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Legal Certainty Downstream Policy of Nickel Mining and the Prohibition of Exporting Raw Nickel Ore in Indonesia

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Abstract

The primary aim of the Indonesian government's policy pertaining to the downstreaming process and the prohibition of exporting unprocessed nickel mining materials is to enhance the nation's value-added and economic advantages. Nevertheless, the implementation of this policy has given rise to numerous legal concerns. These concerns primarily revolve around the inconsistencies between overarching legal statutes, such as the Mineral and Coal Law, and the more specific regulations at the governmental and ministerial levels. These discrepancies primarily pertain to the downstreaming process and the prohibition on exporting raw materials from nickel mining. This study utilises a normative legal methodology, specifically the statute approach, to examine the coherence of legal rules and detect any discrepancies or contradictions among legal norms. Based on the research findings, it is observed that the government regulations and directives issued by the Minister of Energy and Mineral Resources pertaining to the relaxation of imports of nickel mining raw materials are in conflict with the provisions outlined in the Mineral and Coal Law. This law explicitly governs downstream processing and imposes a ban on the export of mineral mining raw materials. The presence of this contradiction gives rise to legal ambiguity, which has implications for the government's investment restrictions and efforts to improve value-added activities. Additionally, the country experiences a loss of revenue from taxes and royalties associated with the export of minerals.

Keywords: Indonesian government, downstreaming process, nickel mining materials, value-added, economic advantages

Introduction

There exists a prevalent perception in numerous developing nations, including Indonesia, that they possess copious reserves of valuable natural resources, including nickel, gold, silver, bauxite, copper, and tin (Jaewon Chung, 2023 and Bernadetta Devi and Dody Prayogo, 2013). Regrettably, the management of these abundant resources has not been effectively executed to maximise the nation's revenue and enhance the well-being of the Indonesian populace. The primary rationale behind this phenomenon is that a majority of mining enterprises primarily engage in upstream activities, focusing on the extraction and subsequent exportation of low-value ore or raw minerals (Agus Supriadi, et.al (2015). In order to optimise the value derived from the mining sector, it is advisable to locally process raw materials instead of exporting them in their unprocessed state. This approach serves as a strategic means to capitalise on value-added processes, hence stimulating domestic economic growth (Claudine Sigam and

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Leonardo Garcia, 2012). Hence, it is imperative for the Indonesian government to adopt a policy approach that prioritises the advancement of downstreaming or refining nickel mining materials. This approach aims to augment the economic value within the domestic (The International Institute for Sustainable Development (IISD), 2018), sphere by implementing reforms to the national mineral management policies outlined in Law No. 4 of 2009 on Mineral and Coal Mining (Ahmad Redi & Luthfi Marfugah, 2021), subsequently amended by Law No. 3 of 2020 on Mineral and Coal Mining (Mining Law). Following the enactment of the Mining Law, the government subsequently released a series of technical implementing regulations in the form of government regulations and ministerial regulations.

The main aim of this proposed reform in mining legislation is to promote the transition of mineral governance from the upstream industry to the downstream industry. The driving force behind this transition is the mandatory obligation for holders of Mining Business Licence (IUP) and Contract of Work (KK) to establish domestic smelters (Assegaf Hamzah and Partners, 2012). The amendments made to the Mineral and Coal Mining Law entail the implementation of a prohibition on the exportation of unprocessed minerals by mining enterprises. The prohibition mentioned is mandated by Government Regulation Number 23 of 2010, which was implemented on January 12, 2014, precisely five years subsequent to the enactment of the Mining Law (Hanina Husin Hadad, Helitha Novianty, and Huala Adolf, 2022). The export ban on nickel ore was further strengthened by the implementation of Minister of Energy and Mineral Resources Regulation Number 11 of 2019. This regulation expedited the prohibition of nickel ore exports, commencing on January 1, 2020.

