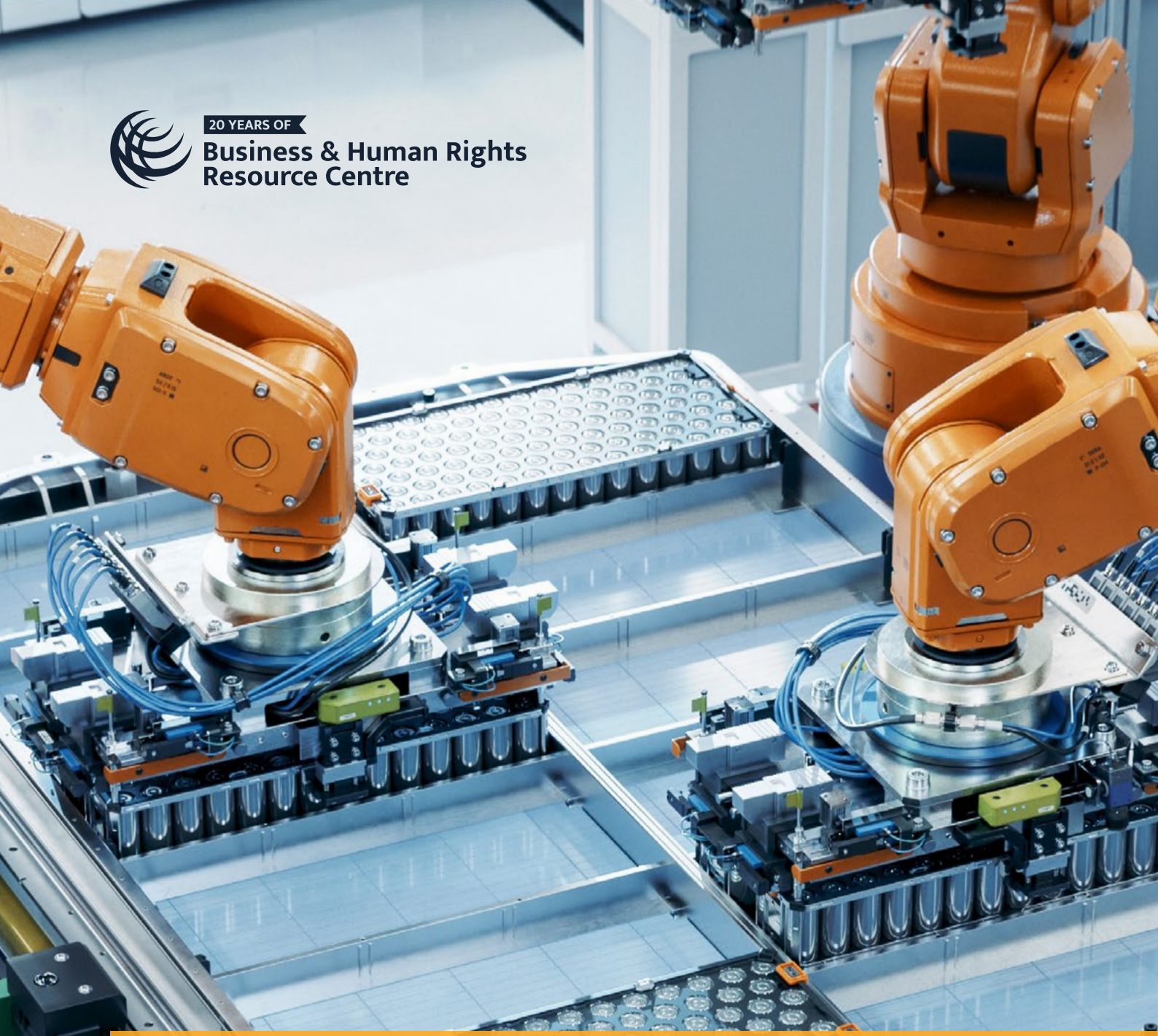


20 YEARS OF
Business & Human Rights Resource Centre

Powering electric vehicles

HUMAN RIGHTS IMPACTS OF INDONESIA'S NICKEL RUSH

JULY 2024

Contents

Executive summary

The climate crisis compels the world to urgently curb carbon emissions. Electric vehicles (EVs) have the potential to shift the transport industry away from fossil fuels. A transition to decarbonised transportation requires the extraction of minerals critical to battery production, including nickel. Demand reduction policies through better public transportation systems and reduction in the use and size of individual cars are critical to curb impacts of extraction – however, in all scenarios, demand will remain robust in the next decade. The International Energy Agency (IEA) estimates demand for nickel could grow almost tenfold by 2040. Indonesia is set to dominate nickel production, holding a 62% share of global nickel supply by 2030. Most Indonesian nickel is used to make stainless steel – but a growing share is going into battery manufacture. Unfortunately, harms linked to the mining and processing of nickel in Indonesia remain a significant concern.

Human rights and environmental abuses in Southeast Asia's nickel supply chains are well-documented, including by the Business & Human Rights Resource Centre (the Resource Centre): our 2023 research highlighted alleged harms linked to nickel mining and processing by the Rio Tuba Nickel Mining Corporation in the Philippines, and Zhejiang Huayou Cobalt (ZHC) and CNGR Advanced Materials (CNGR) in Indonesia. One year on, as global demand for EVs continues to pick up pace, we took a closer look at the abuses baked into Indonesia's nickel supply chain, expanding our research to examine the impacts of nickel mining on two small islands in Southeast Sulawesi: Wawonii and Kabaena. Given the links of Indonesian nickel to EV manufacturers, including some of the biggest name brands on the road, this analysis signals a call to action by car companies, battery makers, mining companies and investors.

Rights-respecting business operations supporting a just transition to clean energy must centre on three core principles:

- **Shared prosperity:** effective business models driving fast transitions that build worker and community rights in companies' operations and supply chains;
- **Human rights and social protection:** the duty of care of governments and companies to shield workers and communities from harm; to demonstrate due diligence to minimise human rights and environmental risks; and to ensure social protection, retraining and creating new decent work; and
- **Fair negotiations:** guarantees for communities and workers that negotiations will be fair throughout operational life-cycles and when accessing remediation for harm, including inclusive community consultation and robust implementation of the principles of free, prior and informed consent (FPIC) for Indigenous Peoples.

Governments, investors, renewable energy companies and the EV industry alike must adhere to these core principles in order to deliver a truly just transition.

The research process employed for this briefing involved an on-the-ground investigation conducted by the Resource Centre's local partner, Satya Bumi, with particular focus on Kabaena island. The Resource Centre also conducted desk research, citing reports by Mighty Earth, Satya Bumi and Climate Rights International, among other sources. Finally, the Resource Centre sought to increase corporate accountability and transparency by reaching out to companies mentioned in the research reports and asking them to comment on their exposure to risk of being linked to environmental and human rights abuses in nickel mining operations in Indonesia.

Key findings

Nickel mining has brought widespread clearing of forests across Indonesia's nickel mining concessions. Many of these forests are key natural carbon sinks and critical biodiversity areas. The climate impacts of deforestation are exacerbated by emissions from Indonesia's captive coal plants, which power nickel processing at the country's industrial parks: **Indonesia Morowali Industrial Park (IMIP)** and **Indonesia Weda Bay Industrial Park (IWIP)**. Further, worker safety continues to be a critical issue of concern at these industrial parks.

