



## NICKEL BAN AND INDONESIA'S DEFENSE: A WTO DISPUTE WITH IMPLICATIONS FOR NATIONAL SECURITY

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### **Abstract:**

The Indonesian government implemented an export ban on unprocessed nickel ore to promote the development of value-added nickel products and establish a strong presence in the global electric vehicle supply chain. This has led to modifications in the country's nickel supply chain and exports. However, the World Trade Organization (WTO) ruled in favor of the European Union's claim that the ban hindered EU manufacturers' access to nickel ore. Indonesia has appealed the verdict, contributing to trade disagreements between the two parties. This study examines the impact of global trade policies on national economic growth and security, focusing on Indonesia's nickel industry. It aims to provide insights into approaches that Indonesia can adopt to enhance its nickel industry and defense capabilities while complying with WTO regulations. The research conducted in Jakarta, Indonesia, in April 2023, employs a comprehensive review of existing literature and grey literature. The collected data underwent content analysis methodologies to present a comprehensive narrative, tables, and figures. Indonesia's nickel industry plays a critical role in the nation's development and national security due to its significant reserves and investments in battery supply chains. However, reconciling domestic interests with global trade commitments, particularly the ban on nickel ore exports, presents challenges. Indonesia can explore strategies such as incentivizing foreign investment and establishing a sustainable regulatory framework to foster the growth of its electric vehicle and steel industries. These measures can help position Indonesia as a key global hub for refined nickel and lithium-ion batteries while complying with WTO regulations.

### **Keywords:**

Nickel; Ban; Indonesia; Defense; WTO; National Security

### **1. Introduction**

Indonesia has implemented a development strategy centered on commodities, particularly nickel, which has made it the leading global producer of this mineral (CSIS, 2021). This strategy is often referred to as "resource nationalism." Currently, Indonesia's nickel production is primarily composed of Class 2 nickel, a low-grade nickel ore commonly used in stainless steel manufacturing (Castillo, Blumenthal and Purdy, 2022).

Indonesia holds a significant position in the global nickel industry, not only as the largest producer but also as a crucial participant. The nickel industry, including its value chains, is estimated to have a total value added of €43 billion and generates an output of approximately €130 billion (Nickel Institute, 2023). The nickel industry plays a significant role in Indonesia's development strategy, which focuses on commodities. The government has implemented measures to increase the value of its nickel production and establish a prominent position in the global electric vehicle supply chain.

In 2014, Indonesia effectively enforced a similar prohibition on the export of nickel ore to promote the development of value-added nickel products for the stainless steel supply chain (Gleason and Sauermilch, 2013; Merwin, 2022). In

August 2019, Indonesia announced a ban on the export of unrefined nickel ore, which was subsequently implemented in January 2020 to build upon its previous achievements.

The Indonesian government claims that the ban on raw nickel exports has produced positive outcomes, including increased investments in mining and downstream activities (Gupta, 2022a). The surge in Indonesia's nickel industry can be attributed to China's demand for nickel ore to manufacture NPI, a crucial component in stainless steel production. In response to Indonesia's export ban, China has expanded its nickel ore import sources, resulting in a decrease in Indonesia's market share from 100% in 2019 to 27% in 2021 (Home, 2022).

The imposition of the nickel export ban in Indonesia has caused changes in the nation's nickel supply chain and exports. Indonesia banned the export of bauxite in December 2022, aiming to replicate its success in enhancing nickel processing capabilities after discontinuing the export of unprocessed nickel ore in January 2020 (Nangoy, 2022). Despite the impact of the COVID-19 pandemic on nickel prices, Indonesia's ban on nickel exports is part of its development strategy focused on commodities and positioning itself as a major player in the global electric vehicle battery supply chain. The ban has led to changes in the nation's nickel supply chain and export patterns, with downstream activities being among the consequences.