The issue occurs at the operational level with regards to mineral downstream policies, as there is a lack of consistency in the government's enforcement of export ban policies. The presence of discrepancy is evident in the regulations pertaining to the export prohibition on unprocessed minerals and the permissible degree of processing or purification for exportation. Minister of Energy and Mineral Resources Regulation Number 7 of 2012 imposes an absolute prohibition on the exportation of unprocessed minerals. In contrast, the government has reinstated the opportunity for the exportation of raw minerals through the implementation of Minister of Energy and Mineral Resources Regulation No. 11 of 2012, subject to specific circumstances known as conditional export.

Following that, the governmental authorities enacted Minister of Energy and Mineral Resources rule No. 20 of 2013 as a replacement for the preceding rule which permitted export prohibitions subject to certain conditions, thereby maintaining an open export policy for a specified duration. The export of raw minerals was officially prohibited by the government with the enactment of Government Regulation Number 1 of 2014 and Minister of Energy and Mineral Resources Regulation No. 1 of 2014. Furthermore, the lack of consistency on the part of the government is evident in the regulations pertaining to the mineral composition required for exportation. There is a tendency for the proportion of processing and purification of metal minerals to decline and become less severe when comparing the initial rules with later ones.

The alterations in rules pertaining to downstream activities, along with a multitude of contradictory policies, give rise to a state of legal ambiguity for potential investors who are considering investment opportunities in Indonesia. On November 22, 2019, the European Union submitted a consultation request to the Dispute Settlement Body of the World Trade Organisation (WTO DSB) pertaining to case number DS592 (Syahrir Ika & Sigit Setiawan, 2018). The European Union asserts that Indonesia has contravened Article XI of the General

Agreement on Tariffs and Trade (GATT) (Nisya Nursyabani dan Irawati, 2023), by its implementation of a restriction policy on nickel ore exports and its failure to fulfil the responsibility of conducting in-country processing (European Union, 2019). Indonesia has been criticised for its alleged delay in the timely dissemination of export limits and the corresponding implementation requirements, which has hindered both the government and traders in effectively adjusting to the relevant legislation (European Union, 2021).

The aforementioned circumstances exemplify the presence of legal ambiguity in investment policies within the mining industry in Indonesia, specifically pertaining to the downstream mining policy that seeks to optimise domestic value addition. Ultimately, this phenomenon has an impact on the level of interest exhibited by investors in allocating their financial resources towards investment opportunities in Indonesia?

Issue of Legal Certainty

While the aim of downstream policy and the ban on exporting nickel mining in raw material form is to increase value-added and economic benefits for the country, its implementation can give rise to several legal certainty issues, including:

- a. **Regulatory Changes:** The nickel mining downstream policy may involve changes in regulations, standards, and legal requirements that must be adhered to by companies involved in the downstream process. This uncertainty can create barriers to investment and the development of downstream projects because companies may feel uncertain about stable and consistent legal policy conditions.
- b. **Significant Investment Obligations:** Furthermore, the downstream policy may require nickel mining companies to invest significant funds in processing facilities and necessary infrastructure. When companies cannot meet these investment obligations, it can lead to legal uncertainty regarding sanctions or government actions.

Therefore, this paper is important to examine the legal certainty related to regulatory changes in the downstream policy and the prohibition of exporting raw nickel ore and whether they have an impact on increased investment and added value in the country.

Research Method

The study employs a qualitative research methodology, specifically adopting a normative juridical approach. The main data source relies on secondary data, specifically primary legal sources in the form of legislation. This study employs a statutory approach to examine the legal dimensions associated with norms, regulations, principles, and legal conceptions pertaining to the downstreaming policy and export ban of mineral raw resources. The pertinent legislation comprises Law No. 3 of 2020, which amends Law No. 4 of 2009 on Minerals and Coal, along with various Government Regulations pertaining to the prohibition on exporting mineral raw materials. Additionally, Ministerial regulations concerning the facilitation of permits for the export of mineral raw materials are technically associated with the regulation of downstreaming and the export ban on such materials.