Nickel mining in Indonesia has also spread to small islands. On Wawonii island, the incoming nickel mining industry has resulted in land clearing in forest areas above villages, causing contamination of communities' water supply. Access to food has also been an issue as dust from the mines covers local crops. Meanwhile, nickel mining on Kabaena island is threatening the Indigenous Bajau people's way of life and the delicate marine ecosystems they depend on.

Tracking nickel supply chains remains challenging due to a widespread lack of transparency from companies. However, research by Mighty Earth and Satya Bumi has shown potential links from nickel mines on Wawonii and Kabaena islands to EV manufacturers, including some of the most established in the sector. The Resource Centre invited 52 companies in the global EV value chain with potential supply chain links to Indonesia's nickel mines to respond to allegations of harms linked to deforestation and operations in the country. Only six responded, highlighting significant room for improvement on accountability.

Key recommendations

Recommendations to nickel mining companies:

- Respect Indigenous Peoples' land and forest rights and the right to FPIC, including their right to define the process by which FPIC is achieved and to withhold consent.
- Work to the international standards of the United Nations Guiding Principles on Business and Human Rights (UNGPs), ensuring a proactive approach that consults those at risk of abuse and their representatives.

Recommendations to nickel refining companies:

- Ensure prevention and mitigation of air, water and soil pollution from industrial activities.
- Immediately stop the construction of all new coal plants and announce a time-bound plan to replace existing coal plants with renewable energy sources.
- Share all information related to future expansion, deforestation, land acquisition and industrial activities with the public, ensuring such information is accessible to local communities.

Recommendations to EV companies:

- Adopt a public commitment to responsible mineral sourcing and undertake supply chain due diligence in line with OECD Due Diligence Guidance for Responsible Supply Chains of Minerals.
- Implement human rights due diligence processes throughout the business cycle, built on worker and community engagement that is safe and inclusive: adopt and effectively communicate zero-tolerance policies for abuse of communities, workers and human rights defenders (HRDs), including labour rights activists and Indigenous Peoples, land and environmental defenders, and provide guarantees of protection and non-retaliation for participants in these processes.
- Increase transparency about EV supply chains by providing public information about all companies in supply chains engaged in mineral mining, refining, smelting and battery production.
- Leverage buying and collective EV industry power to pressure mines, mineral processors, and/or suppliers to change practices that cause environmental or human rights harm.

Recommendations to investors:

- Commit to rights-respecting investments: undertake and promote analysis consistent with the UNGPs for all transition minerals mining and renewable energy investments. Evaluate impacts of investee companies on people and the planet, rather than solely focusing on financial materiality.

Recommendations to the Indonesian Government:

- Enforce laws, particularly those ensuring environmental quality standards are complied with, as well as those imposing sanctions on abusive companies.
- Pass and enforce legislation mandating corporate human rights and environmental due diligence, inclusive of corruption risks, throughout the transition mineral mining lifecycle and based on inclusive consultation and shared benefit with rightsholders, such as Indigenous Peoples and workers.
- Immediately stop issuing new nickel mining licences in forested areas. Moreover, in view of the Constitutional Court's ruling on the prohibition of nickel mining on small islands, immediately stop issuing mining permits on small islands.
- Immediately stop the permitting of all new coal plants, including captive coal plants used in industrial areas.
- Respect and protect affected communities' rights to health, land, food, livelihood, freedom of expression and FPIC.

Introduction

The severity of the climate crisis demands urgent action to curb carbon emissions. Indonesia, through its Just Energy Transition Partnership (JET-P), will receive around USD 20 billion over the next three to five years to develop renewable energy infrastructure and phase out fossil fuels. Along with a shift to renewable energy sources, more sustainable means of transportation such as electric vehicles (EVs) will play a crucial role in the transition. For the foreseeable future, the EV industry will continue to grow, with an increasing number of players entering the market. This means an increase in demand for EV batteries, which contain nickel, a key transition mineral.

Until now, Indonesian nickel has been predominantly used in the manufacturing of stainless steel. But with around 40 kilograms of nickel needed to power the average EV, Indonesia's nickel supply chains are increasingly crucial for the industry. According to the IEA, global nickel demand for EV batteries is projected to increase 41 times by 2040. Demand reduction policies through better public transportation systems and reduction in the use and size of individual cars are critical to curb impacts of extraction – however, in all scenarios, demand will remain robust in the next decade. Meanwhile, end users of minerals are also increasingly under pressure to make sure they clean up their mineral supply chains. For example, the new European Union (EU) Battery Regulation introduces unprecedented requirements for end-users of battery minerals to implement effective due diligence along their supply chains.

The Resource Centre's 2023 research examined the human rights and environmental abuses in Southeast Asia's nickel supply chains in the Philippines and Indonesia, revealing serious harms to communities living near nickel mining and processing sites, including water pollution, destruction of forests, encroachment on Indigenous Peoples' land, and impacts on personal health.

One year on, we've taken a deeper dive into nickel supply chains in Indonesia, the world's biggest nickel producer. Home to 21 percent of the 100 million metric tons of nickel reserves in the world, Indonesia produced 193.5 million tons of nickel ore in 2023 alone. In 2024, ore output is estimated to increase by 5 to 10 percent. About 84 percent of the country's nickel mining and production operation permits are in Sulawesi province, and the highest number of permits are located in Southeast Sulawesi, which contains around 1.8 billion tons of nickel reserves. Sitting on the waters of this province are two vulnerable islands: Kabaena and Wawonii. Indonesia's Constitutional Court recently ruled that small islands require special protection from abnormally dangerous activities, such as mining, as they threaten the lives of all creatures and ecosystems in these vulnerable areas.

This year's analysis discusses additional impacts of nickel mining operations in Indonesia and nickel processing at the country's industrial parks, which were not covered in our 2023 briefing. These impacts relate to deforestation, climate change and worker safety. We also examined mining impacts on Wawonii and Kabaena, where nickel mining continues despite the dangers posed to the environment and local communities.

The research process for this briefing involved an on-the-ground investigation, with a particular focus on Kabaena island. For this purpose, the Resource Centre partnered with Satya Bumi, a local organisation advocating for environmental and human rights in Indonesia. Satya Bumi carried out direct field investigations to gather information and validate any instances of human rights violations and environmental impacts. They conducted interviews with 52 individuals from six villages across four districts on Kabaena island. The Resource Centre also conducted desk research, referencing reports by Mighty Earth and Satya Bumi to establish supply chain links of Indonesian nickel to EVs; and by Climate Rights International (CRI) to highlight climate impacts caused by coal plants that power Indonesia's industrial parks, among other sources.

Nickel mining in Indonesia

"The sea, which once provided us with life, now feels like an unfamiliar and hostile place.

Mother and resident of Baliara, Kabaena island, interviewed by Satya Bumi

In 2022, Indonesia was responsible for supplying almost half of the world's nickel. 90 percent of nickel ores are currently being sourced from four provinces in Central and Eastern Indonesia – Central Sulawesi, South Sulawesi, Southeast Sulawesi, and North Maluku. Two huge industrial parks housing nickel refineries are located in Central Sulawesi and North Maluku: **Indonesia Morowali Industrial Park (IMIP)** and **Indonesia Weda Bay Industrial Park (IWIP)**.