The dispute between Indonesia and the European Union (EU) regarding the prohibition of nickel exports began in November 2019 when the EU initiated legal proceedings against Indonesia in the World Trade Organization (WTO) due to its restriction on nickel ore exports. The EU argued that this restriction hindered EU producers' access to nickel ore (WTO, 2022). The ban was implemented through a series of legal statutes and regulatory measures, including the prohibition of nickel ore exports and the imposition of a domestic processing mandate (DPR) for all nickel ore. Indonesia has formally requested consultations with the EU regarding specific measures imposed by the EU and its member states concerning palm oil and biofuels derived from Indonesian oil palm crops, following established international protocols.

In November 2022, the WTO issued a ruling in favor of the EU, suggesting that Indonesia should modify its policies, specifically the prohibition on exporting nickel ore (Reuters, 2022a, 2022b). This prompted Indonesia's President to declare his intention to challenge the decision. In late 2019, the EU filed a complaint with the WTO regarding Indonesia's prohibition on steel exports, resulting in a significant decrease in Indonesian steel exports due to EU tariffs. This trade-related dispute is not the only instance of discord between the two countries (Strangio, 2023).

The controversy surrounding the prohibition of nickel exports in Indonesia has significant implications for national security, particularly regarding the country's defense strategy. Indonesia's approach to nickel is part of its commodity-driven development strategy, informed by the Mineral and Coal Mining Law of 2009. Approximately 75% of nickel is used in stainless steel production, making it a primary application of this metal (Merwin, 2022). The WTO ruling favoring the EU in the dispute over the nickel export ban has led Indonesia's President to announce his intention to appeal the decision (Reuters, 2022b; Strangio, 2022). The defense presented by the Indonesian Government regarding restricted national nickel reserves and commendable mining practices was dismissed by the Panel (Tempo, 2022).

Indonesia's security challenges are influenced by its resource nationalism strategy and the strategic implications of power shifts among major powers for the future of regional security architecture in East Asia, as mentioned in the source (Sukma, 2010). Recognizing these security challenges, Indonesia acknowledges the importance of formulating a comprehensive national security strategy to effectively address them. This is evidenced, in part, by the country's national defense policy and posture (Anwar, 2020).

The ongoing controversy surrounding the prohibition of nickel exports has significant ramifications for Indonesia's national security, as it has the potential to disrupt the nation's commodity-driven growth plan and the manufacture of stainless steel, a crucial element in the defense sector. Furthermore, the recent WTO decision ruling against Indonesia may have negative implications for the country's economic expansion and its ability to finance its defense strategies (Widadijedja, 2021). Therefore, Indonesia must address the conflict and safeguard its nickel supply chain to uphold national security and sustain economic development.

## 2. Methodology

The research methodology utilised in this study entails a comprehensive review of existing literature supplemented by the incorporation of grey literature. The literature review aims to collect and evaluate peer-reviewed journal

articles pertaining to the prohibition of nickel in Indonesia and its ramifications on the nation's defense sector, encompassing any associated World Trade Organisation (WTO) conflicts. The assessment of grey literature is conducted utilising identical standards as those employed in a literature review, guaranteeing that the data collected is dependable, authentic, and pertinent to the research inquiries. The integration of the grey literature findings with those of the literature review yields a comprehensive and current analysis of the subject matter.

The data collected from diverse sources is subjected to scrutiny through content analysis methodologies. The research methodology of the content analysis entails a methodical investigation of various forms of communication and texts to recognise and analyse patterns, themes, and trends. The present investigation employs content analysis to scrutinise the content extracted from scholarly sources, online news outlets, and government data concerning the prohibition of nickel and its ramifications for Indonesia's defense sector, along with any associated disputes within the World Trade Organisation.

The data is conveyed through a narrative structure, wherein the results are succinctly and coherently summarised. The information is additionally displayed in tabular and graphical formats to enhance comprehension of the results and offer a visual depiction of the data. Tables and figures effectively communicate important data points, including statistical data and patterns, in a succinct and comprehensible format. The feature facilitates prompt and effortless comprehension of the principal discoveries and patterns discerned via content analysis.