From a practical standpoint, the aims of doing research via the legislation approach can be summarised as follows:

- a. **The classification and explication of existing laws:** Normative legal study facilitates the categorization and elucidation of the prevailing laws within a legal system or a particular legal domain. This process entails the identification of standards, rules, and principles that

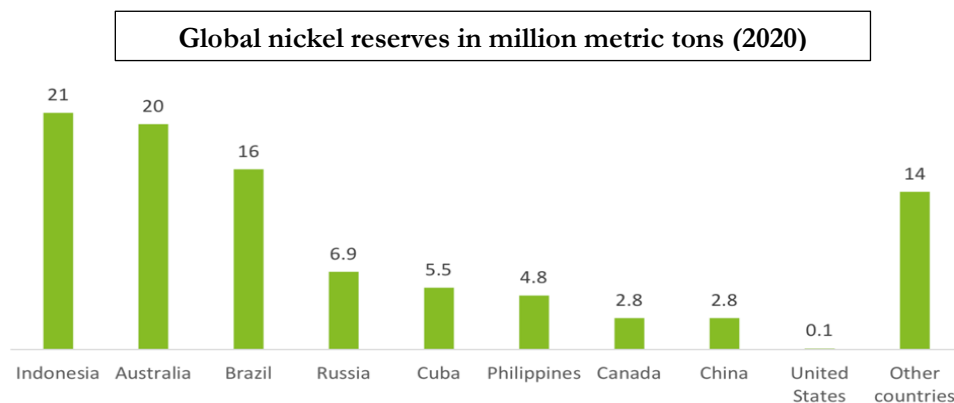
are relevant and appropriate.

- b. The examination of legal consistency and inconsistency involves the application of this methodology, enabling scholars to assess the internal coherence of the legal system and detect any incongruities or contradictions that may arise among different legal norms.
- c. One of the key functions of legal research is to offer direction in the development of legal policies. Normative legal research findings can serve as a valuable resource for policymakers, aiding them in comprehending the legal foundation and pertinent concepts involved in handling legal matters. This understanding, in turn, facilitates informed decision-making in the realm of law.

Policy on Nickel Mining Downstreaming in Indonesia

1. Indonesia's nickel mining industry

As the world's largest nickel producer since 2019, Indonesia holds a favorable position to tap into the growth wave in the electric vehicle downstream sector. In 2020, Indonesia was recorded to possess a total nickel metal resource and reserve of 143 million tons and 49 million tons, respectively (Fahressi Fahalmesta, 2022). Meanwhile, the total cobalt metal resource and reserve amounted to 3.6 million tons and 0.4 million tons. According to data from the Directorate General of Mineral and Coal (Ditjen Minerba), there are a total of 339 active mining licenses covering approximately 836 thousand hectares scattered across Southeast Sulawesi, Central Sulawesi, South Sulawesi, North Maluku, Maluku, South Kalimantan, West Papua, and Papua. Indonesia's nickel ore production reached 0.76 million tons of nickel with consumption at approximately 0.70 million tons of nickel.

