



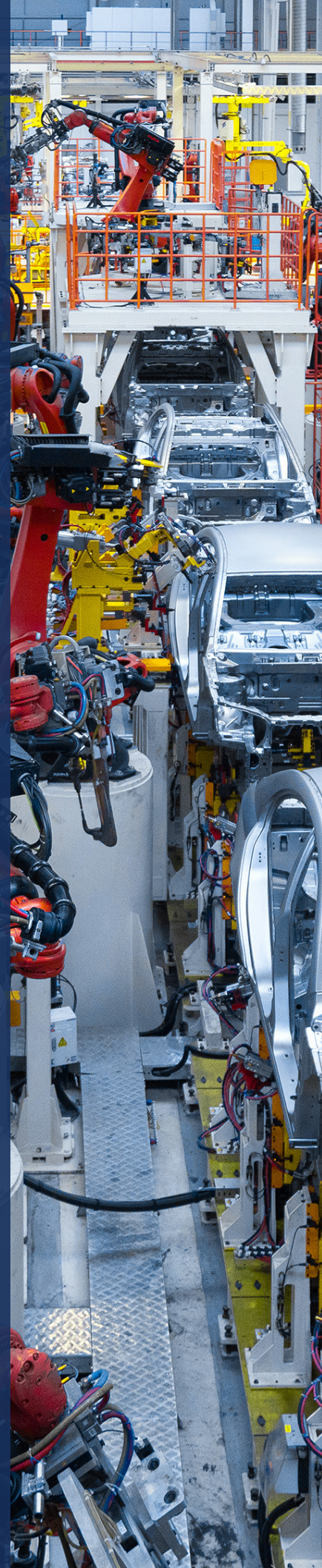
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INVESTMENT MONITOR

Indonesia as an Emerging Hub for Critical Minerals and Electric Vehicles: Opportunities and Risks for Canada

FEBRUARY 2024



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Key Takeaways

OPPORTUNITIES:

1. Indonesia is a growing regional hub for electric vehicle (EV) production, embedded within the Association of Southeast Asian Nations (ASEAN) ecosystem and benefiting from abundant nickel resources.
2. Foreign direct investment (FDI) has picked up in Indonesia's mining and EV sectors, leading to the development of business clusters that will reduce the cost of EV production.

RISKS:

1. Indonesia's mining sector is impacted by global price volatility, protectionist policies, and nationalization.
2. Indonesia is also suffering from social conflicts over the environmental impact of mining, which may disrupt mining operations and the development of the EV sector.

CANADIAN PRESENCE IN INDONESIA:

1. Canadian companies invested more than C\$900M in Indonesia's mining sector from 2003 to 2019. They are also significantly involved in nickel mining, with PT Vale Indonesia, a subsidiary of Vale Canada Limited, owning the largest nickel mine in the country.
 2. Canada is expanding its footprint in the region by stationing Canada's first Indo-Pacific Trade Representative, Paul Thoppil, in Jakarta and negotiating free trade agreements with Indonesia and ASEAN.
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With the world's largest nickel reserves, Indonesia is well-positioned to be a regional hub for sourcing nickel, a core component of electric vehicle (EV) batteries. Although Indonesia is a relative [latecomer to the EV market](#), its government has passed an ambitious set of policies to expand domestic production and boost domestic use of EVs. Indonesia's growing role in the global EV and critical mineral industries presents an opportunity for Canadian investors in Indonesia, who must be prepared to face volatile mineral prices, a shifting policy environment, and social protests over mining activities.

On the plus side, the Government of Canada announced two strategies in late 2022 — the [Indo-Pacific Strategy \(IPS\)](#) and the [Critical Minerals Strategy \(CMS\)](#) — that could provide a framework for Canadian firms to develop or strengthen investment and trade partnerships in Asia. That includes not only countries seeking secure and sustainable supplies of critical minerals, such as Japan and South Korea, but also other regional [suppliers of these minerals](#), such as Indonesia. Beyond a simple transactional relationship, these suppliers may well benefit from Canada's policy goal of becoming a source of sustainable and clean mining technology.

What are the opportunities?

