

The Prisoner's Dilemma: Indonesia and the European Union in Export Commodity Disputes

Kasistha Cantyani¹, Jason Matthew², Sesilia Rainaputri³, Aureishia Huang⁴

¹Faculty of Humanities and Theology, TU Dortmund University, tkasistha@gmail.com

²Faculty of Social and Political Sciences, Universitas Katolik Parahyangan, Indonesia, jason.mtw@gmail.com

³Faculty of Social and Political Sciences, Universitas Katolik Parahyangan, Indonesia, sesiliaraina@gmail.com

⁴Faculty of Social and Political Sciences, Universitas Katolik Parahyangan, Indonesia, aureishia11@gmail.com

ABSTRACT

Nickel ore export ban has been imposed by Indonesia as the leading actor on the global nickel supply chain which created a disruption and has not been perceived well by other countries, especially the European Union (EU) countries. This paper will analyze the implications caused by the export ban to EU countries and the actions following it, including the enactment of the palm oil ban. Starting with the World Trade Organization (WTO) panel, the EU's strategy of forcing Indonesia to lift the export ban has not yet succeeded. With the tit-for-tat strategy, this paper identifies the EU's palm oil ban as a form of retaliation for the Indonesian nickel ore export ban. Although the tit-for-tat strategy often is used in a positive-sum game, the conflict between Indonesia and the EU is a negative-sum game with both parties putting their economies at risk.

Keywords: *nickel ore export ban, palm oil ban, tit-for-tat strategy, Indonesia, European Union*

ABSTRAK

Indonesia sebagai aktor penting dalam pasokan nikel global menetapkan larangan ekspor bijih nikel yang menciptakan disrupsi dan tidak diterima dengan baik oleh berbagai negara, terutama negara Uni Eropa (UE). Penelitian ini akan menganalisa implikasi yang disebabkan oleh larangan ekspor ke negara UE dan tindakan yang mengikutinya, termasuk larangan minyak kelapa sawit. Dimulai dengan panel World Trade Organization (WTO), strategi UE untuk memaksa Indonesia mengangkat larangan ekspor masih belum berhasil. Dengan strategi tit-for-tat, penelitian ini mengidentifikasi larangan minyak kelapa sawit yang dilakukan oleh UE merupakan bentuk dari pemberontakan terhadap larangan ekspor bijih nikel. Meskipun strategi tit-for-tat seringkali digunakan dalam permainan positive-sum, konflik antara Indonesia dan UE merupakan permainan negative-sum dengan kedua pihak menempatkan ekonomi mereka dalam risiko.

Kata kunci: larangan ekspor bijih nikel, larangan minyak kelapa sawit, strategi tit-for-tat, Indonesia, Uni Eropa.

Introduction

As the world is progressing towards climate neutrality, the demand for nickel ore and nickel products is increasing, especially for electric vehicle batteries.¹ With an estimated 21 million tons spread across the country, Indonesia has the largest nickel reserves and produces one million metric tons each year.² In 2021, Indonesia is leading in the global nickel supply which contributed around

¹ "BNamericas - Why Nickel Prices Are Rising – and Will Remain...," BNamericas.com, March 28, 2022, <https://www.bnamericas.com/en/interviews/why-nickel-prices-are-rising--and-will-remain-high#:~:text=The%20main%20point%20that%20will>.

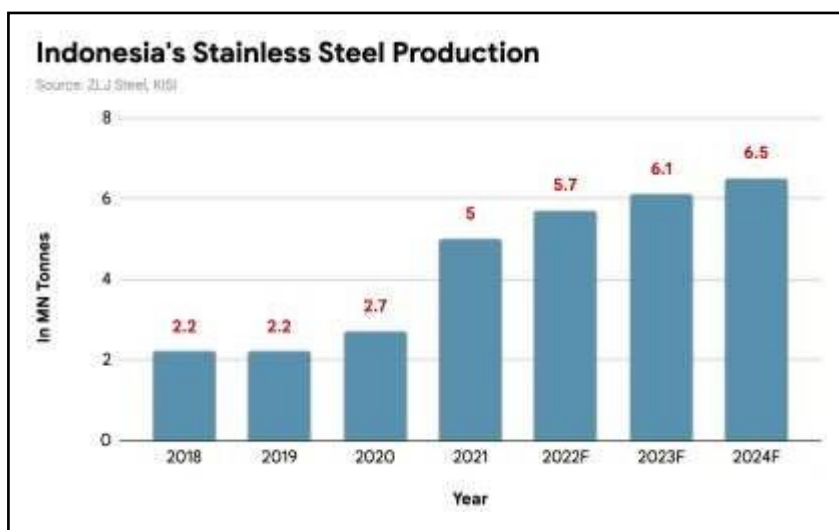
² "Nickel for Life," BKPM, 2019, <https://www.bkpm.go.id/en/publication/detail/news/nickel-for-life#:~:text=Nickel%20potential%20in%20Indonesia>.

37% of the total nickel production or amounting to 2.7 million metric tons.³ Growing demand for nickel also encourages more investments in the low-carbon metals industry which also benefit the smelter industry in Indonesia.⁴

Indonesia has cooperated with several countries in the world in exporting its nickel, particularly to the European Union (EU). The relations between the EU and Indonesia were initiated when the Association of Southeast Asian Nations (ASEAN) and the EU first established diplomatic ties in 1980. Through the Framework Agreement on Comprehensive Partnership and Cooperation (PCA) in 2014, Indonesia deepened its bilateral relations with the EU while the agreement has provided a firm foundation for Indonesia-EU cooperation. In the initial agreement, it has been stated that the EU perceives Indonesia as a prominent partner in the region, specifically as a source of raw materials.⁵

Indonesia has repositioned its stance in the global supply chain to gain more economic development opportunities. With that, Indonesia re-imposed the nickel ore export ban at the end of 2019. At first, Indonesia released an export ban on nickel ore in January 2014. However, Indonesia was not ready to boost its smelter industry which created a steep decline in nickel production.⁶ Seeing new opportunities in the nickel market, Indonesia re-imposed the ban with the purpose of developing Indonesia's smelter industry by processing nickel ore into nickel products domestically. The second phase of the nickel ore export ban managed to get a fruitful result with an increase in Indonesia's stainless steel production and is projected to increase more in the upcoming years.⁷

Graphic 1.1 Indonesia's Stainless Steel Production



Source: Korea Investment & Sekuritas Indonesia, 2022

³ Christina Vania Winona, "Indonesia's Nickel Industry in the Aftermath of Trade Dispute with the European Union," <https://cwts.ugm.ac.id>, accessed January 9, 2023, <https://cwts.ugm.ac.id/en/2022/11/03/indonesias-nickel-industry-in-the-aftermath-of-trade-dispute-with-the-european-union/#:~:text=Indonesia%20produces%201%20million%20metric>.