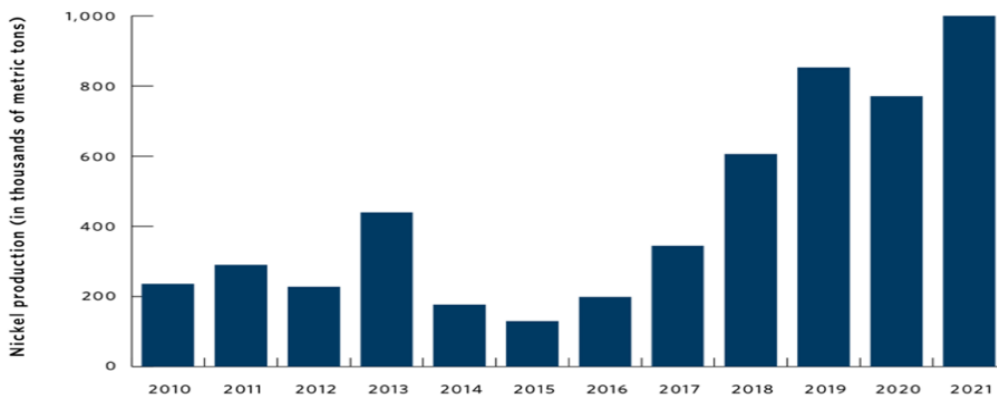


According to data published by the Ministry of Energy and Mineral Resources (ESDM), there were at least 292 Production Operation Mining Business Licenses (IUP-OP) for nickel in 2020 (Ministry of Energy and Mineral Resources 2020), with the majority located in Sulawesi, Maluku, and Papua. Key players include PT Vale Indonesia, with a total concession area of 118,017 hectares, including its operations in the Soroako Block (South Sulawesi) and other locations (PT. Vale Indonesia, 2021); PT Bintang Delapan Mineral with 21,695 hectares; PT Aneka Tambang Tbk with five nickel mines in Sulawesi; PT Makmur Lestari Primatama with 407 hectares; and PT Citra Silika Mallawa with 475 hectares (Anisatul Umah, 2021). Additionally, there were 13 nickel smelters operating throughout Indonesia in 2020. The government intends to increase this number to 30 by 2024 (AP3I, 2021), with five smelters

equipped with High-Pressure Acid Leach (HPAL) technology expected to commence operations in 2023.

Prior to 2019, the trade balance of nickel-based products yielded a positive value, primarily from the contributions of ore exports, NPI/FeNi, nickel matte, and stainless steel HRC (Media Nikel Indonesia, 2023). In 2020, its contributions were further supplemented by stainless steel CRC. As of June 2021, nickel processing and refining plants that were already operational were predominantly using pyrometallurgical technology, totaling 27 plants, while there were only 2 plants employing hydrometallurgical technology. The downstream nickel industry that has been established is the stainless steel industry, with a production realization of 2.62 million tons of series-300 and 60 thousand tons of series-200 steel (Media Nikel Indonesia, 2023).

Indonesia's Nickel Mine Production 2010–2021



*Note: Value for 2021 is estimated.

SOURCE: "Mineral Commodity Summaries 2022," U.S. Geological Survey, January 31, 2022, <https://doi.org/10.3133/mcs2022>.

Indonesia, as a mineral-rich country, should ideally see nickel mining make a significant contribution to state revenues and serve as an economic pillar for the welfare of the Indonesian people (Rudenno, V. 2004). However, in reality, this contribution remains quite small. The Indonesian Mining Association (IMA) confirmed that over the past 10 years (2005-2012), the average state revenues from the general mining sector (taxes and royalties) were very limited, amounting to approximately IDR 60.42 trillion or 6.16 percent of the total state revenues (Indonesian Mining Association, 2013). Meanwhile, production fees/royalties from nickel only contributed 4.72% to non-tax state revenue from the mining sector (PNBP minerba), far below the contributions of coal, copper, and gold. It is highly ironic when considering the relatively small contribution of nickel in the non-tax state revenue from mineral commodities. This is despite the fact that Indonesia's nickel wealth has been extensively exploited, resulting in environmental damage. In other words, the environmental damage caused by nickel mining is not proportionate to the state revenue (ICW, 2017).

2. Nickel raw material downstreaming policy and export ban

According to Patunru (2015), downstreaming or value-adding, often referred to as "hilirisasi," signifies efforts to reduce the export of raw materials and, conversely, promote domestic industries to utilize these materials to increase domestic added value (while creating job opportunities) (Patunru, A.A. and S. Rahardja, 2015). If exports are necessary, they should