### 3. Results and Discussion

#### 3.1. Export ban's effect on Indonesia's defense capabilities

The imposition of export restrictions on nickel ore and the domestic processing obligations in Indonesia have had a noteworthy effect on the nation's defense capabilities. Indonesia possesses 22% of the global nickel reserves, as indicated in figure 1 (U.S. Geological Survey, 2022). Since 2020, the country has imposed a ban on nickel ore exports, leading to significant alterations in the supply chains of crucial commodities like electric vehicles and rocket engines (Merwin, 2022). The objective of the ban is to foster the growth of domestic downstream industries that are associated with nickel commodities, such as the electric battery industry, which holds significant importance for the defense sector.

The objective of the Indonesian government is to increase investment in the nickel downstream sector with the goal of establishing itself as a worldwide centre for the manufacturing of lithium-ion batteries. The export ban and domestic processing requirement on nickel ore imposed by Indonesia have been deemed to be in violation of WTO regulations by the World Trade Organisation (Holman, 2022). The prohibition has resulted in a short-term loss of export earnings, employment opportunities, and government revenues for Indonesia. Nevertheless, the nation has successfully achieved its objective of luring investments in nickel processing and enhancing the value of its nickel reserves over an extended period. Consequently, the imposition of export restrictions and the mandate for domestic processing have yielded both advantageous and disadvantageous effects on Indonesia's defense potential.

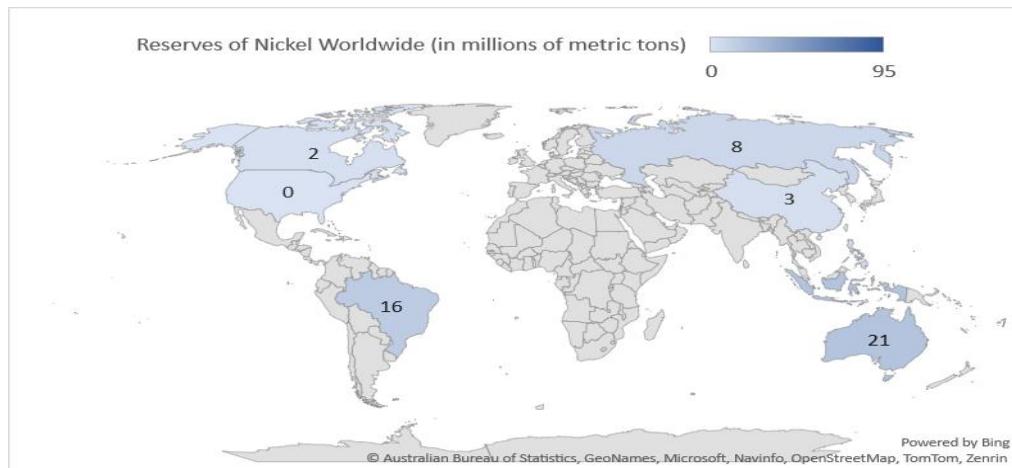


Figure 1. Nickel Reserves Worldwide (Source: Mineral Commodity Summaries, 2022)

The Indonesian government has expedited the execution of nickel ore exports effective January 1, 2020, as per the Minister of Energy and Mineral Resources Regulation No. 11 of 2019, which pertains to the Second Amendment to the Ministry of Energy and Mineral Resources Regulation No. 25 of 2018 concerning Mineral and Coal Mining. The aforementioned regulation is purported to contravene Article XI of the General Agreement on Tariffs and Trade (GATT), which pertains to the General Elimination of Quantitative Restrictions. As a result, the European Union has initiated legal action against this regulation by filing a lawsuit with the Dispute Settlement Body of the World Trade Organisation (WTO) (Haddad, Novianty and Adolf, 2022).

The dispute between Indonesia and the European Union (EU) within the framework of the World Trade Organisation (WTO) pertains to the imposition of two measures by Indonesia, which the EU contends hinder the export of nickel ore. The aforementioned measures pertain to the imposition of a ban on the exportation of nickel ore and the implementation of a domestic processing requirement (DPR) for all nickel ore. In August 2019, Indonesia, formerly the largest global exporter of nickel ore, implemented a ban on the export of the unprocessed mineral and mandated a domestic processing requirement.