⁴ "Commodity Watch Indonesia: Zooming in on Nickel, a Valuable Metal with a Bright Future | Indonesia Investments," www.indonesia-investments.com, June 7, 2022, <https://www.indonesia-investments.com/business/business-columns/commodity-watch-indonesia-zooming-in-on-nickel-a-valuable-metal-with-a-bright-future/item9521>.

⁵ "Uni Eropa | Portal Kementerian Luar Negeri Republik Indonesia," Kemlu.go.id, 2018, https://kemlu.go.id/portal/en/read/149/halaman_list_lainnya/uni-eropa.

⁶ Isabelle Huber, "Indonesia's Nickel Industrial Strategy," www.csis.org, December 8, 2021, <https://www.csis.org/analysis/indonesias-nickel-industrial-strategy>.

⁷ Fahressi Fahalmesta, "Indonesia Nickel Crucial Metal for Low-Carbon Future" (Korea Investment & Sekuritas Indonesia, May 7, 2022), <https://kisi.co.id/storage/research-analysis/August2022/ZuWoIYdDKyucPZU6Zurg.pdf>.

Despite the advantages that Indonesia gained from the export ban, the EU did not respond well to Indonesia's nickel ore export ban. The EU has proposed a lawsuit at the World Trade Organization (WTO) arguing that the Indonesian nickel ore export ban was unfair and illegally harmful to the EU in accessing raw materials needed for stainless steel production.⁸ The EU claims that Indonesia's policy was not aligned with several articles in the General Agreement on Tariffs and Trade (GATT) 1947 which can directly affect the increasing price of nickel ores in the global supply chain.⁹ In response to the panel, Indonesia filed an appeal against WTO by claiming that its policy has been showing positive impacts in mining investments and exports of nickel products. Yet, the Indonesian nickel ore export ban has not been lifted.¹⁰

Nonetheless, the EU continued to launch several policies with the aim of urging the export ban to be lifted immediately, including the palm oil ban. Actions taken by the EU need to be fully comprehended in order to recommend adequate policy recommendations. Therefore, why did the EU retaliate by enacting a palm oil ban from Indonesia?

Literature Review

The first group of the literature the authors used argues that Indonesia does not violate international trade law regarding banning nickel ore export. By the principle of economic sovereignty, the state has all rights to control and utilize all of its natural resources for the prosperity of its people. Therefore, Indonesia exercised resource nationalism to gain maximum profits from the usage of its resources. Furthermore, Indonesia was also planning to downstream the melting industry to add nickel value for export for maximizing profits.

The article titled "The Dispute between Indonesia and the European Union Concerning the Export Ban on Nickel Ore under the International Trade Law" by Reygina Yenny Mitraina et al. stated that nickel is valued as an essential commodity for industries. Nickel is used for the production of daily tools, such as spoons, forks, and knives, also several are used in electronics. According to Mineral Commodity Summaries 2020, Indonesia is the biggest producer of nickel. Despite the huge quantity of nickel ore Indonesia is exporting, nickel exports have little to no effect on the development of Indonesia's economy. That is caused by the low selling price of raw (non-processed) nickel ores. The current nickel export is valued at \$30 USD a ton. If the nickel is processed to become ferronickel, the export value increases to \$100 USD a ton. Currently, Indonesia has several nickel-processing smelters that are operating, and several are still under construction. The EU countries are important importers of nickel from Indonesia. The EU raised an objection to Indonesia's nickel ore ban. The EU views the nickel ore ban as unfair because it restricts the EU's access to raw nickel. Therefore, the EU sent this dispute to the WTO.¹¹

⁸ Reuters Staff, "Indonesia Appeals WTO Ruling in Nickel Dispute against EU," *Reuters*, December 12, 2022, sec. Commodities, <https://www.reuters.com/article/indonesia-eu-nickel-idUSKBN2SW1PR>.

⁹ "WTO Panel Rules against Indonesia's Export Limitations on Raw Materials," European Commission, November 30, 2022, https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7314.

¹⁰ The Jakarta Post, "Indonesia Appeals WTO Ruling in Nickel Dispute against EU," *The Jakarta Post*, December 13, 2022, <https://www.thejakartapost.com/business/2022/12/13/indonesia-appeals-wto-ruling-in-nickel-dispute-against-eu.html>.

¹¹ Bernard Nainggolan et al., *ICLHR 2021: Proceedings from the 1st International Conference on Law and Human Rights, ICLHR 2021, 14-15 April 2021, Jakarta, Indonesia*, Google Books (European Alliance for Innovation, 2021), https://books.google.co.id/books?hl=en&lr=&id=5a1jEAAAQBAJ&oi=fnd&pg=PA226&dq=indonesia+nickel+ban+policy+european+union&ots=qdPe9VZPqw&sig=InXkmX-Hqfja4EHtRaVncINgk-c&redir_esc=y#v=onepage&q=indonesia%20nickel%20ban%20policy%20european%20union&f=false.

Sovereignty is a right that is possessed by the state to govern everything under its territory. Sovereignty makes the state the supreme and absolute power to regulate economic policy in their territory and their international economic policy. Economic sovereignty gives states the same equal status for international economic relations. Furthermore, economic sovereignty gives the state authority over natural resources, economic systems, and rules regarding agreements in international economic relations. Indonesia's economic sovereignty is stated in the 1945 Constitution of the Republic of Indonesia in article 33 paragraph 3 which states; "The land and waters and the natural resources contained therein are controlled by the state and used for the greatest prosperity of the people." The state has complete control over all the minerals for the interest of the state and people's prosperity because the minerals are national assets. Indonesia is not misusing its sovereignty to ban nickel ore export because it is considered detrimental to Indonesia's economy.¹²

The nickel ore export ban that Indonesia enacted is justified because Indonesia wants to limit the quantity of nickel ore exported to prevent it from depletion. Nickel is considered an essential product for the state. Nickel is also a non-renewable resource with a high consumption level that is faster than its availability will cause resource depletion. Quantity restriction is also to protect the foreign balance of payments. Indonesia increases its nickel price to also increase its foreign balance of payments by processing nickel ores to ferronickel. State's income will be increased that affects the foreign balance of payments from deficit to become surplus.¹³