consist of finished products resulting from the processing of raw materials. Recognizing the limited contribution of the mineral sector to the country's economic added value, the Indonesian government reformed mineral and coal management policies through Law No. 4 of 2009 on Mineral and Coal Mining (Mining Law) by implementing the downstream policy. This was based on the assumption that downstream policy plays a crucial role in national development, serving as one of the government's fiscal instruments to create mineral added value, increase state revenues, stimulate economic growth, generate employment, and improve the welfare of Indonesian society as a whole (Eko Tri Sumarnadi Agustinus, 2019). The success indicator of mineral downstream policy is that Indonesia's exports should no longer consist of raw materials but rather finished goods produced from those raw materials. Indonesia should be exporting cosmetics or chemical mixtures, not palm oil; exporting aluminum products for motor vehicle components, not bauxite or bauxite concentrate, depending on the type (Rudenno, 2004, Feri Sandria, 2022). For instance, the value added to bauxite increases twelvefold or varies between 25 percent and 35 percent when processed into alumina. The added value of bauxite can be further increased to 60 percent or more through metallurgical processes or smelting (Arifin,, 2023).

Therefore, the primary mission of the enactment of the Mining Law was to encourage the transition of mineral management, from upstream to downstream, by obliging Mining Business License (IUP) and Contract of Work (KK) holders to establish smelters within the country (Iskak Aji, 2019). Alongside this downstream mining policy, the government also prohibited mining companies from exporting raw minerals. This ban was regulated by Government Regulation (PP) No. 23 of 2010, enforced on January 12, 2014, five years after the enactment of Law No. 4/2009.

However, during the implementation stage of the Mining Law, various challenges arose that hindered the smooth execution of the downstream policy. The first challenge was the difficulty faced by mining companies in integrating upstream mining operations with downstream mineral processing operations, both technically and financially. The second challenge was resistance from foreign-owned mining companies (Contract of Work holders) due to cash flow difficulties. For instance, PT Freeport Indonesia was constructing an underground mining project in Grasberg with a \$1.5 billion investment. Regulations prohibiting the export of raw minerals caused many mining companies to lack the financial capability to build smelters. Their revenues plummeted, leading to layoffs of employees (Syahrir Ika, 2017). This situation demonstrates that the downstream policy formulated in Law No. 4 of 2009 had weaknesses that led to legal uncertainty. These weaknesses should have been addressed through amendments or revisions to Law No. 4 of 2009. However, instead of taking corrective action, the government issued five implementing regulations in the form of Government Regulations (Syahrir Ika, 2017).

Some of the government regulations issued include Government Regulation Number. 23 of 2010 on the Implementation of Mineral and Coal Mining Activities (Government of Indonesia, 2010), followed by the issuance of Ministerial Regulation Number 7 of 2012 on Value-Added (PNT). In the same year, Government Regulation Number 24 of 2012 on Amendments to Government Regulation Number 23 of 2010 was also issued (Government of Indonesia, 2012). One of the objectives of issuing these regulations was to provide legal certainty for Contract of Work holders and Mining Business License holders intending to extend their licenses, regulating the procedures for the application for the aforementioned Mining Business Licenses.

In addition, two regulations were enacted on January 11, 2014: Government Regulation Number 1 of 2014 regarding the second amendment to Government Regulation Number 23 of 2010. This rule was enacted with the goal of maximising the benefits of minerals for the general public and regional growth. In accordance with Article 103 and Article 170 of Law No. 4 of 2009 concerning Mineral and Coal Mining (Government of Indonesia, 2014), it is essential to increase the value-added of minerals through processing and purification of mineral resources within the country. The Ministerial Regulation Number 8 of 2015 amending Ministerial Regulation No. 1 of 2014 became effective on March 4, 2015 (Ahmad Nugraha Abrar, 2022).

Three regulations were enacted on January 11, 2017, including Government Regulation (PP) No. 1 of 2017 regarding the fourth amendment to Government Regulation Number 23 of 2010. Then came Ministerial Regulation Number 5 of 2017 regarding the enhancement of the value of minerals through domestic processing and purification. In the meantime, Ministerial Regulation Number 06 of 2017 regarding the procedures and requirements for granting recommendations for the export of processed and purified minerals was enacted. This Ministerial Regulation was subsequently amended on March 30, 2017, and was subsequently enacted as Ministerial Regulation Number 28 of 2017 regarding the amendment to Ministerial Regulation No. 05 of 2017. These regulations were enacted based on several considerations (Government of Indonesia, 2017).