In November 2022, the World Trade Organisation (WTO) issued a ruling in favour of the European Union (EU), recommending that Indonesia modify its measures, which include a prohibition on the exportation of nickel ore. The Republic of Indonesia has declared its intention to file an appeal in response to the aforementioned decision. In November 2019, the European Union (EU) launched a challenge against Indonesia's limitations on the export of non-smelted ores at the World Trade Organisation (WTO). Subsequently, on November 30, 2020, the dispute-settlement panel issued its recommendation.

The European Union has made claims that Indonesia has violated Article XI: 1 of the General Agreement on Tariffs and Trade (GATT) by imposing policies that prohibit the export of nickel ore and impose domestic processing obligations. This article pertains to regulations that restrict trade and commerce:

1. The contracting parties are prohibited from instituting or maintaining any prohibitions or restrictions, except for duties, taxes, or other charges, which may be enforced through quotas, import or export licences, or other measures, on the importation of any product originating from the territory of another contracting party or on the exportation or sale for export of any product intended for the territory of any contracting party.
2. The scope of the first paragraph of this Article shall exclude the subsequent items:
  - a. Temporary export prohibitions or restrictions are implemented to prevent or alleviate critical shortages of foodstuffs or other essential products for the exporting contracting party;
  - b. The implementation of standards or regulations for the classification, grading, or marketing of commodities in international trade may require the imposition of import and export prohibitions or restrictions;
  - c. Import limitations imposed on agricultural or fisheries commodities, in any form, that are deemed essential for the implementation of governmental policies that are in effect:
    - i. To limit the quantities of domestically produced or marketed products that are similar in nature, or in the absence of significant domestic production of such products, to limit the quantities of domestically produced products that can be directly replaced by the imported product; or
    - ii. In order to address a temporary excess of a particular domestic product, or in cases where there is no significant domestic production of the like product, but a domestic product that can be directly substituted for the imported product exists, it may be appropriate to make the surplus available to specific groups of domestic consumers at no cost or prices lower than the prevailing market rates; or
    - iii. Limit the production quantities of any animal product that relies heavily on imported commodities, particularly if domestic production of said commodity is insignificant.

The adoption of a policy by President Joko Widodo has resulted in the cessation of nickel ore exports to the European Union from 2020 to present. This policy was formulated based on the premise that converting nickel ore into a more valuable commodity would result in a more profitable export value. As per a report published by the Badan Pusat Statistik (BPS), the exports of nickel and its processed products from Indonesia amounted to USD 5.97 billion, with a corresponding volume of 777,411.8 tonnes in the year 2022. The value experienced a significant increase of 369.37% in comparison to the preceding year, reaching a total of US \$1.27 billion and a volume of 166,331.7 tonnes (figure 2) (BPS, 2022).

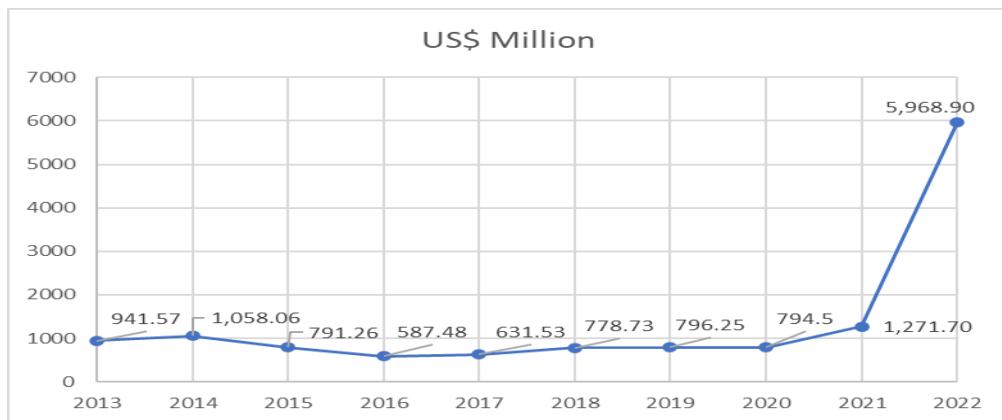


Figure 2. Indonesia Nickel Export (source: BPS, 2022)