In the chapter titled "Nationalism, developmentalism and politics in Indonesia's mining sector" by Eve Warburton, there was a global mining boom from 2003 until 2013 that affected mining extraction in Indonesia which is rich in natural resources in Kalimantan, Sulawesi, and Sumatra. Many policymakers, activists, and politicians are worried about the increase of exports of cheap minerals which Indonesian people are not affected economically by the mining boom. The increase in activities in the Indonesian mining sector did not reduce poverty and inequality.¹⁴

Value-adding was practiced in Indonesia during the mining boom. Mining companies would invest in downstream facilities for the nickel ore would be processed and smelted the minerals domestically. The downstream of mineral processing aims to increase the economic footprint of Indonesia's mining industry. The value-adding policy received much support from the policy-making elites. The international economic system is explained by dependency theory which argues that poor countries are obligated to sell cheap primary resources to advanced industrialized countries. The resource-exporting countries were subjected to industrialized countries with worse economic conditions, which is called the "resource curse". Some economists argued that to prevent the resource curse, downstream integration, value-adding, and price stabilization schemes could protect resource-exporting countries from the resource curse.¹⁵

The fear of dependency on advanced industrialized countries encouraged nationalists to intervene in the resource sector. Many politicians in Indonesia were anxious regarding Indonesia's dependence on primary commodities exports which made the economy vulnerable to boom-bust cycles. They argued that it would still sell cheap raw materials to rich industrialized countries without enhancing the economy or the global value chain if there is no state intervention. Nationalist intervention is generally justified by Article 33 of the Indonesian constitution which explained that all

¹² Ibid.

¹³ Ibid.

¹⁴ Eve Warburton, *Nationalism, Developmentalism and Politics in Indonesia's Mining Sector*, 2018.

¹⁵ Ibid.

natural resources should be controlled by the state and used to ensure the prosperity of the people. It was argued that if Indonesia was still not investing in industrial upgrading, it would remain “a nation of slaves”.¹⁶ Both articles lack attention to how complex the interdependence between Indonesia's nickel ore exports towards European steel industries. Nationalistic motives that drove Indonesia's decision to ban nickel export are the dominant factor. The article only focuses on Indonesia's right to profit from nickel production without taking into consideration the mutual trade agreements between Indonesia and the EU.

The second group of literature that the authors used argues that Indonesia's nickel ore export ban violated several international trade agreements. Indonesia as a member of the World Trade Organization could not arbitrarily impose a decision that causes a disruption in international trade that harms other parties' interests. In the article titled “Questioning Indonesia's Ban on Export of Ore Policy Under International Investment and Trade Law” by Erwin Prasetyo, it is accepted in the international community within the General Assembly Resolution 1803 in 1962 that the natural resources of a country shall be under the sovereignty of the state and must be used for the national development and the well-being of its people. Indonesia affirms this notion within its constitution with Article 33(3) which mandated the state to utilize its natural resources only for the prosperity of the people. This clause made foreign investment or projects in the mining sector be regulated by Indonesia to ensure the prosperity of its people.¹⁷

Indonesia's trade and economy are dependent on exporting its natural resources. The majority of natural resources export commodities are nickel and bauxite. Indonesia received 17% (around 2 billion USD) from mineral exports. Indonesia is considered a major player in the global metal market which produces approximately 20 percent of the global nickel supply. In 2009, there was a deficit in trade balances Indonesia was trying to add value to its mineral by imposing the Law No. 4 of 2009 regarding Mineral and Coal Mining that bans the export of “unprocessed” minerals.¹⁸

While Indonesia has the sovereign right to control its mineral resources, it is also obliged to make favorable business conditions for foreign investors with minimum standard treatment and certainty under international investment law. Furthermore, if a state has ratified the WTO Agreements, it no longer has full sovereignty over its trade policy.¹⁹

It is required to make a balance between the states' and private companies' interests to fully give prosperity to the people because the state itself might not be able to explore and exploit natural resources by itself. By joining the WTO or agreeing on an investment treaty with other states, a state could not haphazardly establish regulations that may harm others' interests. Investors' interests also have a vital impact on the economy and their rights, and their interests are protected by the law and they should not be forcefully taken away by the government. The article suggests that the government must find solutions that could have mutual benefits for all parties involved and add value to Indonesia's natural resources and give benefits to the investors.²⁰

In the article “Indonesia's Mineral Export Prohibition and Legality of Export Duties Under the GATT Rules” by Bani Adam and Haniff Ahamat, the region that has the most populous countries

¹⁶ Ibid.

¹⁷ Erwin Prasetyo, “Questioning Indonesia's Ban on Export of Ore Policy under International Investment and Trade Law,” n.d., accessed January 9, 2023.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

are Asian developing countries which affect the consumption of minerals that led to the exploitation of mineral resources to produce manufactured goods. The price for raw materials was increasing which could encourage price leverages in the global market. Indonesia decided to tighten the export of the materials to make it more valuable than the export of raw materials.²¹

The legal argument of the Indonesian government to impose restrictions on nickel ores is Article 33 (3) of the Constitution which grants authority to the government to fully control all kinds of mineral resources which should be utilized for the prosperity of the people. The Indonesian government also restricts nickel ore export purposefully to downstream the industry to give domestic opportunities. The downstream process is also expected to improve social prosperity that begins with income distribution, national revenue, and also protection of the environment. This policy is mainly called resource nationalism which tends to threaten the interests of advanced-industrialized countries which could not gain materials that are important. The EU views the decision Indonesia has made as unfair because there is an uneven distribution of minerals in the region and the restriction appeared to be an obstacle for the EU to access the resources.²²

The General Agreement on Tariffs and Trade (GATT 1994) forbids member countries to impose measures that could distort international trade. Therefore, member countries should not restrict exports through banning, quotas, export licenses, or other measures. Through this argument, the European Union complained regarding Indonesia's nickel export ban. Indonesia's measures on restricting nickel export cause a violation of Article XI.2(a) and Article XX (b) and (g) of GATT 1994.²³ The GATT 1994 decided that export restrictions are not allowed in a normal situation. The prohibition of export restrictions is made to prevent distortion of trade flows, e.g. quotas, import or export licenses, or other measures. Indonesia is viewed to take measures that are inconsistent with Article XI.1 GATT.²⁴

Both articles still only consist of explanations on the perspective of international trade law between Indonesia and the EU. The EU has the right to contest Indonesia to the WTO as a reaction to Indonesia's violation of the agreements. This article posits its arguments that Indonesia and the EU should cooperate to have bigger profits on nickel ore and oil palm trade.