Consequently, on March 7, 2018, Government Regulation Number 08 of 2018 regarding the fifth amendment to Government Regulation Number. 23 of 2010 became effective. In addition, Ministerial Regulation No. 25 regarding the administration of mineral and coal mining was enacted on April 30. This Ministerial Regulation examined Article 96 of Government Regulation Number 23 regarding the increase in value-added (which had been amended through Government Regulation Number 08 of 2018).

The existence of these government regulations as implementing rules of Law No. 4 of 2009 did not solve the fundamental issues encountered by mining companies; in fact, some of these regulations created new issues. Government Regulation Number. 1 of 2014 regarding the second amendment to Government Regulation No. 23 of 2010 concerning the Implementation of Mineral and Coal Mining Business Activities contains provisions for easing or relaxing export permits for copper minerals, which are only intended for mining companies holding Contracts of Work (such as PT Freeport Indonesia and PT Amman Nusa Tenggara) and are required to pay exit fees at rates determined by the Ministe. Some mining companies viewed this regulation as unjust and discriminatory because it only benefits foreign firms with active work contracts.

The government issued Ministerial Regulation No. 7 of 2023 regarding the Continuation of the Development of Metal Mineral Refining Facilities within the subsequently. This regulation permits the export of unprocessed minerals, including copper, iron, lead, and zinc. This policy demonstrates that the government's implementation of the downstream obligations mandated by Law No. 3 of 2020 concerning Amendments to Law Number 4 of 2009 concerning Mineral and Coal Mining is inconsistent. This ministerial regulation also conflicts with mineral and coal law, which prohibits the export of raw minerals beginning in June 2023; however, this ministerial regulation permits the export of raw minerals until May 31, 2024.

Government policy mandates that proprietors of Mining Business Permits (IUP) and Special Mining Business Permits (IUPK) increase the value-added of minerals in mining business activities within the country (Sri Mastuti, 2022). This value addition is accomplished through

the processing and purification of metal mineral extraction products. This means that proprietors of IUP and IUPK are prohibited from exporting metal minerals before adding value in accordance with Articles 102 and 103 of the mineral and coal law.

Holders of IUP and IUPK in the Production Operation stage are permitted leniency for the export of raw minerals for a maximum of three years following the enactment of mineral and coal law, per Article 170 A, paragraph (1). mineral and coal law itself was enacted on June 10, 2020, and three years after that, on June 10, 2023, holders of IUP or IUPK in the Production Operation stage are not permitted to sell certain metal mineral products that have not been purified abroad. Certain metal minerals can only be sold by holders of Production Operation IUP or IUPK if they have fulfilled the obligation of purification within the country (PWYP Indonesia, 2023).

Regarding nickel mining, a number of regulations pertaining to the nickel sector have been issued, the most notable of which is the ban on the export of nickel ore beginning in January 2020, based on Ministerial Regulation Number 11 of 2019, which was issued to amend Ministerial Regulation Number 25 of 2018 regarding the Management of Mineral and Coal Mining (Ministry of Energy and Mineral Resources of the Republic of Indonesia, 2020). With this prohibition, however, there is the possibility that local smelters will attempt to purchase nickel ore from small-scale producers at extremely low prices. To address this issue, the government has established a monthly benchmark mineral price (HPM) for nickel ore, which is calculated based on the reference mineral price (HMA), and stipulates that smelters cannot purchase nickel ore at a price more than 3 percent below the HPM (Ministry of Energy and Mineral Resources of the Republic of Indonesia, 2020). The government also established a task force in August 2020 to assure companies' compliance with this regulation.