Indonesia's industrial parks and nickel refineries are dominated by Chinese companies. The country's success in supplying nickel to the world cannot be separated from the financial boost provided by Chinese investment. Despite monetary gains, the social and environmental costs of nickel mining and processing in Indonesia continue to accumulate. In July 2023, the Resource Centre analysed the scale and scope of human rights and environmental impacts of Chinese overseas investment in transition minerals across the globe. Indonesia recorded more allegations of abuse than any other country, with a total of 102 allegations of abuse recorded from January 2021 to December 2022.

Human rights and environmental impacts

Deforestation

There are 329 nickel mines in Indonesia, according to a report published by Mighty Earth in April 2024. Nickel mining has brought widespread clearance of endemic rainforests, many of which are key natural carbon sinks and critical biodiversity areas. Some of the mines are also alleged to be illegally operating in production forests (which are set aside for forestry uses) and illegally clearing protection forests (which are set aside to protect life and ecosystems). Other mines operate in harmful proximity to oceans, which can be considered illegal depending on regulations by local governments having jurisdiction over such areas.

Mighty Earth estimates the amount of forest clearance carried out across Indonesia's nickel concessions is at least 76,030.71 hectares, an area bigger than the whole land area of Wawonii island. This estimate comprises all tree cover loss within the legal boundaries of nickel concessions. Mighty Earth's assessment is most likely incomplete as it does not include forest clearance in unlicensed nickel mines.

Many of the forests are being cleared by 25 of the highest-deforesting nickel mines in Indonesia. These areas have intact blocks of High Carbon Stock forests or forests that have large amounts of stored carbon. These forests need to be protected due to their value as carbon sinks. Their continued clearance will contribute to the effects of the climate crisis.

Climate impacts

Aside from deforestation, Indonesia's captive coal plants also contribute to the climate crisis. Industrial parks in Indonesia are mainly powered by captive coal plants – power sources that directly feed into the parks' operations and do not connect to the electricity grid. Partly due to these recent build outs of captive coal plants, Indonesia's coal generation is peaking at record levels. Coal consumption in the country increased by 33 percent in just a year's time (from 2021 to 2022), marked by a 20.3 percent increase in the country's greenhouse gas emissions. Coal consumption in Indonesia's industrial parks accounts for more than 15 percent of the entire country's coal use.

To illustrate the scale of coal use in Indonesia's industrial parks, **PT IWIP**, when fully operational, will have 12 new coal-fired power plants totalling 3.78 gigawatts (GW) of capacity. Such an amount is greater than the capacity of coal plants in operation in 74 separate countries, including Brazil, Romania and Spain. Indonesia is projected to have more than 30 GW of captive coal capacity by 2030 due to the significant build out of these captive coal plants.

New coal power projects by Chinese companies have surfaced notwithstanding China's pledge in 2021 to discontinue financing and construction of new coal-fired power plants overseas. A report by the Centre for Research on Energy and Clean Air identified two new coal power projects, namely: PT Halmahera Persada Lygend Nickel Smelter Phase III Units 5-8, invested by **Ningbo Lygend Resources & Technology** and undertaken by **China Energy Engineering Group Tianjin Electric Power Construction**; and Weda Bay power station Unit 12, financed by **Tsingshan** and contracted to **Henan Province Second Building Engineering Development**. The Resource Centre reached out to these companies but did not receive a response.

Despite Indonesia's commitments under its JET-P, in which the government's objective is for renewable energy to account for 44 percent of the national electricity mix by 2030, captive coal plants continue to be built. Nickel processed in Indonesia's coal-powered industrial parks ironically feed into the production of EVs, which are intended to reduce carbon emissions.

Indonesia's captive coal plants drive climate change, increasing the vulnerability of local communities to its most severe impacts. Such impacts include sea level rise and increased flooding. For coastal communities near Indonesia's industrial parks, these impacts are disastrous.

Photo by Satya Bumi

Worker safety issues at industrial parks

The Resource Centre's Transition Minerals Tracker monitors risks of human rights abuses across all geographies associated with significant and large-scale mining operations of six key transition minerals, including nickel. As revealed by analysis of tracker data in 2024, labour rights abuses, including risks of severe hazards and occupational health issues, remain a stark reality in the transition mineral mining sector, with workers impacted in a quarter (163 cases) of alleged abuses recorded from 2010 to 2023.

Worker safety in Indonesia's industrial parks has been a critical issue in the country for the past decade. According to research by Trend Asia, smelters in these industrial parks, owned mainly by Chinese companies, are dangerous areas for workers due to their unsafe conditions. Trend Asia monitored news in digital media from 2015 to 2020 on smelter workplace accidents and identified 68 workplace incidents in 15 smelters in Sulawesi and Maluku Islands, where most Indonesian smelters are located. These workplace incidents resulted in 76 injured workers and 57 deaths. Ten of those recorded deaths were suspected to have been caused by suicide.

Worker safety issues in industrial parks have been under investigation by Komnas HAM, Indonesia's National Human Rights Commission. In February 2023, three Chinese workers at PT IMIP filed a complaint with the Commission alleging poor workplace conditions. The workers stated they *"endured a lot of physical, psychological, financial damages to their reputation as human beings."* Their lawyers alleged the workers did not have proper safety and respiratory gear, worked long hours without breaks, and suffered pay cuts. In addition, passports belonging to Chinese nationals were withheld. The workers were also not allowed to unionise.

More recently, on 24 December 2023, a fire broke out at a nickel smelter owned by **PT Indonesia Tsingshan Stainless Steel (ITSS)**, which is controlled by **Tsingshan** in PT IMIP. Twenty people were killed, including 12 Indonesian workers and eight foreign workers, according to the Central Sulawesi Regional Police. In addition to the fatalities, 29 people were severely injured. The fire sparked a protest at the nickel smelter complex on 27 December 2023. Around 100 workers demanded the closure of all smelting operations at IMIP until a full investigation into the fire was completed. The workers also called for a 20 percent increase in wages. PT IMIP's spokesperson said the company would enhance safety measures. The ITSS incident was immediately followed by another fire at a nickel smelter owned by **Jiangsu Delong Nickel Industry** subsidiary **Gunbuster Nickel Indonesia** on 28 December 2023. Two days later, a mine excavation landslide killed two workers at a **Sumber Permata Mineral** nickel mine, also in IMIP.

During her visit to the nickel smelters, Commissioner Anis Hidayah of Komnas HAM found a clear lack of protection for workers. She said: *"there was no effective monitoring for the workers by the labour inspectors,"* and that *"this applied to both the local and the Chinese workers."*

Workers alleged they had personally seen and experienced accidents that result in serious injuries or deaths nearly every week. An absence of official data means the actual number of worker deaths and incidents in Morowali could be significantly higher. In addition to the occupational hazards concerning worker safety, activists argue people in Morowali are also facing health risks due to severe pollution in the areas surrounding mining facilities, which often leads to respiratory issues.

Worker safety and health issues plaguing IMIP and IWIP can be considered as logical consequences of the troubled Job Creation Law, which may have influenced compromised safety standards in a bid to attract more investors to Indonesia.