Theoretical Framework

a. Game Theory

In analyzing the calculation of Indonesia banning nickel ores from the EU, this paper uses game theory, specifically the tit-for-tat strategy. Game theory is a concept to analyze strategic cooperation between states. Game theory can be divided into two categories, there are cooperative games, which are called variable-sum, and non-cooperative or also known as zero-sum.²⁵ Variable-sum or cooperative games describe a situation where both sides gain or lose. On the other hand, zero-sum or non-cooperative games describe a situation where one side wins, while the other loses.

Besides cooperative and non-cooperative games, there is also a mix of both strategies, known as the Prisoner's Dilemma. The Prisoner's Dilemma is a condition in which the prisoners have to

²¹ Bani Adam and Haniff Ahamat, "Indonesia's Mineral Export Prohibition and Legality of Export Duties under the GATT Rules," *Sriwijaya Law Review* 6, no. 2 (July 13, 2022): 239, <https://doi.org/10.28946/slrev.vol6.iss2.1661.pp239-253>.

²² Ibid.

²³ Ibid.

²⁴ Ibid.

²⁵ Timothy Dunne, Milja Kurki, and Steve Smith, *International Relations Theories: Discipline and Diversity*, 5th ed. (New York: Oxford University Press, 2021), 119.

choose between remaining silent or confessing their mistakes. If both confess, the outcome would be worse than remaining silent. However, if both prisoners remain silent, it will not solve the problem. Thus, both prisoners must make cooperative decisions that will benefit them

b. Tit-for-Tat Strategy

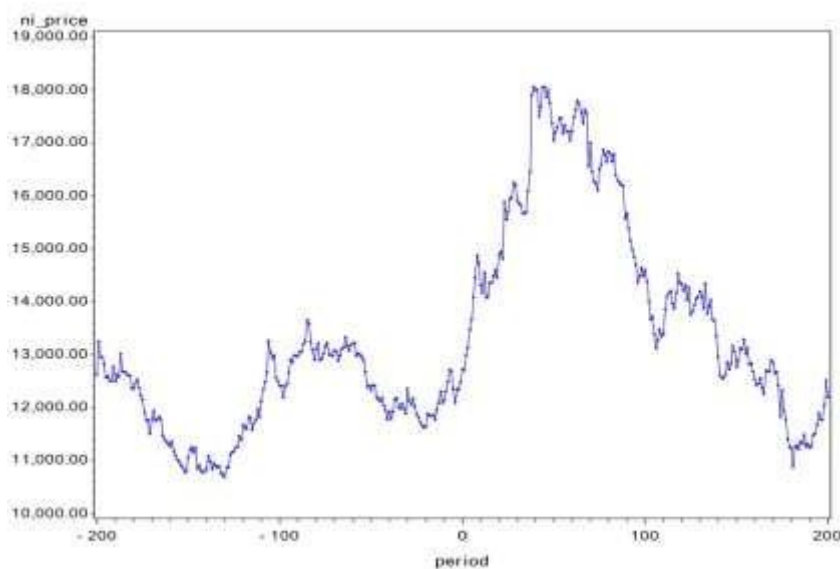
In the prisoner's dilemma, if both players failed to cooperate with each other, the other player could respond by not cooperating in the future, especially if they lost in the first place. Therefore, Axelrod demonstrates a Prisoner's Dilemma strategy called the tit-for-tat. Axelrod explains tit-for-tat is a cooperation strategy in which a person does something according to what others have done before, or equivalent retaliation.²⁶ The impacts of the tit-for-tat strategy can be divided into short and long-term. In the short term, the tit-for-tat strategy can be used as revenge, yet in the long term, the tit-for-tat strategy is a cooperative tool. Considering the tit-for-tat strategy, this paper argues that both the EU and Indonesia have done the tit-for-tat strategy to solve the trade disputes between them. However, the outcomes are neither beneficial for the EU nor Indonesia.

Analysis

a. Initial Effect of the Nickel Export Ban

As a state producing 60% of the global supply of nickel, the ban that Indonesia imposed on raw nickel ore had a large effect on nickel prices in the London Metal Exchange.²⁷ Following the 2019 ban on unprocessed nickel exports from Indonesia, the price of nickel ore slowly rose, and peaked at \$18,050/ton on 9 September 2019, 2 months after the announcements of nickel export bans on 8 July 2019.²⁸

Graphic 1.2. Nickel prices after the announcement



Source: *RISKS*, 2021

²⁶ Robert Axelrod, *The Evolution of Cooperation* (New York: Basic Books, Inc, 1981), 20

²⁷ Byungkwon Lim, Hyeon Sook Kim, and Jaehwan Park, "Implicit Interpretation of Indonesian Export Bans on LME Nickel Prices: Evidence from the Announcement Effect," *Risks* 9, no. 5 (May 11, 2021): 93, <https://doi.org/10.3390/risks9050093>.

²⁸ *Ibid.*, 5.

As explained by UNCTAD, the nickel ore ban that Indonesia imposed is a way to establish nickel as a means of national wealth and help Indonesia to add value to the nickel exports. Furthermore, the ban would allow Indonesia to better control the rate at which nickel is being extracted to ensure sustainable mining practices.²⁹

The ban was also designed to heighten Indonesia's role as a processor and manufacturer, not only a raw material exporter. Before the first ban imposed in 2014, Indonesia only had three nickel smelters, and the other nickel mines would export raw materials straight to foreign buyers.³⁰ In Indonesia, Chinese nickel processors were the main buyers, with their stainless steel industry being highly dependent on the production of Indonesian nickel ores. Without their decision to move their production and help invest in nickel processing plants across Indonesia, Indonesia would most likely not take the leap of banning raw nickel ore.³¹

b. Growth of the Indonesian EV Battery Industry

Morowali Industrial Park in Central Sulawesi became one of the most invested nickel production hubs, with investment growing to approximately \$18 billion from \$6,7 billion in the span of three years, from 2019 to 2022.³² The latest help came from GEM Co. Ltd, which is a Chinese company engaging in electric vehicle (EV) battery production.³³ Leading up to the 2019 export ban that was announced in July, GEM had already made plans to inject \$700 million in facility buildings at Morowali and plans to produce 30,000 tons of EV battery material per year.³⁴

Furthermore, growth in Morowali Industrial Park has brought Tsingshan Iron and Steel Group, the first Chinese company who invested in Morowali to develop a new industrial park, Weda Bay Industrial Park in North Maluku.³⁵ As Indonesia starts to meet the demand for EV batteries through the newly constructed industrial parks, the production output of nickel from Indonesian mines has grown 41% from January-July 2022 when compared to 2021.³⁶ This growth also contributed to the 14% rise in global production seen in 2022.³⁷ As expected from Indonesia's decision, the price of raw nickel traded in the London Metal Exchange rose to \$23,000/ton, whilst Indonesian refined nickel sold directly to buyers dropped its price, becoming more desirable to importers of nickel.

c. The EU's Disadvantaged Position

However, whilst Indonesia reaps the benefits of its refined nickel and EV battery industry growth, importers of raw nickel in Europe were forced to bear the consequences of Indonesia's ban.