Mining has been a staple of Indonesia's economy since the [early 1970s](#), as well as a significant source of investment since the 1990s and an important contributor to government revenue and economic development. In recent years, pressure from the global community to meet net-zero emissions targets has driven up the demand for some of the critical minerals Indonesia has in abundance, including nickel. Meanwhile, [geopolitical tensions and competition between China and the U.S.](#) are placing a premium on the ability of countries to secure reliable supplies of the commodities they need to power their clean-technology sectors. Both of these factors — rising demand and the increasingly urgent need for secure supplies — work in Indonesia's favour, which in 2021 accounted for roughly [37 per cent](#) of the world's nickel production.

The Indonesian government has responded to these two aforementioned factors by passing a series of policies over the past 15 years that support resource extraction and help Indonesia capture the value-added benefits from these resources. For example:

- A [2007 Foreign Investment Law](#) designed to remove barriers to foreign investment.

- In 2009, the government passed a [law](#) encouraging domestic mineral processing; processing of critical minerals domestically adds value to the extracted minerals prior to export.
- [Government regulations](#) passed in 2017 shifted ownership from foreign companies to domestic firms by reducing foreign ownership of mining operations to 49 per cent.
- [Presidential Regulation No. 55](#), released in 2019, established the legal framework for EVs and EV battery production.
- The so-called '[Omnibus Law](#)' of 2020 increased the ease of doing business and restricted local communities' ability to challenge mining activities, including limiting consultation on the environmental impact of [mining projects to those communities directly affected](#). The *Omnibus Law* was implemented through an [Emergency Jobs Regulation](#) in 2021.
- [The 2020 Mining Law](#) amended the 2009 law (mentioned above), encouraging more foreign investment in the mining sector by removing barriers, such as limits on the size of operations and licensing requirements, and [shifting power over licensing and permits to the central government](#).

Collectively, these policies are intended to help Indonesia ascend the global value chain. This includes, more recently, supporting the domestic manufacturing of EVs. As of March 2023, the government has rolled out subsidies for the sale of electric motorcycles and electric cars, with each electric motorcycle qualified for around [C\\$600](#) in rebates. The initiative is expected to help the country reach its target of having 35,000 EVs in use in 2024.

Unsurprisingly, international businesses are capitalizing on this opportunity by setting up shops in Indonesia to realize the benefits of co-location. This includes an uptick in investment from leading automotive companies. In 2022, a [South Korean consortium led by LG Energy](#) signed agreements with Indonesian state-owned enterprises (SOEs) ANTAM and Indonesia Battery Corporation (IBC), to manufacture EV battery cells in Indonesia. A similar agreement between ANTAM and IBC was signed by [China's CATL](#) during the same year. International corporate presence is dominated by Chinese companies, which have built [more than 90 per cent of Indonesia's nickel smelters](#) and participate in multiple extractive projects across the region. Indonesia has also attracted FDI from EV manufacturers such as [Toyota](#), which began investing in

Indonesia's EV production in 2019, and [Hyundai](#), which produced its first EV in Indonesia in 2022. Hyundai Indonesia has also announced [plans to export its electric batteries](#) to 14 Asian countries.

As international companies expand their activities in Indonesia's EV and critical mineral sectors, they can support the creation of business clusters. These clusters may ultimately lower the cost of EV production, especially as more components used in EVs and EV batteries become available locally. Furthermore, the global growth of EV manufacturing is increasing demand in other countries for Indonesia's critical minerals; South Korea's Hyundai, for example, signed a [memorandum of understanding](#) with PT Adaro Minerals in 2022 for access to Indonesian nickel.

Finally, Indonesia's plan to expand domestic production and utilization of EVs comes at an opportune time. The 10-member ASEAN signed a declaration in May 2023 to support the [development of the EV ecosystem](#) that may help transform the region into a global EV manufacturing hub and propel Indonesia to a leading EV manufacturer.

Indonesia's policies to support EVs and critical mining — combined with broader initiatives and incentives across ASEAN and the region — will provide opportunities for Canadian companies interested in entering these new Southeast Asian markets.

What are the risks?

The opportunities that come with the rise in demand for critical minerals like nickel used in the EV value chain should be weighed against possible near- and medium-term risks. **One is that nickel mining, like many commodities in the extractive sector, is prone to boom and bust cycles.** During a boom, prices rise rapidly as demand picks up, incentivizing extraction and spurring economic

growth. During a bust, however, prices drop suddenly once supply exceeds global demand, dampening the need for extraction and leading to a potential economic downturn. This is not a hypothetical risk; although Indonesia's mining sector has performed well in the early 2020s, as more countries begin producing nickel, supply could exceed demand, pushing prices down, as the [recent slump in lithium prices](#) suggests.