Nickel mining on small islands

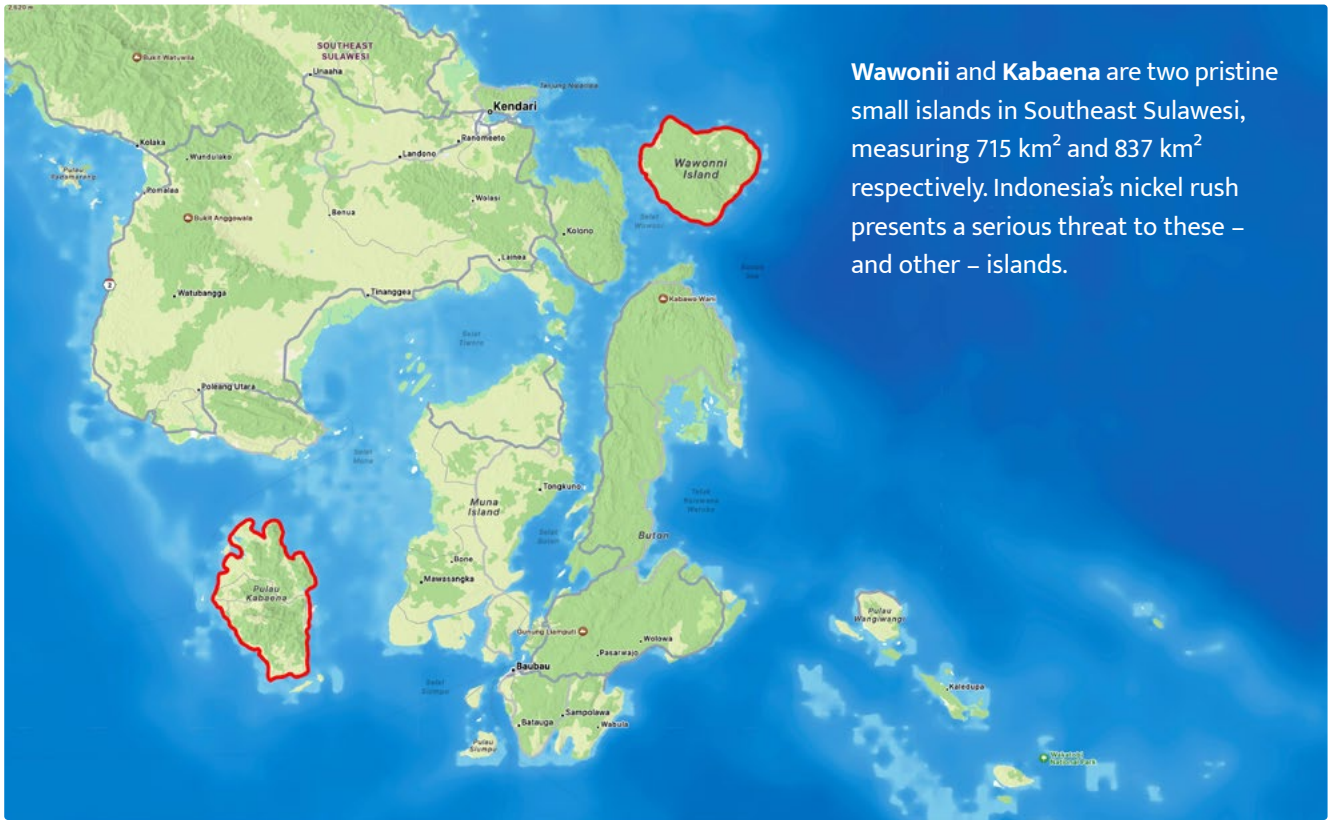
According to Law No. 1 of 2014 on the Amendment to Law No. 27 of 2007 on the Management of Coastal Zones and Small Islands, mining activities on islands under 2,000 km^2, which are categorised as "small islands", are not priorities. Article 35(k) of the Law stipulates that *"In the utilisation of Coastal Areas and Small Islands, every person is directly or indirectly prohibited from conducting mineral mining if it technically and/or ecologically, and/or socially and/or culturally causes environmental damage and/or environmental pollution and/or detrimental to the surrounding Community."* In practice, however, mining permits have been granted for activities on small islands. Inconsistencies in government legislation and policy have created a loophole in the granting of mining permits.

Since 1967, mining permits have been issued by the central government. However, after Reformasi in 1999, permits were issued by regional governments. In 2020, the nomenclature of business permits was changed. Law No. 3 of 2020 on Amendments to Law No. 4 of 2009 on Minerals and Coal Mining strengthens the central government's authority to issue permits, using the business license.

Law No. 3 of 2020 also deleted Article 7 of Law No. 4 of 2009, which provided for the authority of the provincial government to issue licenses. The provincial government may still issue permits if there is a delegation of authority from the central government to the regions under certain conditions. In addition, the designation of mining areas is regulated by the Regional Regulations (Perda) on Spatial and Regional Planning (RTRW), which is the responsibility of the regional government.

Frequent changes in regulations make the management of mining permits difficult.

TAPaK, the Advocacy Team for Small Island Conservation, noted that 218 mining business permits have been granted for over 274,000 hectares on 34 small islands in various regions in Indonesia, including on Wawonii and Kabaena islands. Fifteen mining permits covering Wawonii island have been issued by the government. Eleven of those permits were issued for nickel mining. On Kabaena Island, 25 nickel mining permits have been issued. As of 2024, according to Indonesia' Ministry of Energy and Mineral Resources, 15 nickel mining companies are actively operating.



Wawonii and **Kabaena** are two pristine small islands in Southeast Sulawesi, measuring 715 km^2 and 837 km^2 respectively. Indonesia's nickel rush presents a serious threat to these – and other – islands.

Wawonii Island

Since nickel miners arrived in 2017, local communities on Wawonii island have been fighting back, a struggle mostly led by women. Residents on the island greatly depend on agriculture-based livelihood to survive, growing and selling produce, such as coconuts, cashews, nutmeg and cloves. When nickel mining started on the island, it polluted the environment, including the water, which is the most important resource for the local people. Water once safe for drinking has become murky and undrinkable. According to a local resident, land clearing in forest areas above villages caused the contamination of the community's water supply. During the rainy season, tap water turns brown, and some women have to walk several kilometres to get drinking water. Access to food is also a problem, as dust from the mines covers local crops.

The Wawonii people continue to resist land clearance for mining activities. In December 2023, women defenders clashed with PT GKP miners, who asserted their operations to be legal. Local residents also believe **PT GKP** is trespassing on their land.

PT GKP says its mining area covers less than 1 percent of Wawonii Island and that the company is wrongly blamed for environmental problems. The company adds that heavy rains are the main cause of water contamination, and that they have helped the community by building a ring well and supplying water trucks when water turns turbid.

The Indonesian Chamber of Commerce claims nickel mining has ushered in a new era of growth and prosperity for the people. Wawonii residents reject this claim, arguing nickel mining has not brought them economic prosperity. The Head of the Regional Development Planning Agency of Southeast Sulawesi agrees with the Wawonii residents, highlighting poverty rate data indicates rising mining revenue shows "no correlation with community welfare."

In April 2023, Wawonii residents filed a legal challenge with the Jakarta State Administrative Court (PTUN) against **PT GKP** Forest Area Borrow-to-Use Permit (Izin Pinjam Pakai Kawasan Hutan/IPPKH). The permit, which covers an area of 707.10 hectares on the Island, was used to carry out the company's nickel mining activities. In its ruling in September 2023, the Court decided to cancel **PT GKP**'s IPPKH and ordered the company to stop all mining activities on Wawonii Island. However, the company resumed its mining activities after the Jakarta State Administrative High Court (PTTUN) ruled in favour of **PT GKP**'s appeal against the PTUN's September 2023 decision in January 2024.

Further, **PT GKP** also challenged the ban on mining on small islands by filing a petition for judicial review with the Constitutional Court. The Court ruled against **PT GKP** stating the company's argument could not be considered further as it had no relevance.