²⁹ UNCTAD, *Using Trade Policy to Drive Value Addition: Lessons from Indonesia's Ban on Nickel Exports* (Geneva: UNCTAD, 2017).

³⁰ UNCTAD, *Using Trade Policy to Drive Value Addition: Lessons from Indonesia's Ban on Nickel Exports* (Geneva: UNCTAD, 2017).

³¹ *Ibid*, 11.

³² Bloomberg, "Export Ban Triples Nickel Investment in Indonesia's Morowali," *Mining Weekly*, September 30, 2022, <https://www.miningweekly.com/article/export-ban-triples-nickel-investment-in-indonesias-morowali-2022-09-30>.

³³ Karl Decena, "Chinese Firms Lay out Processing Facility Plans after Indonesian Ore Export Ban," *www.spglobal.com*, May 9, 2019, https://www.spglobal.com/marketintelligence/en/news-insights/trending/119hkna_dqquro-fmklifa2.

³⁴ *Ibid*.

³⁵ Xinhua, "China-Invested Industrial Parks Bring Boom to Indonesia's Nickel Industry - Global Times," *Global Times*, November 17, 2022, <https://www.globaltimes.cn/page/202211/1279768.shtml>.

³⁶ Andy Home, "Column: Indonesia's Nickel Surge Bad News for Price and Pricing," *Reuters*, September 30, 2022, sec. Commodities, <https://www.reuters.com/markets/commodities/indonesias-nickel-surge-bad-news-price-pricing-2022-09-29/>.

³⁷ *Ibid*.

As a leading region in the stainless steel industry which heavily relies on raw nickel, the EU was disadvantaged by the ban on nickel export suddenly imposed by Indonesia.³⁸ According to Korea Investment, stainless steel is projected to see a reduction in demand as large as -57% as the demand for EV batteries grows by +28% by 2030.³⁹

Although in 2022, 60-70% of nickel consumption is still used for stainless steel and only 9% is used for EV battery production, European stainless steel prices have fallen throughout the year.⁴⁰ In Northern Europe, prices of stainless steel sheets in July 2022 dropped €200 per ton from June 2022.⁴¹ Large distributors of stainless steel sheets in Europe have stocked up on large volumes of stainless steel sheets when prices of nickel increased in March 2022. As this created a market flush, prices of stainless steel sheets dropped quickly.

The main reason for this development is whilst Indonesia bans raw nickel export, the EU producers have shifted to import nickel from Russia. Between 2021 and 2022, Indonesia has coincidentally been the second fastest growing nickel producer in the world, with a production increase of 12.5%.⁴² By 2022, it was expected that Indonesia would produce 40% of all global nickel output.⁴³ Nevertheless, as Indonesia effectively stopped nickel ore exports of all grades on 1 January 2020, nickel ore imports from Russia to the EU increased significantly since 2020. In 2019, the value for EU imports of nickel from Russia was \$1,65 billion and only declined by a small margin in 2020 to \$1,6 billion.⁴⁴

Following the Indonesian nickel ban, in 2021 Russian nickel imports to the EU were valued at \$2,5 billion and rose to \$3,39 billion in 2022.⁴⁵ However, the Russia-Ukraine war, which started in February 2022 has made sourcing difficult and prices soar.⁴⁶ In January 2022, global nickel prices were at \$22,355 per metric ton, and in March 2022 they surged to \$33,924 per metric ton as the war escalated.⁴⁷ From January to July 2022, global nickel prices averaged \$27,858 per metric ton, which is nearly a 60% increase in prices compared to the first half of 2021.⁴⁸

d. Equivalent Retaliation From the EU

Contextualized with the mathematical problem of a Prisoner's Dilemma, Indonesia and the EU can be perceived as two rational actors stuck in the payoff matrix. In the classical Prisoner's

³⁸ PUSHEP, "Why Does Indonesia's Nickel Export Ban Upset the EU?" Pusat Studi Hukum Energi dan Pertambangan, February 3, 2021, <https://pushep.or.id/why-does-indonesias-nickel-export-ban-upset-the-eu/>.

³⁹ Fahressi Fahalmesta, "Indonesia Nickel Crucial Metal for Low-Carbon Future" (Korea Investment & Sekuritas Indonesia, May 7, 2022), <https://kisi.co.id/storage/research-analysis/August2022/ZuWoIYdDKyucPZU6Zurg.pdf>.

⁴⁰ Ross Yeo, "Europe Stainless Steel Prices Fall Further, No Relief until September – Sources – British Stainless Steel Association," British Stainless Steel Association, accessed January 10, 2023, <https://bssa.org.uk/europe-stainless-steel-prices-fall-further-no-relief-until-september-sources/>.

⁴¹ Ibid.

⁴² Isabeau van Halm, "The nickel price rollercoaster of 2022," Mining Technology, January 10, 2023, <https://www.mining-technology.com/features/nickel-price-surge-2022-markets/>.

⁴³ Ibid.

⁴⁴ "European Union Imports of Nickel from Russia," Trading Economics, May 2023, <https://tradingeconomics.com/european-union/imports/russia/nickel>.

⁴⁵ Ibid.

⁴⁶ Emily Pickrell, "Russia-Ukraine War Helps Drive Nickel Prices, EV Headaches," Forbes, March 31, 2022, <https://www.forbes.com/sites/uhenergy/2022/03/31/russia-ukraine-war-helps-drive-nickel-prices-ev-headaches/?sh=59f5c7eb57cd>.

⁴⁷ Statista Research Department, "Monthly price of nickel worldwide from September 2016 to April 2023," Statista, May 9, 2023, <https://www.statista.com/statistics/260799/monthly-price-of-nickel-at-lme/>.

⁴⁸ Isabeau van Halm, "The nickel price rollercoaster of 2022," Mining Technology, January 10, 2023, <https://www.mining-technology.com/features/nickel-price-surge-2022-markets/>.

Dilemma, Axelrod has established the tit-for-tat strategy as one of the simplest and most rewarding strategies. The strategy essentially rewards one's action with an equivalent retaliation – meaning when an actor cooperates, the other actor will ensure cooperation. However, in the likely case that an actor does not cooperate – as Indonesia has done – then the other actor will retaliate in a similar manner.