Indonesia's participation in the World Trade Organisation (WTO) is driven by its national interests, aimed at promoting economic development and reducing poverty. Indonesia has joined multiple coalitions with the aim of enhancing its negotiating stance. The aforementioned coalitions, namely the G-33, G-20, and NAMA-11, share common interests. Indonesia is an active participant in these groups, working towards a shared stance that places emphasis on attaining the development goals of the Doha Development Agenda (DDA). Indonesia has been consistently engaged in matters that align with its primary interests, including but not limited to development, intellectual property, environmental concerns, and multilateral trade.

This article discusses the potential for Indonesia to justify its policy of imposing an export ban on nickel ore under Article XX(g) of the General Agreement on Tariffs and Trade (GATT) 1994. Specifically, the article highlights a gap in the provision, which pertains to the conservation of exhaustible natural resources and its effectiveness in conjunction with restrictions on domestic production or consumption. The article suggests that Indonesia may be able to utilise this provision to implement and maintain policies aimed at protecting natural resources and the environment. However, the article notes that for such policies to be justified under Article XX(g) of GATT 1994, they must meet three prerequisites:

- The intended policy objectives entail the preservation of non-renewable natural resources (i.e., conservation of exhaustible natural resources) to ensure sustainability;
- The execution of action should be aligned with the intended objective of the policy; and
- The enforcement of the action should be implemented in conjunction with the prohibition of domestic production or consumption (Sihotang and Suandika, 2023).

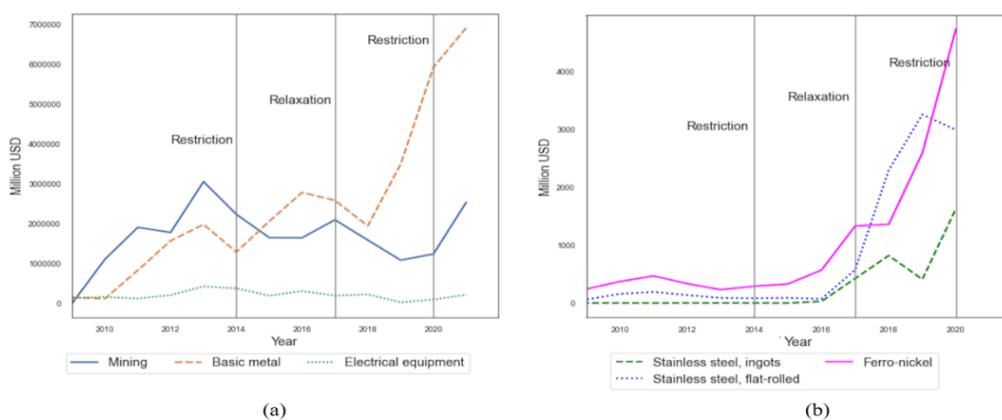


Figure 3. The two indicators - increased investments and exports. (a) Investment realization in mining, basic metal, and electrical equipment; (b) Nickel downstream exports. Source: The Jakarta Post, 2022

The evidence presented by Indonesia in favour of the nickel ban comprises augmented investments in the nation's nickel processing industry and amplified exports of nickel products, as depicted in figure 3. The presented data indicates a decline in investments within the mining sector during the year 2014, which coincided with the implementation of a governmental prohibition on the exportation of nickel ore. This measure resulted in the removal of a significant investment incentive. The data from 2021 reveals that there has been an increase in investments in the industry as compared to the previous year. This indicates that the imposition of an export ban does not have a negative impact on investment, as the domestic market is able to absorb the supplies. The fluctuations in nickel-based production were impacted by the imposition of a ban in 2014, subsequent relaxation in 2017, and subsequent reimplementation of the ban in 2020. The government has decided to extend the mineral export ban to other products, such as tin and copper, due to the positive signals of increased investments and exports by the downstream mining industry.