TAPaK argues that this pronouncement by the Constitutional Court can be cited as a basis for the Indonesian Government to cease mining on all small islands in Indonesia – including Wawonii and Kabaena.

Photo by Satya Bumi

Kabaena island

Satya Bumi, together with WALHI Southeast Sulawesi, highlighted the reckless forest clearing and marine pollution caused by the 25 nickel mining concessions on Kabaena. Many of these permits were issued after 2014, the year Law No. 1 of 2014 on the Amendment to Law No. 27 of 2007 on the Management of Coastal Zones and Small Islands was enacted, making such permits legally infirm.

Kabaena is home to the Bajau Indigenous People, known as the last sea nomads, whose great maritime tradition dates back hundreds of years. The Bajau live on stilted houses in the sea and are renowned for their exceptional diving skills and reliance on the sea for their livelihood. Their ancestral way of fishing involves diving to depths of up to 30 metres and archery using traditional tools. Nickel mining in Kabaena threatens the traditional Bajau way of life and the delicate marine ecosystems they depend on.

Baliara Village, West Kabaena, is the most populous Bajau settlement on the island. In this village, the seawater has changed colour to reddish brown. Residents claim this change in the water has taken place over the past 10 years since mining began. Locals who used to be able to fish for food under their houses now must go further, up to 20 miles out to sea, to forage and feed their families.

A fisherman from Baliara explained: *"before the water turned red, I only needed two litres of diesel to go out to sea, two miles were enough to meet my family ends. But now, I require up to 15 litres of diesel, to go further 20 miles away, just to bring back an uncertain amount of fish."* As a result, the Bajau community in Baliara has been left in debt. Another resident said *"I have been living as a fisherman for more than 35 years. A moment to reminisce, a single fishing trip could yield over 15 kilograms of fish, I can send my kids to school. Now, with fish becoming scarcer, we are forced to sail up to 20 miles just to catch a meagre one to five kilograms of fish."* Community members are also suffering from health problems they attribute to direct contact with the polluted seawater.

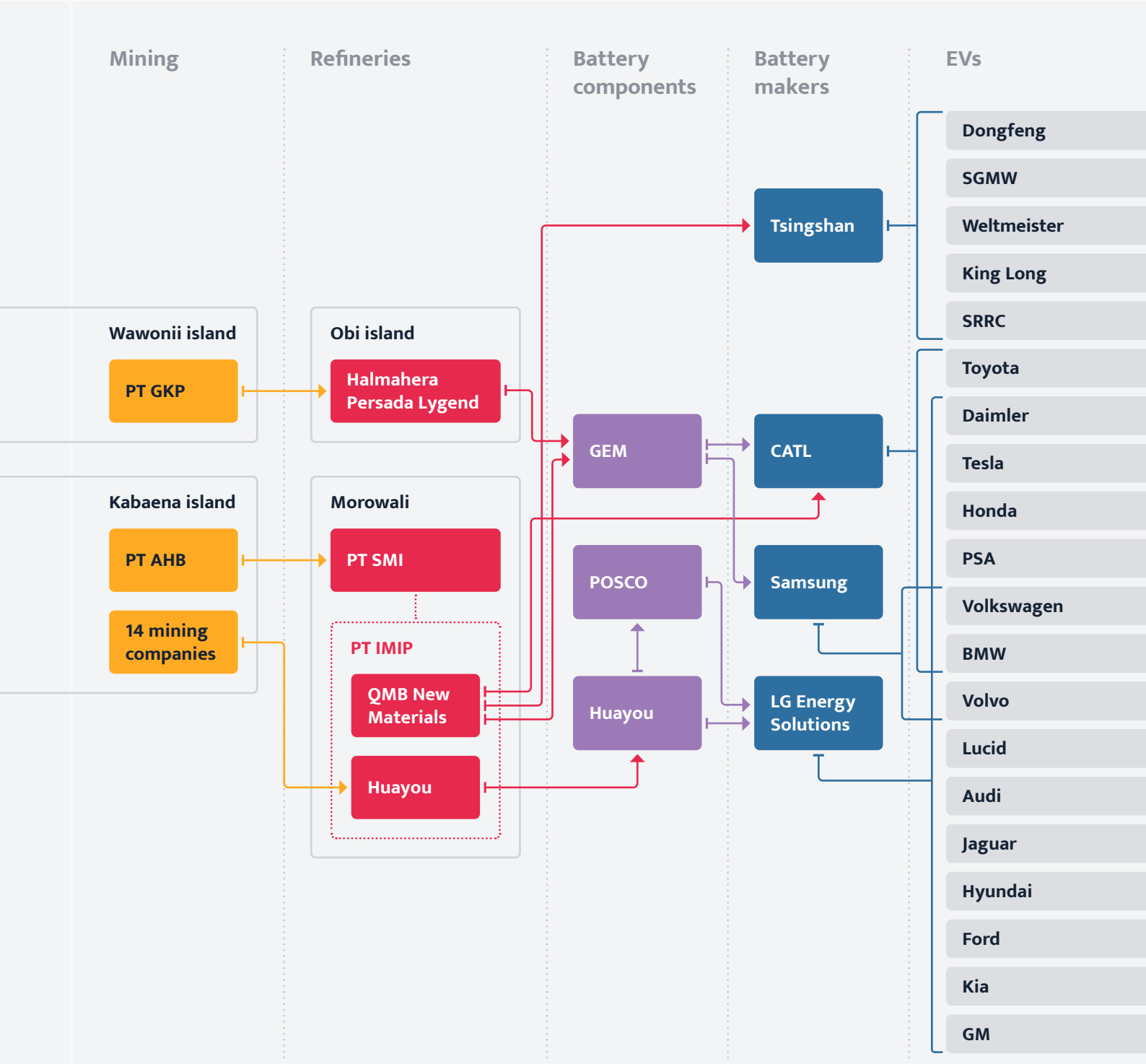
In Baliara, three children under the age of five reportedly drowned in murky waters caused by mine waste. Nickel mining has drastically affected the traditions of the Bajau, who teach their children to dive from the age of three. In the last decade, however, the Bajau no longer allow their children to swim and learn to dive in the sea because of the perilous water conditions. A mother in Baliara explained: *"we used to teach our children to dive from the age of three. We are a Bajau community, diving is in our culture. Due to the sea turning red and filled with mud, we no longer allow them to swim or learn to dive in the ocean because it is so easy for kids to get skin-blemished. The sea, which once provided us with life, now feels like an unfamiliar and hostile place."* Satya Bumi and WALHI Southeast Sulawesi see this particular impact on Bajau culture as a serious human rights abuse caused by nickel mining.

Most of the mining concessions on Kabaena Island overlap with forested areas, with only three situated outside those zones. Despite the inactivity of some mines, their presence has led to deforestation and abandoned mining lands, adversely impacting both Kabaena's ecosystem and the local population.

Satya Bumi's research methodology for Kabaena island involved both direct field investigations and desk studies. Prior to conducting the direct field investigations, desk studies were employed to delineate the areas on Kabaena Island where potential human rights violations or environmental impacts were likely to occur. Direct field investigations were then undertaken to gather information and validate any instances of human rights violations and environmental impacts. Satya Bumi conducted interviews with 52 individuals from six villages across four districts on Kabaena Island. Of those surveyed, 71 percent reported impacts on their personal health, 83 percent reported disruption to their livelihoods, and 94 percent reported environmental damage. Interviews with local residents also revealed reports that no meaningful consultation had taken place and FPIC was not sought.