Whilst the nickel ore export ban formalized by Indonesia to increase its resource wealth might be an important national policy for a state that has long been disadvantaged in global trade, it now puts the EU at an unfair disadvantage. As the EU is losing the main exporter of nickel ore, stainless steel production has been disrupted followed by an increase in nickel prices worldwide, leaving the EU with no alternatives than resorting to more expensive sources, such as Russian nickel ores.⁴⁹ This position led the EU to request a consultation with the government of Indonesia and address their concerns about the ban regarding how it will affect Europe's stainless steel production.⁵⁰ The EU was particularly concerned about how restrictions on raw material exports would be a breach of Article X:1 and XI:1 of the GATT 1994. However, the consultations were unsatisfactory and led the EU to request the formation of a World Trade Organisation panel to investigate the breach.⁵¹ As the second actor in the 'prisoner's dilemma' with Indonesia, the act of forming the Panel is perceived to be the first act of equivalent retaliation against Indonesia.

The Panel eventually ruled that Indonesia had unlawfully applied the nickel ore ban without a sufficient basis for action.⁵² In regards to Article XI:1, GATT underlines that states must not apply prohibitions or restrictions which are not in the form of duties, taxes, or charges implemented through quotas, and import or export licenses.⁵³ Indonesia had argued that the raw nickel ore ban they formalized was to prevent critical shortages of the material. Regardless, the Panel proved that though there was a supply-demand imbalance, the imbalance was not extreme enough to warrant an export ban.⁵⁴ In addition to concluding that Indonesia failed to fulfill Article XI:1, the Panel concluded that Indonesia's export ban is not enough to secure compliance with other Indonesian laws or regulations, hence there are other measures Indonesia could have taken instead of the export ban.

Furthermore, in article X:1 of GATT 1994, laws, regulations, and rulings must be published promptly to ensure that governments and traders are able to acquaint themselves with new requirements, restrictions, or prohibitions.⁵⁵ Nonetheless, the Panel found Indonesia to have announced the ban before it came into motion (the ban was announced in July 2019, whilst it only came into motion in January 2020).⁵⁶ However, due to the findings that Indonesia had indeed breached article XI:1, the WTO Panel has formally recommended that Indonesia should amend its national policy to fulfill the obligations outlined in the GATT 1994.

⁴⁹ Gerber Group, "Raw material costs cause stainless steel prices to rise further – Stainless Espresso," Steel News, November 30, 2022, <https://steelnews.biz/raw-material-costs-stainless-steel-prices-rise/>.

⁵⁰ "WTO | Dispute Settlement - DS592: Indonesia - Measures Relating to Raw Materials," World Trade Organization, accessed January 9, 2023, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds592_e.htm.

⁵¹ Ibid.

⁵² Ibid.

⁵³ World Trade Organization, "WTO Analytical Index GATT 1994 - Article XI (Practice)," accessed January 9, 2023, https://www.wto.org/english/res_e/publications_e/ai17_e/gatt1994_art11_oth.pdf.

⁵⁴ "WTO | Dispute Settlement - DS592: Indonesia - Measures Relating to Raw Materials," World Trade Organization, accessed January 9, 2023, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds592_e.htm.

⁵⁵ World Trade Organization, "WTO Analytical Index GATT 1994 - Article X (Jurisprudence)," accessed January 10, 2023, https://www.wto.org/english/res_e/publications_e/ai17_e/gatt1994_art10_jur.pdf.

⁵⁶ "WTO | Dispute Settlement - DS592: Indonesia - Measures Relating to Raw Materials," World Trade Organization, accessed January 9, 2023, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds592_e.htm.

e. Palm Oil Restriction from the EU

Following the raw nickel ore export ban which has kept its place as an Indonesian policy even after the WTO ruling, as a second act of retaliation, the EU has opted to mimic the acts of Indonesia. As a large market destination for Indonesian palm oil, which is Indonesia's most valuable export commodity, the EU has a lot of power in regard to Indonesia's export trade. In 2023, the EU started to ban the usage of palm oil biofuels, specifically due to deforestation and illegal plantations in producing palm oil.⁵⁷ Oke Nurwan as Director General of Foreign Trade claimed the palm oil ban is discriminatory towards Indonesia. He stated that raw materials from the EU should be categorized as high-risk resources for the environment as well.⁵⁸

The aforementioned decisions also harm Indonesia, resulting in a significant loss of GDP. Since Indonesia is one of the largest nickel exporters, with a total of \$1,5 million in 2022, the ban on nickel ore exports directly impacted Indonesia's export revenue.⁵⁹ On the other hand, this also affected Indonesia's palm oil exports. Palm oil is one of the biggest contributors to Indonesia's economy, with a total income of up to \$35,5 billion in 2021. Aside from that, the palm oil industry helps Indonesia to improve its economy through job creation and poverty alleviation. The palm oil industry succeeded in improving the living standard of 2,6 million Indonesians. However, due to the palm oil ban, Indonesia has the possibility of losing 51% of total palm oil exports and it affects palm oil farmers.⁶⁰ Moreover, Indonesian farmers rely on palm oil as their main source of income, thus, it could affect their livelihoods.

Although the EU has provided its rationale for restricting the use of palm oil, citing environmental concerns, we perceive this action by the EU as a response to Indonesia's restrictions on the export of nickel ore. Firstly, in the year 2020, Indonesia officially announced that they banned nickel ore export. This was subsequently followed by the EU's decision to impose a ban on the export of palm oil in September 2022 through the Renewable Energy Directive (RED).⁶¹ Secondly, the EU argues that nickel ore restrictions by Indonesia could negatively impact steel industries, specifically in job losses for 200.000 workers.⁶² However, when put into perspective, if the EU sets an indirect palm oil ban into place, an estimated 178.200 workers will lose employment, and over half of it (an estimated 124.800 workers) are in the island of Sumatra. This is a 0,54% decline in employment for a region 10 times smaller than the EU.⁶³ We see that the negative impact of nickel ore bans from

⁵⁷ Jong, Hans Nicholas. 2023. "Indonesia and Malaysia Assail New EU Ban on 'Dirty Commodities' Trade." *Mongabay Environmental News*. January 31, 2023. <https://news.mongabay.com/2023/01/indonesia-and-malaysia-assail-new-eu-ban-on-dirty-commodities-trade/>.

⁵⁸ "Kelapa Sawit, Ancaman Perang Dagang RI-Uni Eropa Dan Enam Hal Lainnya," *BBC News Indonesia*, March 23, 2019, <https://www.bbc.com/indonesia/indonesia-47663602>.