Another risk is that Indonesia's policies could restrict corporate activity.

For example, as noted above, Indonesia has passed a set of policies that encourage the domestic processing of raw materials — including the development of downstream industries such as smelting and refining — while simultaneously [banning the export of unprocessed nickel](#). Data compiled by the Extractive Industries Transparency Initiative, a multi-stakeholder organization based in Norway and a global standard-setting body for extractive industries, show that Indonesia's nickel production grew rapidly from 2014 to 2018, making it the world's [largest nickel producer](#) by 2019. While these new domestic policies collectively boosted nickel extraction and helped Indonesia expand its critical mineral value chain, they restricted corporations' ability to export unprocessed nickel. The government's nickel quota mining system can also delay mining activities, as occurred in 2023 when the government's sweeping crackdown on corruption delayed the allocation of new mining permits, leaving gaps in the local supply of nickel with smelting factories resorting to [buying nickel from the Philippines](#) to meet their needs.

Indonesia's 2019 ban on the export of unprocessed nickel (implemented in 2020) also became the subject of a trade dispute with the European Union (EU), which asked the [World Trade Organization](#) (WTO) to adjudicate the case as the ban on the export of nickel from Indonesia restricted the EU's access to Indonesia's nickel that it used for the EU's [domestic steel production](#). The [WTO's dispute settlement committee ruled in favour of the EU](#), but Indonesia has [appealed the decision in December 2022](#) and is planning to impose similar export restrictions on other commodities, such as [bauxite \(used in manufacturing](#)

[aluminum often utilized in vehicle parts\)](#) and [tin \(used in semiconductors\)](#). The Indonesian government is also strengthening its hand vis-à-vis foreign mineral extraction companies by increasing its ownership of foreign-owned firms, including the Canadian branch of [PT Vale](#) (see below for details). Based on the *Indonesian Mining Law* (Law No. 4 of 2009), extractive companies operating in Indonesia [over a certain period of time \(between the 10th and 25th year of production\) must divest 51 per cent](#) of their company to central or regional governments.

Another risk for Canadian companies looking to enter Indonesia's critical mineral and EV markets is a possible increase in environmentally focused [social conflict](#) around mining sites. Over the past five decades, there have been [more than 100 environmental conflicts in Indonesia](#). These include protracted protests against nickel processing operations in [Morowali Industrial Park](#) (protests [starting in 2019](#)) and over tin mining by [PT Timah](#), with both protests leading to [disruptions of mining activities](#) in the 2010s. More recently, in January 2023, there were protests against the [PT Gunbuster Nickel Industry \(GNI\) smelter](#).

It should be noted that these protests have continued even after the passage of Article 162 of *The 2020 Mining Law* that [criminalizes protests that hinder mining activities](#). In 2021, [53 people were criminally charged](#) for activities in opposition to mining companies, 10 of them for allegedly violating Article 162, which is punishable by a maximum of a one-year [prison term and a maximum fine of C\\$8,526](#). Furthermore, Indonesia's 'permissive' new mining regulations, such as the [Emergency Jobs Regulation](#), have led to [widespread labour protests](#) due to a perceived lack of proper consultation.

Figure 1: Mining protests across Indonesia's provinces (1968-2019)



Source: Leah Temper, Daniela del Bene and Joan Martinez-Alier. 2015.

A related market-entry risk is companies' possible association with the environmental destruction that can result from certain mining practices. For example, mining-induced deforestation has resulted in a [58 per cent loss of Indonesia's forest cover](#). And air and water pollution from mining have been well-documented in several parts of Indonesia, including in [Morowali Industrial Park](#), Indonesia's largest nickel-based industrial area in Central Sulawesi province, and in