Potential links to EV supply chain

Tracking nickel supply chains is extremely difficult due to widespread lack of transparency from mining companies, nickel refineries and EV manufacturers. Mighty Earth's report maps (in Figure 5) a potential supply chain from Indonesia's nickel refineries (including their owners) to EV manufacturers which reportedly sell models that contain Indonesian nickel refined by Chinese majority-owned, Indonesia-based nickel refineries. Mighty Earth references the Rosa Luxemburg Institute as the basis of information for this potential supply chain. For this analysis, the Resource Centre presents a simplified version of Mighty Earth's potential supply chain, linking the chain to nickel mining on Wawonii and Kabaena islands.



According to Forest Watch Indonesia, there are 11 nickel mining concessions operated by nine companies on Wawonii island:

No.	Company	District Location	Area
1	**PT Natanya Mitra Energy**	West and North Wawonii	**5,506.94 ha**
2	**PT Natanya Mitra Energy**	East and North Wawonii	**4,569.54 ha**
3	**PT Gema Kreasi Perdana**	West and Central Wawonii	**1,042.78 ha**
4	**PT Gema Kreasi Perdana**	Southeast Wawonii	**1,047.49 ha**
5	**PT Cipta Puri Sejahtera**	West Wawonii	**2,241.56 ha**
6	**PT Kimco Citra Mandiri**	N/A	**1,039.94 ha**
7	**PT Arlington Nickel Plant**	Southeast and South Wawonii	**5,506.49 ha**
8	**PT Bumi Konawe Mining**	South and Central Wawonii	**3,495.51 ha**
9	**PT Investa Pratama Intikarya**	South Wawonii	**269.37 ha**
10	**PT Kharisma Kreasi Abdi**	South Wawonii	**634.70 ha**
11	**PT Hasta Karya Mega Cipta**	South Wawonii	**1,491.17 ha**

Based on Mighty Earth's potential supply chain map, nickel from Wawonii Island is allegedly refined by **Halmahera Persada Lygend** on Obi Island. Since the **Harita Group** owns 68.1 percent of Halmahera Persada Lygend, Wawonii residents claim nickel ore mined by **PT Gema Kreasi Perdana (PT GKP)**, a subsidiary of Indonesia-based Harita Group, is sent to Halmahera Lyjend for processing. According to Mighty Earth, nickel processed on Obi Island is then shipped to battery component maker, **GEM**, in China. The battery components then reach battery makers **CATL** and **Samsung**, which allegedly supply batteries to EV companies.

On Kabaena island, there are 15 active mining companies that are allegedly linked to EV manufacturers. These companies are as follows:

No.	Company	District Location	Area
1	**PT Rohul Energi Indonesia**	Central Kabaena	**3,450 ha**
2	**PT Tonia Mitra Sejahtera**	Central and East Kabaena	**5,891 ha**
3	**PT Agrabudi Baramulia Mandiri**	Central, East, and West Kabaena	**3,940 ha**
4	**PT Manyoi Mandiri**	West Kabaena	**1,732 ha**
5	**PT Trias Jaya Agung**	North and West Kabaena	**512 ha**
6	**PT Timah Investasi Mineral**	West Kabaena	**300 ha**
7	**PT Bakti Bumi Sulawesi**	South and Main Kabaena	**4,888 ha**
8	**PT Almharig**	West and South Kabaena	**2,018 ha**
9	**PT Margo Karya Mandiri**	South Kabaena	**2,128 ha**
10	**PT Tambang Bumi Sulawesi**	South Kabaena	**1,533 ha**
11	**PT Tekonindo**	South Kabaena	**531 ha**
12	**PT Anugrah Harisma Barakah**	South Kabaena & Telaga Raya	**2,527 ha**
13	**PT Arga Morini Indah**	Telaga Raya	**2,835 ha**
14	**PT Arga Morini Indotama**	Telaga Raya and East Kabaena	**1,026 ha**
15	**PT Narayana Lambale Selaras**	East Kabaena	**414 ha**

Source: List of the 15 active mining companies in Kabaena (Satya Bumi, 2024)

Nickel ore from Indonesia-based **PT Anugrah Harisma Barakah (PT AHB)** is purchased and transported to jetties, including PT Sulawesi Mining Investment (SMI) jetty in Morowali. According to Mighty Earth, PT SMI owns 25 percent of PT IMIP, which in turn owns 10 percent of **QMB New Materials Energy**. Nickel from PT AHB, which is transported to PT SMI is allegedly linked to QMB New Materials Energy. Refined nickel from QMB New Materials Energy is then allegedly sent to China-based companies **GEM**, **CATL**, and **Tsingshan**. The nickel from battery components and batteries then makes its way to EV manufacturers.

The other 14 active mining companies on Kabaena supply to **Zhejiang Huayou Colbalt Ltd**, according to the company's own report. As can be seen in Mighty Earth's report, Zhejiang Huayou Colbalt Ltd owns a nickel refinery (**Huayou Nickel and Cobalt**) in PT IMIP and is also a battery component maker. Nickel from these 14 mining companies is allegedly used by battery maker **LG Energy Solutions**, which supplies batteries to EV companies. **POSCO** is another battery component maker that allegedly supplies to LG Energy Solutions. When the Resource Centre invited companies to respond to allegations mentioned in the Mighty Earth report, POSCO confirmed its battery material company sources precursor materials containing nickel through Huayou. Following the potential supply chain map, the processed nickel from Huayou (allegedly sourced from Kabaena) is also linked to POSCO, and therefore linked to LG Energy Solutions.

Company responses

The Resource Centre reached out to companies mentioned in the Mighty Earth Report and companies which have not responded to CRI on its report and received these responses:

Mining sector

Only one mining company, **PTVI**, responded. The company's response was comprehensive, addressing each allegation linked to the company in the Mighty Earth report. Regarding the allegation that PTVI's mining blocks located at Sorowako, Bahodopi and Pomalaa are among Indonesia's 10 highest-deforestation nickel mines, PTVI clarified that the *"...Sorowako operation block is currently in the operational phase, while the other two blocks are still under construction."* PTVI further explained that *"...between 2014 and 2022, in the Sorowako operation, PTVI used 1,365.1 hectares of forested area while simultaneously rehabilitating 842.7 hectares, leaving only 522.4 hectares as active mining open area."*

With regard to the allegation that **PTVI** is one of the nickel mines in Indonesia that has illegally cleared Production Forest, the company mentioned that it already obtained a Forest Borrow and Use Permit for exploration activities in Pomalaa block in 2018 and that it also holds a Forest Borrow and Use Permit for production operation activities in Pomalaa block since 2021.

Lastly, on the allegation that the **PTVI** concession area overlaps with indicative High Carbon Stock forests, PTVI explained that *"...within the total Sorowako concession area of 70,566 hectares, only about 10% (6,957 hectares) has been opened, with 3,375 hectares already rehabilitated."* With regards to the Pomalaa block, PTVI mentioned a biodiversity baseline study in 2021 which categorised forest areas in the block as carbon storage, with no mention of high carbon stock forests.