⁵⁹ Winona, Christina. 2022. "Indonesia's Nickel Industry in the Aftermath of Trade Dispute with the European Union." *Cwts.ugm.ac.id*. November 3, 2022. <https://cwts.ugm.ac.id/en/2022/11/03/indonesias-nickel-industry-in-the-aftermath-of-trade-dispute-with-the-european-union/>.

⁶⁰ Taufan Adharsyah, "RI Bakal Rugi Miliaran Dolar Akibat Larangan Sawit Uni Eropa," *market (cnbc indonesia.com)*, March 20, 2019, <https://www.cnbcindonesia.com/market/20190320173153-17-61904/ri-bakal-rugi-miliaran-dolar-akibat-larangan-sawit-uni-eropa>.

⁶¹ "Threats in Europe, for Indonesian Palm Oil in 2023." 2023. *BPDP*. January 16, 2023. <https://www.bpdp.or.id/en/threats-in-europe-for-indonesian-palm-oil-in-2023#:~:text=The%20EU>.

⁶² "EU Needs Nickel, but Discriminates Palm Oil." 2021. *Indonesian Palm Oil Association (GAPKI IPOA)*. March 8, 2021. <https://gapki.id/en/news/19858/eu-needs-nickel-but-discriminates-palm-oil>.

⁶³ Irlan A. Rum, et.al., "Impact assessment of the EU import ban on Indonesian palm oil: Using environmental extended multi-scale MRIO," *Science of the Total Environment* 853 (September 2022): 6, <http://dx.doi.org/10.1016/j.scitotenv.2022.158695>.

Indonesia to the EU job market is not a comparable impact to how palm oil bans will impact Indonesia, specifically in provinces of Sumatra such as Riau and North Sumatra. Despite this, the EU proceeded with the prohibition of palm oil exports.

Moreover, the impacts on emissions are not highly significant with the ban. The EU's import bans of Indonesian palm oil can reduce national greenhouse gas emissions by -0,24% or 1,99 million tonnes.⁶⁴ In a hypothetical situation of if the palm oil ban led to a 100% rewilding of freed-up land, then there would be a potential of 149.74 million tons CO₂e in carbon sequestration. Nonetheless, immediate impacts of the ban on environmental protection are limited, and changing palm to other vegetable oil crops (e.g. sunflowers, rapeseed) is not yet a viable solution – both economically and environmentally. This data provides insight into the EU's weak reasoning for its palm oil ban. We view that if this ban was enacted for environmental protection, there are far more sustainable actions that the EU could take. Data on the lack of impact this ban brings further reiterates our point that this ban was more of an act of retaliation, rather than to address environmental concerns.

Conclusion

Indonesia banned nickel ore export because of its economic sovereignty to control all of its natural resources to bring prosperity to the people. It is written in the Indonesian constitution that the government shall protect its natural resources from depletion. However, Indonesia is deemed to have violated several international trade laws with its ban policy. The international trade law suggests that any state could not arbitrarily impose measures that could disrupt the international trade balance. Yet, Indonesia still does its 'resource nationalism' in order to gain maximum profit from extracting nickel. Furthermore, Indonesia is also planning to downstream its nickel processing industry to make new opportunities for the domestic economy and enhance development. With the downstream process, Indonesia could add value to its nickel exports and sell them at higher prices.

Indonesia's decision to ban nickel ore exports made a significant impact on the EU's industry. The EU as the major importer of nickel imports has lost its resources to produce daily things. Therefore, the EU proceeds to negotiate with the Indonesian government. However, the Indonesian government still imposed its nickel ore export ban. Eventually, the EU retaliated against Indonesia's decision by issuing to the WTO to make a panel for investigation. The EU also imposed a palm oil import ban on Indonesia which detrimentally affected Indonesia's palm oil industry.

According to the tit-for-tat strategy, it is needed for both parties to cooperate to achieve mutual benefits. Indonesia and the EU still could benefit each other if both parties cooperate. However, both Indonesia's and the EU's economies are highly at risk because of the nickel ore ban and the palm oil ban. Therefore, both Indonesia and the EU are currently in the negative-sum game as a result of a non-cooperative manner

References

Adam, B., & Ahamat, H. (2022). Indonesia's Mineral Export Prohibition and Legality of Export Duties Under the GATT Rules. *Sriwijaya Law Review*, 6(2), 239. <https://doi.org/10.28946/slrev.vol6.iss2.1661.pp239-253>

⁶⁴ Ibid., 9.

- Bloomberg. (2022, September 30). *Export ban triples nickel investment in Indonesia's Morowali*. Mining Weekly. <https://www.miningweekly.com/article/export-ban-triples-nickel-investment-in-indonesias-morowali-2022-09-30>
- BNAmericas - *Why nickel prices are rising – and will remain...* (2022, March 28). BNAmericas.com. <https://www.bnamericas.com/en/interviews/why-nickel-prices-are-rising--and-will-remain-high#:~:text=The%20main%20point%20that%20will>
- Codingest. (2023, January 16). *Threats in Europe, for Indonesian Palm Oil in 2023*. BPDP. <https://www.bdpd.or.id/en/threats-in-europe-for-indonesian-palm-oil-in-2023#:~:text=The%20EU>
- Commodity Watch Indonesia: Zooming In On Nickel, A Valuable Metal With A Bright Future / Indonesia Investments*. (2022, June 7). Wwww.indonesia-Investments.com. <https://www.indonesia-investments.com/business/business-columns/commodity-watch-indonesia-zooming-in-on-nickel-a-valuable-metal-with-a-bright-future/item9521>
- Decena, K. (2019, May 9). *Chinese firms lay out processing facility plans after Indonesian ore export ban*. Wwww.spglobal.com. https://www.spglobal.com/marketintelligence/en/news-insights/trending/119hkna_dqquro-fmklifa2
- Dunne, T., Kurki, M., & Smith, S. (2021). *International relations theories : discipline and diversity* (5th ed., p. 119). Oxford University Press.
- EU Needs Nickel, But Discriminates Palm Oil*. (2021, March 8). Indonesian Palm Oil Association (GAPKI IPOA). <https://gapki.id/en/news/19858/eu-needs-nickel-but-discriminates-palm-oil>
- European Steel in Figures 2022. (n.d.). In *EUROFER*. EUROFER. Retrieved January 10, 2023, from <https://www.eurofer.eu/assets/publications/brochures-booklets-and-factsheets/european-steel-in-figures-2022/European-Steel-in-Figures-2022-v2.pdf>
- Fahalmesta, F. (2022). *Indonesia Nickel Crucial metal for low-carbon future* (pp. 1–5). Korea Investment & Sekuritas Indonesia. <https://kisi.co.id/storage/research-analysis/August2022/ZuWoIYdDKyucPZU6Zurg.pdf>
- Halm, I. van. (2023, January 10). *The nickel price rollercoaster of 2022*. Mining Technology. <https://www.mining-technology.com/features/nickel-price-surge-2022-markets/>
- Home, A. (2022, September 30). *Column: Indonesia's nickel surge bad news for price and pricing*. Reuters. <https://www.reuters.com/markets/commodities/indonesias-nickel-surge-bad-news-price-pricing-2022-09-29/>
- Huber, I. (2021, December 8). *Indonesia's Nickel Industrial Strategy*. Wwww.csis.org. <https://www.csis.org/analysis/indonesias-nickel-industrial-strategy>
- Idris, M. (2021, January 15). *Uni Eropa, Gigih Tolak Sawit Indonesia, Tapi Butuh Nikelnya Halaman all*. KOMPAS. <https://money.kompas.com/read/2021/01/15/203805526/uni-eropa-gigih-tolak-sawit-indonesia-tapi-butuh-nikelnya?page=all>
- Kelapa sawit, ancaman perang dagang RI-Uni Eropa dan enam hal lainnya. (2019, March 23). *BBC News Indonesia*. <https://www.bbc.com/indonesia/indonesia-47663602>
- Lim, B., Kim, H. S., & Park, J. (2021). *Implicit Interpretation of Indonesian Export Bans on LME Nickel Prices: Evidence from the Announcement Effect*. *Risks*, 9(5), 93. <https://doi.org/10.3390/risks9050093>
- Nainggolan, B., Wijayati, A., Panjaitan, H., Saputra, D. F., & Rahim, R. (2021). *ICLHR 2021: Proceedings from the 1st International Conference on Law and Human Rights, ICLHR 2021, 14-15 April 2021, Jakarta, Indonesia*. In *Google Books*. European Alliance for Innovation.