As per an article published in the Jakarta Post, the ban has been acknowledged by the government as a measure that can lead to the generation of employment opportunities and foster economic progress (Gupta, 2022b). The third law of 2020, which pertains to the amendments made to the fourth law of 2009 concerning Mineral and Coal Mining, stipulates the prohibition of exporting raw materials. The optimisation of mineral and coal mining products is contingent upon downstream activities within the mineral and coal sector. In the future, downstream activities are expected to be a significant source of state revenue, in addition to taxes and coal.

The government remains steadfast in its dedication to downstreaming the mining sector, which involves a gradual cessation of the exportation of unprocessed minerals or mining materials. Following the cessation of nickel exports, the government will promptly discontinue the exportation of unprocessed bauxite materials. Preventing the exportation of raw nickel materials generates significant value-added benefits that are perceivable by the populace. The establishment of a novel nickel ore processing industry is expected to generate substantial employment prospects for a significant number of individuals, potentially numbering in the tens of thousands or even millions, who may be eligible for recruitment. An additional benefit is the generation of revenue for the state through the collection of taxes. The expectation is that the downstream sector will facilitate the production of various nickel derivative products, including but not limited to steel, pans, and spoons. The correlation between technology transfer and the proliferation of small and medium enterprises in the surrounding area has a positive effect on the enhancement of individuals' well-being.

### **3.2. Indonesia's nickel industry & defense strategy under WTO rules.**

The nickel industry of Indonesia holds significant importance in the worldwide electric vehicle (EV) sector, owing to the country's plentiful nickel reserves. In the year 2019, the Indonesian government implemented a ban on the exportation of unprocessed nickel ore and also enforced regulations mandating domestic processing (IEA, 2022). In order to enhance the growth of the industry and adhere to the regulations set forth by the World Trade Organisation, Indonesia may contemplate several prospective approaches:

1. One potential strategy to promote the establishment of domestic nickel processing facilities is to incentivize investment from corporations such as Tesla. The proposed measure has the potential to facilitate the domestic value addition of Indonesia's nickel resources and foster the growth of its electric vehicle sector.
2. One potential strategy for enhancing the value of a nation's nickel resources prior to exportation is to allocate resources towards the establishment of downstream nickel processing facilities, such as smelters. This measure would additionally facilitate the growth of domestic sectors that are dependent on nickel, such as the steel manufacturing industry.
3. The objective is to establish a regulatory framework that is both sustainable and transparent while also striking a balance between the requirements of the domestic industry and the obligations of international trade.

The European Union and Indonesia are currently engaged in a trade dispute concerning the prohibition of nickel ore exports imposed by the latter. Although the nation intends to challenge the WTO decision, it may have to contemplate alternative approaches to adhere to WTO regulations and advance its nickel sector.

#### 4. Conclusion

The development of Indonesia's nickel industry poses a challenge in adhering to WTO regulations while simultaneously ensuring national security and defense industry interests. Indonesia has taken steps to enhance the value of its nickel resources by instituting policies such as prohibiting the exportation of unrefined nickel ore and establishing domestic processing mandates to foster downstream industries. Nevertheless, the implementation of these measures has resulted in notable repercussions on supply chains and contravened regulations established by the World Trade Organisation. Indonesia may contemplate various strategies to enhance the industry and adhere to the World Trade Organisation (WTO) regulations. These strategies may include incentivizing investment from corporations such as Tesla, allocating resources toward the establishment of downstream processing facilities, and fostering a sustainable regulatory framework. Achieving a balance between national security interests and the facilitation of equitable trade is of utmost importance, and it is imperative to assess the possible ramifications of any judicial ruling meticulously. In general, the endeavours of Indonesia to enhance its nickel industry and fortify its defense capabilities will persist as a noteworthy determinant in the nation's economic expansion and mitigation of poverty.

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