POSCO responded by first clarifying that the company named POSCO mentioned on page 24 in the Mighty Earth report is **POSCO Future M**, a secondary battery material company of the POSCO Group, which does not directly purchase nickel produced in the IMIP and IWIP regions in Indonesia. POSCO mentioned, however, that *"...POSCO Future M sources precursor materials containing nickel through three Chinese companies (Jiana, CNGR and Huayou)."* POSCO explained that *"...POSCO Future M actively manages its supply chain based on a mineral purchasing policy that integrates considerations for environmental and human rights."*

EV manufacturers

The Resource Centre was only able to obtain responses from four out of the 21 EV manufacturers we reached out to during the research process. These four EV manufacturers are **Volkswagen**, **BMW**, **Mercedes-Benz** and **Tesla**. All four are included in the second annual Leaderboard on automotive supply chains published by Lead the Charge, which evaluates 18 of the world's leading automakers on their efforts to eliminate emissions, environmental harms and human rights violations from their supply chains. Out of the four, **Mercedes-Benz** had the highest total score of 40 percent and ranked second overall, followed by **Tesla** in third place with a total score of 35 percent. **Volkswagen** had a total score of 26 percent and ranked sixth overall, followed by **BMW** in seventh place with a score of 24 percent.

In its response to the Resource Centre, **Mercedes-Benz** mentioned that it does not currently source nickel directly but maps *"...nickel supply chains in great detail in an ongoing process, as they are dynamic and very complex with many tier stages."* Mercedes-Benz further explained that the company works closely with direct suppliers and oblige them to pass on its Responsible Sourcing Standards within the supply chain. Mercedes-Benz referred to its Raw Materials Report which contains an assessment which involves: (1) Increasing transparency along raw material supply chains, (2) Identification of risk hotspots in these supply chains, and (3) Define and implement measures for the risk hotspots and review their long-term effectiveness. In responsible sourcing of transition minerals subsection of the leaderboard, where companies are specifically assessed on their performance in addressing risks related to transition mineral sourcing, Mercedes-Benz came in third place, with a score of 42 percent. According to the leaderboard, Mercedes-Benz discloses its process to map its mineral supply chains to the point of extraction. However, the company no longer discloses a full list of the smelters or refiners in its supply chain.

Tesla responded to the report by CRI, by stating its commitment to ensuring their suppliers respect human rights and protect the environment. Tesla mentioned that *"...the best way to promote responsible sourcing is to remain engaged and encourage corrective actions."* Tesla referred to its 2022 Impact Report (specifically pages 171-172) and mentioned measures the company implemented in its nickel supply chain, which included visits to nickel sites in Indonesia in May 2022 and December 2023, 28 audits against internationally-recognised responsible production standards, and ongoing discussions with NGOs related to appropriate standards for nickel mining, among others. Tesla had the biggest score increase by any company in any subsection in the Lead the Charge leaderboard, improving its transition mineral score by 31 percentage points, ranking second with a score of 64 percent. Tesla states that it maps its nickel to the point of extraction and discloses percentages it has sourced directly from extractive companies for nickel (>45 percent).

Volkswagen responded by saying it does not currently purchase nickel directly but obtains battery raw materials indirectly from suppliers in the form of EV batteries. The company further explained that its battery suppliers, in turn, source nickel through their own business processes. **BMW** responded in the same vein, explaining it does not have any direct supply relationships or cooperations with nickel suppliers in Indonesia, and that nickel suppliers source raw materials independently. Volkswagen scored 34 percent in responsible sourcing of transition minerals. Unlike in 2023, Volkswagen no longer discloses the countries of origin for each of its priority minerals. BMW, on the hand, scored 30 percent and did not receive any points for identifying transition minerals risks in its supply chain to the point of extraction.

Company statements

Beyond **Tesla**'s response to the Resource Centre, the company also announced in its 2023 Impact Report that it is exploring *"...the need for the establishment of a no-go zone for mining to protect indigenous and human rights, particularly those of uncontacted communities."* This announcement follows a Survival International campaign focusing on how mining in Halmahera, Indonesia, could wipe out the uncontacted Indigenous Hongana Manyawa people.

Mining impacts affecting the Hongana Manyawa were previously covered in our May 2023 briefing, including the risks posed by a partnership between German chemical firm, **BASF**, and French mining company, **Eramet**, to build a refinery in Halmahera. When the Resource Centre reached out to BASF and Eramet on this issue, both companies responded by saying they are still evaluating and conducting feasibility studies on the proposed investment and have not yet decided on implementing the project. On 24 June 2024, BASF announced, after thorough evaluation, that it will not continue with the planned nickel refinery.

Conclusion and recommendations

Indonesia's grand plan to harness its mineral resources to boost its economy and become world's nickel powerhouse is in full swing. Newly-elected President Prabowo Subianto pledged to continue the former administration's nickel "downstreaming" strategy, which includes five industrial parks worth a total of 636.9 trillion rupiah (USD 39.58 billion) for nickel processingin four different towns in Central and Southeast Sulawesi provinces. Indonesia's Head of the Geological Agency at the Ministry of Energy and Mineral Resources (ESDM), Muhammad Wafid, added that the government has also identified several sites in northern Sumatra, Kalimantan, Maluku and Papua. Without clear policy safeguards and meaningful enforcement, the risks to people and the environment will continue to stain the country's mining industry.

Even with the constitutional prohibition on mining in small islands, mining concessions are still operational in Wawonii and Kabaena. Impacts on the environment such as deforestation and water pollution will unfortunately prevail. The lack of FPIC with communities will remain unaddressed and the cultural distortions against the Bajau will continue. In industrial parks like PT IMIP and PT IWIP, and future parks yet to be built, worker health and safety, deforestation, and the use of captive coal plants will continue to cause serious problems without effective regulation to safeguard people's rights and the environment.

Disregarding human rights can also prove to be economically counterproductive if Indonesia does not give proper attention to these issues. The Indonesian government has been trying to close a limited critical minerals trade deal with the United States, but negotiations have failed so far. The trade agreement would give Indonesian companies the opportunity to take advantage of large tax credits through the US Inflation Reduction Act. Nine US senators have objected to the deal, stating they have concerns regarding Indonesia's standards for labour rights, environmental protection, safety and human rights.

If EV companies are serious about human rights and curbing carbon emissions, they need to start by improving their transparency and sourcing practices. Considering recent regulatory developments such as the EU's Corporate Sustainability Due Diligence Directive and Batteries Regulation – and increasing interest from the investor community for more rights-respecting nickel mining operations – EV companies are increasingly required to adopt responsible mineral sourcing policies, to be more transparent and to conduct human rights due diligence along their supply chains. Moreover, EV companies can leverage their buying power to influence mining and mineral processing companies to respect human rights and the environment.

Recommendations

Recommendations to nickel mining companies:

- Respect Indigenous Peoples' land and forest rights and the right to FPIC, including their right to define the process by which FPIC is achieved and to withhold consent. In cases where consent is properly granted, fully and fairly compensate all affected community members including all benefits afforded to them by law and international standards.

- Work to the international standards of the UNGPs. Ensure the approach is proactive and consults those at risk of abuse and their representatives, in accordance with the UN Working Group's guidance on ensuring respect for HRDs. Reinforce related goals with a time-bound plan, resourcing commensurate to ambition, executive oversight and board approval.

Recommendations to nickel refining companies:

- Ensure prevention and mitigation of air, water and soil pollution from industrial activities by installing air pollution control mechanisms, properly disposing of industrial waste and coal ash, and treating wastewater from industrial facilities and coal plants based on the best available science and technologies.

- Immediately stop the construction of all new coal plants and announce a time-bound plan to replace existing coal plants with renewable energy sources as soon as possible.