- https://books.google.co.id/books?hl=en&lr=&id=5a1jEAAAQBAJ&oi=fnd&pg=PA226&dq=indonesia+nickel+ban+policy+european+union&ots=qdPe9VZPqw&sig=InXkmX-Hqfja4EHtRaVncINgk-c&redir_esc=y#v=onepage&q=indonesia%20nickel%20ban%20policy%20european%20union&f=false
- Nickel for Life. (2019). BKPM. <https://www.bkpm.go.id/en/publication/detail/news/nickel-for-life#:~:text=Nickel%20potential%20in%20Indonesia>
- Nickel monthly price worldwide 2023. (n.d.). Statista. Retrieved May 25, 2023, from <https://www.statista.com/statistics/260799/monthly-price-of-nickel-at-lme>
- Organization, W. T. (n.d.-a). *WTO Analytical Index GATT 1994 - Article X (Jurisprudence)*. Retrieved January 10, 2023, from https://www.wto.org/english/res_e/publications_e/ai17_e/gatt1994_art10_jur.pdf
- Organization, W. T. (n.d.-b). *WTO Analytical Index GATT 1994 - Article XI (Practice)*. Retrieved January 9, 2023, from https://www.wto.org/english/res_e/publications_e/ai17_e/gatt1994_art11_oth.pdf
- Pickrell, E. (2022, March 31). *Russia-Ukraine War Helps Drive Nickel Prices, EV Headaches*. Forbes. <https://www.forbes.com/sites/uhenergy/2022/03/31/russia-ukraine-war-helps-drive-nickel-prices-ev-headaches/?sh=59f5c7eb57cd>
- Post, T. J. (2022, December 13). *Indonesia appeals WTO ruling in nickel dispute against EU*. The Jakarta Post. <https://www.thejakartapost.com/business/2022/12/13/indonesia-appeals-wto-ruling-in-nickel-dispute-against-eu.html>
- Prasetyo, E. (n.d.). *Questioning Indonesia's Ban on Export of Ore Policy Under International Investment and Trade Law*.
- PUSHEP. (2021, February 3). *Why does Indonesia's nickel export ban upset the EU?* Pusat Studi Hukum Energi Dan Pertambangan. <https://pushep.or.id/why-does-indonesias-nickel-export-ban-upset-the-eu/>
- Staff, R. (2022, December 12). *Indonesia appeals WTO ruling in nickel dispute against EU*. Reuters. <https://www.reuters.com/article/indonesia-eu-nickel-idUSKBN2SW1PR>
- Taufan Adharsyah. (2019, March 20). *RI Bakal Rugi Miliaran Dolar Akibat Larangan Sawit Uni Eropa*. Market; [cnbcindonesia.com](https://www.cnbcindonesia.com/market/20190320173153-17-61904/ri-bakal-rugi-miliaran-dolar-akibat-larangan-sawit-uni-eropa). <https://www.cnbcindonesia.com/market/20190320173153-17-61904/ri-bakal-rugi-miliaran-dolar-akibat-larangan-sawit-uni-eropa>
- TRADING ECONOMICS | 20 Million Indicators for 196 Countries. (n.d.). Tradingeconomics.com. Retrieved May 25, 2023, from <https://tradingeconomics.com/european-union/imports/russia/nickel>.
- Uni Eropa | Portal Kementerian Luar Negeri Republik Indonesia. (2018). Kemlu.go.id. https://kemlu.go.id/portal/en/read/149/halaman_list_lainnya/uni-eropa
- Warburton, E. (2018). *Nationalism, developmentalism and politics in Indonesia's mining sector*.
- Winona, C. V. (n.d.). *Indonesia's Nickel Industry in the Aftermath of Trade Dispute with the European Union*. <https://cwts.ugm.ac.id>. Retrieved January 9, 2023, from <https://cwts.ugm.ac.id/en/2022/11/03/indonesias-nickel-industry-in-the-aftermath-of-trade-dispute-with-the-european-union/#:~:text=Indonesia%20produces%201%20million%20metric>

WTO / dispute settlement - DS592: Indonesia - Measures Relating to Raw Materials. (n.d.). World Trade Organization. Retrieved January 9, 2023, from https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds592_e.htm

WTO panel rules against Indonesia's export limitations on raw materials. (2022, November 30). European Commission. https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7314

Xinhua. (2022, November 17). *China-invested industrial parks bring boom to Indonesia's nickel industry* - *Global Times*. *Global Times*. <https://www.globaltimes.cn/page/202211/1279768.shtml>

Yeo, R. (n.d.). *Europe stainless steel prices fall further, no relief until September – sources* – *British Stainless Steel Association*. British Stainless Steel Association. Retrieved January 10, 2023, from <https://bssa.org.uk/europe-stainless-steel-prices-fall-further-no-relief-until-september-sources/>