the impacts of human rights abuses with which they are involved and ensure access to effective remedies in the event of violations occurring.
- Increase incentives, such as technical and financial support, as well as grants-based funding for loss and damage, mitigation and adaptation to enable partner countries to undertake their own Just Transition processes and mechanisms.
- Promote, protect and enable civic space and counter shrinking space for civil society. Ensure meaningful, inclusive and safe consultations and dialogues with CSOs, during the design, implementation, monitoring and evaluation of its policies. At the same time, the EU should protect human rights defenders, as well as the right to defend rights.
- Strengthen social justice during the green transition by promoting and facilitating the mobilisation of domestic and, when needed, international resources to set up and scale up Universal Social Protection Floors and systems, including income support schemes, re-skilling and up-skilling programmes, and quality public services, such as health care.

⁴³ EEB Press Release (2023), "SDGs: EU Voluntary Review does not support rhetoric of transformative and participatory change"

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