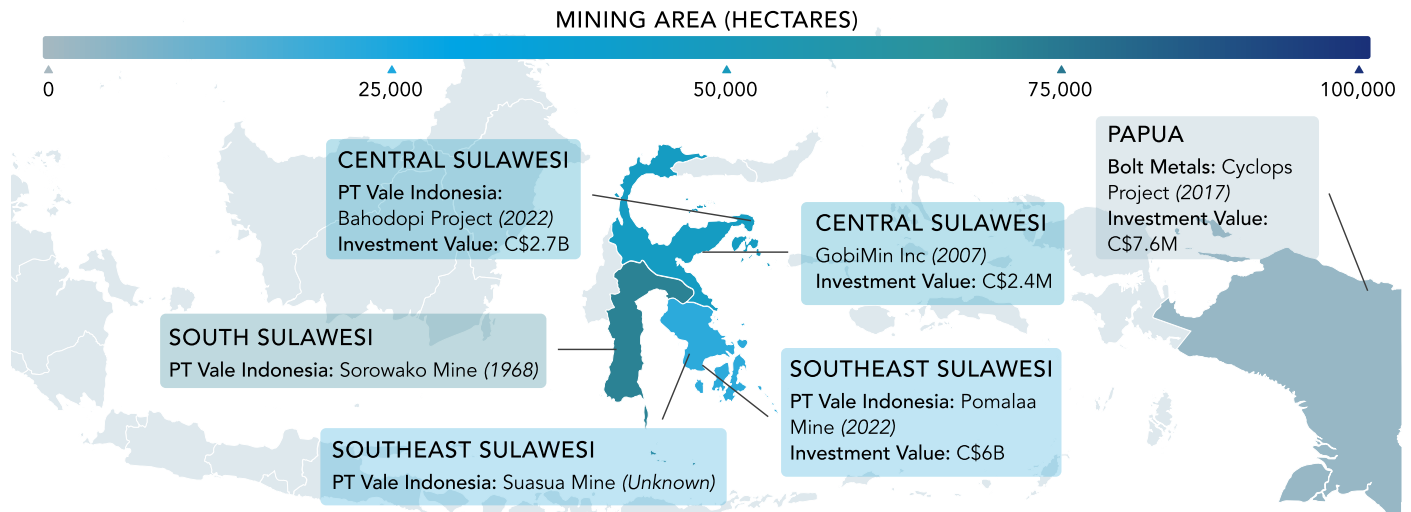
the Obi archipelago in North Maluku province, where [deep-sea tailings disposal](#) has destroyed the marine ecosystem. There is also a greater risk of [flooding and landslides](#) due to mining activities that can impact mining operations in the region. JATAM, a Jakarta-based environmental advocacy group, reported that as of June 2021, the Indonesian government had issued 131 mining permits and 2,848 mining concessions in earthquake-, flood-, and landslide-prone areas.

Canada's corporate presence in Indonesia's nickel mining sector

Canadian companies have nickel mining operations in four Indonesian provinces (see Figure 2) and have been present in the country's mining sector since 1968. Beyond nickel, these companies have been quite active, investing around C\$900M in other mining activities in Indonesia between 2003 and 2019, with large investments in Indonesia's gold sector led by Canada's Apollo Gold investment in 2004.

PT Vale Indonesia, a subsidiary of Canadian mining company Vale Canada Limited, has operated in Indonesia since 1968. It operates the largest nickel mine in the country, the Sorowako Mine in South Sulawesi, as well as mines in Central and Southeast Sulawesi. PT Vale represents an informative snapshot of how Canadian firms balance the opportunities and risks in the Indonesian market.

Figure 2: Canadian Investment in Indonesia's Nickel Mining



Source: APF Canada Investment Monitor; fDi Markets

In 2014, the Indonesian government renegotiated its contract with [PT Vale](#), requiring it to divest 20 per cent of its shares to Indonesian holders in order to extend its contract of work past 2025. In 2020, Indonesian SOE PT Indonesia Asahan Aluminum Persero (Inalum) acquired 20 per cent of PT Vale for C\$407M — Vale Canada Limited sold 14.9 per cent of its stake. In July 2022, PT Vale signed a [memorandum of co-operation](#) with China's Zhejiang Huayou Cobalt Co. and Ford Motor Company to process nickel ore mined at PT Vale's properties in Indonesia. The estimated total investment

will be C\$11.3B over the next three years, signalling PT Vale's continued commitment to expanding its presence in Indonesia's nickel mining. The company has faced its share of pressure to retain [its social licence to operate](#) and faced business interruptions and social protests over extractive activities related to the environmental and socio-economic impacts of its extractive operations. To maintain its social licence to operate, PT Vale has developed strong [ESG commitments](#) to stakeholders and the wider community.