Legal Certainty in Mineral Mining Downstreaming Policy

The notion of legal certainty is intricately linked to the overarching concept of the rule of law. The primary objective of the rule of law is to ensure a sense of predictability and assurance for each individual with regards to the acts undertaken by the government. The concept of a rule of law entails that the government is obligated to adhere to established legal principles, hence ensuring equitable predictability for all individuals (F.A. Hayek, 1944). The absence of legal certainty renders law devoid of significance, since it becomes incapable of fulfilling its role as a normative framework for individual conduct. The pursuit of legal certainty is widely recognised as a fundamental purpose of the legal system (Montesquieu, Charles de Secondat. 2005). In essence, the legal system operating under the rule of law enables individuals to engage in more reliable planning by ensuring the protection of legitimate expectations in relation to government behaviour and policies. Legal certainty is a prominent factor in the formulation of decisions within legal standards in the context of mineral mining downstreaming policy. The establishment of a stable and reliable system of governance for policy issuance within the business sector has a beneficial effect on the overall business environment, leading to increased confidence and commitment from investors to implement their investments within a particular region.

The analysis of the government's policies pertaining to downstreaming in mineral mining and the prohibition of raw mineral export reveals a lack of consistency in governmental regulation concerning the downstreaming of mineral mining activities. The initial downstreaming policy, as stipulated by mineral and coal law, explicitly enforced the prohibition on the exportation of

unprocessed mineral resources. Subsequently, the government proceeded to promulgate various implementing laws, including Government Regulation number 24 of 2010, Government Regulation Number No. 1 of 2014, and Government Regulation Number 1 of 2017, which granted permission for the exportation of unprocessed minerals within specific thresholds. The aforementioned laws gave rise to legal ambiguity due to their inherent contradiction with the overarching objectives of the downstreaming strategy. Legal scholars contended that the aforementioned implementing rules contravened mineral and coal law, hence prompting the Supreme Court to undertake a judicial review of Government Regulation Number 1 of 2017.

In relation to the prohibition of raw material exports, the government implemented Ministerial Regulation No. 7 of 2012, which imposed a comprehensive ban on the exportation of unprocessed minerals. Nevertheless, a portion of these limitations were rescinded with the publication of Ministerial Regulation No. 11 of 2012, thereby reinstating the possibility of exporting under specific stipulations. Following that, the government enacted Ministerial rule No. 20 of 2013 as a replacement for the preceding rule, which encompassed a contingent prohibition on exports. Ultimately, the government implemented a formal prohibition on the exportation of unprocessed minerals with the enactment of presidential regulation number No. 1 of 2014 and Ministerial Regulation No. 1 of 2014. Furthermore, the lack of uniformity in governmental laws was apparent in the stipulations pertaining to the quality standards for mineral exports. There was a noticeable trend of decreasing and more permissive percentage thresholds for the processing and refinement of metal mineral grades when comparing the initial regulations to succeeding ones. The nickel mining downstreaming policy exhibited legal uncertainty due to the presence of multiple regulations at the technical implementation level. The implementation of presidential regulation number 1 of 2017 has caused business actors, particularly those holding Contract of Work, to perceive it as a disruptive factor to their strategic business goals.

Following the revision of Mineral and Coal Mining Law in 2020, which resulted in the enactment of Law No. 3 of 2020 on Mineral and Coal Mining, the requirement to domestically purify mining materials was reaffirmed. Subsequently, on June 9, 2023, the Ministry of Energy and Mineral Resources issued Ministerial Regulation No. 7 of 2023, granting permission to holders of IUP and IUPK licences to export raw minerals without purification within the country until May 31, 2024. Nevertheless, it is important to note that only commodities such as copper, iron, lead, or zinc are deemed appropriate for export. The current ministerial order is in conflict with the provisions of Mineral and Coal Mining Law, which strictly limits the exportation of unprocessed minerals until June 2023. The ministerial regulation exemplifies the lack of uniformity exhibited by the government in the implementation of the downstreaming policy inside Indonesia.