- Share all information related to future expansion, deforestation, land acquisition and industrial activities with the public, and make that information accessible to local communities, including by holding public meetings and providing information in local languages, and ensure that Indigenous Peoples give FPIC as required by international law.

Recommendations to EV companies:

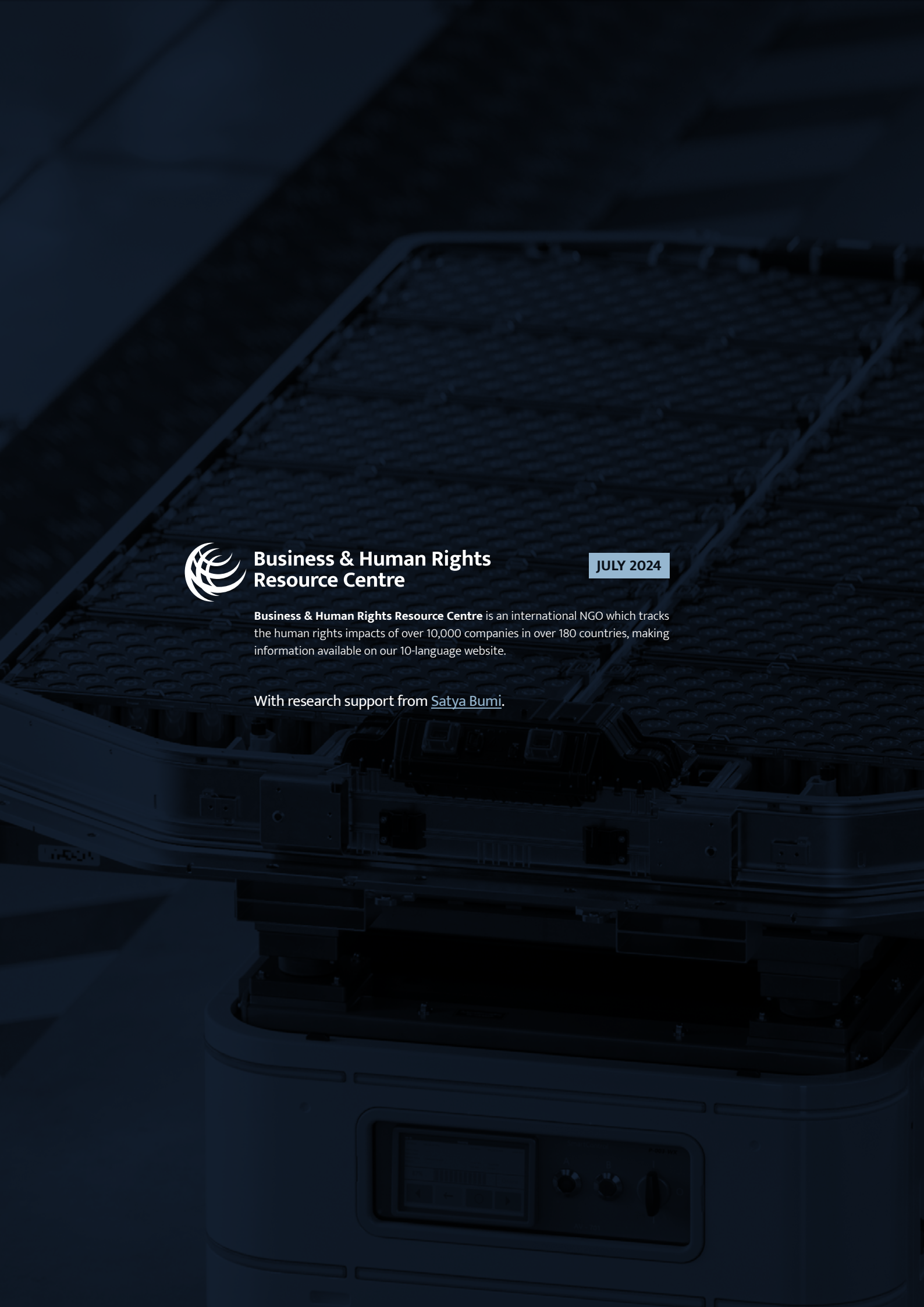
- Adopt a public commitment to responsible mineral sourcing and undertake supply chains due diligence in line with OECD Due Diligence Guidance for Responsible Supply Chains of Minerals.
- Implement human rights due diligence processes throughout the business cycle, built on worker and community engagement that is safe and inclusive: adopt and effectively communicate zero-tolerance policies for abuse of communities, workers and HRDs, including labour rights activists and Indigenous, land and environmental defenders, and provide guarantees of protection and non-retaliation for participants in these processes.
- Increase transparency about EV supply chains by providing public information about all companies in your supply chain engaged in mineral mining, refining, smelting and battery production.
- Assign clear Board responsibility for and oversight of respect of human and environmental rights. The Board should approve policies and regularly reviews salient human and environmental rights abuse allegations, due diligence plans and remedy outcomes.
- Respect and publicly report on implementation of principles of FPIC to obtain community consent prior to taking investment and operational decisions. Ensure communities and workers are well-advised of these processes and that they are accessible, culturally appropriate, safe and effective.
- Leverage buying and collective EV industry power to pressure mines, mineral processors, and/or suppliers to change practices that cause environmental or human rights harm.
- Demand that nickel suppliers stop the construction of all new coal plants and produce a time bound plan to power operations using renewables.
- Make time-bound commitments for deforestation-free nickel supply chains. This means sourcing from mines that avoid and minimize extraction of nickel that leads to tropical forest loss.

Recommendations to investors:

- Commit to rights-respecting investments: undertake and promote analysis consistent with the UNGPs for all transition minerals mining and renewable energy investments. Evaluate impacts of investee companies on people and the planet, rather than solely focusing on financial materiality.
- Actively engage with investee companies: adopt stewardship policies and develop and implement plans to proactively prevent and mitigate human rights and environmental risks and related costly conflict, alongside reputational, legal and regulatory risks.
- Integrate sustainability into fiduciary duty through inclusive human rights and environmental due diligence: throughout the business cycle, undertake due diligence and engagement with worker organisations and communities, including reviewing potential investees' up-to-date record of environmental harm and human rights abuse.

Recommendations to the Indonesian Government:

- Enforce laws, particularly those ensuring environmental quality standards are complied with, as well as those imposing sanctions on abusive companies.
- Pass and enforce legislation mandating corporate human rights and environmental due diligence, inclusive of corruption risks, throughout the transition mineral mining lifecycle and based on inclusive consultation and shared benefit with rightsholders, including Indigenous Peoples and workers.
- Immediately stop issuing new nickel mining licences in forested areas. Moreover, in view of the Constitutional Court's ruling on the prohibition of nickel mining on small islands, immediately stop issuing mining permits on small islands.
- Immediately stop the permitting of all new coal plants, including captive coal plants used in industrial areas.
- Ensure that mining, smelting, and all related activities do not lead to serious or preventable environmental damage and other human rights abuses of affected communities.
- Ratify ILO Convention 169, the Indigenous and Tribal Peoples Convention, and enact the Indigenous Peoples' Rights Bill in order to simplify the process of recognition of Indigenous Peoples and their customary lands.
- Respect and protect affected communities' rights to health, land, food, livelihood and freedom of expression.



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Business & Human Rights Resource Centre is an international NGO which tracks the human rights impacts of over 10,000 companies in over 180 countries, making information available on our 10-language website.

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