Strengthening the Canadian opportunity

Indonesia represents a complex operating environment for international businesses active in the mining and EV sectors. On the one hand, the country has abundant resources and a newly permissive investment environment. On the other hand, the mining sector has been implicated in environmental degradation, leading to alarming incidents of social unrest. When combined

with changes to the regulatory environment, the risks to foreign investors also increase.

Canadian investors interested in Indonesia's critical minerals and EV sectors could benefit from government-supported programs and strategies outlined in Canada's Critical Minerals Strategy (CMS) and Indo-Pacific Strategy (IPS). The CMS encourages

Canadian clean-technology firms to support the green energy transition, which could encourage closer international partnerships between Canadian and Indonesian stakeholders in providing clean technology for the critical mineral and EV sectors. For example, Canada could share its technology and know-how in both of these sectors to support sustainable extractive practices and EV manufacturing. Moreover, Canada's IPS reinforces Asia's importance to Canada and facilitates closer economic relations between Canada and the region.

Canadian businesses could also benefit from the Canadian government's efforts to improve trade infrastructure between [Canada and Indonesia](#). [The Canada-Indonesia Comprehensive Economic Partnership Agreement \(CEPA\)](#) and [Canada-ASEAN Free Trade Agreement](#) are expected to reduce tariff and non-tariff barriers, facilitate trade, and, through the investment chapters included in these agreements, provide more predictability to foreign investors. As indicated by the CEPA's [Environmental Assessment](#), the clean-technology sector will benefit substantially from the conclusion of these agreements, which, alongside the CMS and IPS, will help Canadian companies access Indonesia's mining and EV sectors. The Indonesian government has proposed including a [limited FTA for critical minerals](#) in the U.S.-led Indo-Pacific Economic Framework (IPEF). With Canada vying to [join the IPEF](#), the two countries may build closer economic ties, which may include critical minerals collaboration, provided that the other IPEF members support Indonesia's call for the limited FTA.

Future opportunities for Canadian companies in Indonesia will also be shaped by developments in the latter, including the general elections that will take place in Indonesia on February 14, 2024. While there are [expectations](#) that current President Joko Widodo's successor will not change course on mining policy, [elections nonetheless can create some political uncertainty](#) that might dissuade companies from investing in new activities or expanding their operations.

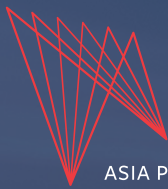
While Indonesia is a [country of opportunity](#) driven by a young population, rapid digitalization, and growth in infrastructure and renewable energy sectors, foreign investors should also be cautious about the risks. Mining and EV companies should analyze market risks before entering Indonesia. As noted earlier, companies can use existing resources, such as the EJ Atlas (or, Global Atlas of Environmental Justice, an online database developed in collaboration between academia, citizens, NGOs, and activist groups documenting social and environmental injustices), to learn about previous local protests. They should also carefully survey mining sites before investing, given that the land may be prone to environmental hazards, including landslides and flooding, that could damage corporate property. The government's heavy hand in the mining and EV sectors substantially impacts corporate activities in Indonesia. Thus, corporations should closely survey regulations and identify regulatory patterns before investing. Ultimately, Canadian companies considering entering Indonesia's mining or EV sectors may reduce market entry risks by partnering with companies on the ground or accessing resources provided by the Canadian government to support their market entry strategies.

Acknowledgments

The Asia Pacific Foundation of Canada is grateful to Export Development Canada for its sponsorship of this Investment Monitor report.

APF Canada would also like to acknowledge the Research team members who contributed to this report: Dr. Anastasia Ufimtseva, Program Manager, International Trade and Investment; Charlotte Atkins, Senior Project Specialist, International Trade and

Investment; Pia Silvia Rozario, Project Specialist, Women Entrepreneurship Strategy; and Rachael Gurney, APF Canada Canada-Asia Young Professionals Fellow. The Foundation also acknowledges the support of Vina Nadjibulla Vice-President, Research & Strategy; Michael Roberts, Director of Communications; Erin Williams, Senior Program Manager; Chloe Fenemore, Graphic Designer; Eva Moreta, Translator; and Ted Fraser, Editor.



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