In practical application, these modifications often deviate from the legal provisions. The modifications in regulatory policies pertaining to the operational procedures of the nickel sector have concurrently impacted the prevailing conditions of the domestic market. Consequently, there exists the possibility for commercial entities to engage in rule infractions. One type of transgression involves the illicit exportation of nickel ore. According to Law No. 4/2009 and its corresponding technical regulations, a provision was established specifying that between the years 2017 and 2019, the allowance for the exportation of nickel ore with a grade below 1.7 percent would solely be allowed to enterprises that were actively engaged in the construction or had already completed the construction of smelting facilities. The primary objective of the

policy allowing the exportation of low-grade nickel ore was to ensure the continued availability of nickel ore for domestic smelters. This was deemed necessary due to the fact that the majority of smelters in Indonesia were constructed with the assumption that the nickel input would consist of grades exceeding 1.8 percent. In contrast, the nickel resources and reserves in Indonesia are predominantly comprised of low-grade nickel.

At present, there exists a total of 328 individuals or entities who possess Mining Business Permits (IUP) in various regions of Sulawesi, Maluku, and West Papua. Within the sector, it is noteworthy that an only 27 smelters are currently functioning downstream. In addition to mining businesses, certain smelters possess independent smelter permits. Nevertheless, for the purpose of exporting, mining IUPs are required to be associated with smelters. In practical application, numerous mining IUPs lack connections, leading some to resort to illicit exports as a means to guarantee the absorption of their produce. The reason for this is that individuals with IUP permits are required to engage in mining activities, whereas the capacity for domestic smelting is constrained.

The disparity in downstream policy has significant implications for the implementation of the law, giving rise to fundamental legal concerns. The presence of legal ambiguity in the implementation of the downstream strategy is evident through the imposition of export restrictions on raw mineral commodities. The alignment of downstream policy development and the prohibition of raw mineral material exports should adhere to the laws' type, hierarchy, and normative content at both the legislative and regulatory levels, ensuring coherence and avoiding any contradictions. The formulation of this policy ought to be conducted in a systematic manner, taking into account the hierarchical structure of legislative laws, in order to ensure coherence and consistency in its execution. The purpose of this alignment is to establish a framework that ensures legal certainty in the implementation of the downstream policy for mineral mining. The existence of legal regulations that control various policies pertaining to the same subject matter always gives rise to legal ambiguity. According to Article 170A, paragraph (1) of the Mineral and Coal Mining Law, it is specifically stated that holders of IUP and IUPK licences are prohibited from engaging in the exportation of raw minerals starting from June 2023. Nevertheless, Minister of Energy and Mineral Resources Regulation No. 7 of 2023, specifically in Articles 2 paragraph (2) and 3 paragraph (1), has stipulations that grant the possibility of extending the timeframe for raw mineral exports until May 2024.

It can be argued that the rules outlined in Article 2, paragraph (2) and Article 3, paragraph (1) do not align with the principle of *lex superior derogate legi inferiori*, which posits that subordinate regulations must not conflict with superior regulations. The presence of conflicting norms inevitably gives rise to legal ambiguity in their enforcement, thereby compromising the coherence of legal provisions pertaining to the subsequent policy on mineral mining. Consequently, this situation also exerts an influence on the investment environment within Indonesia's mineral and coal mining industry.

The expected benefit from putting the downstream policy into practise

As elucidated in the introductory section of this discourse, a primary objective of the downstream strategy and the prohibition on the exportation of unprocessed natural resources, as stipulated in the revised natural and Coal Mining Law, is to augment the value derived from the domestic handling of minerals. Nevertheless, from an empirical standpoint, it is evident that this objective has yet to meet the anticipated outcomes. The legal ambiguity surrounding

the downstream policy in nickel mining and the prohibition on exporting raw mineral materials has resulted in a decrease in the exportation of mining commodities. This fall has had implications for the government's revenue, namely in terms of taxes and non-tax sources.

According to the BPS statistics from 2014, the recorded export value for January 2014 was US\$ 14.48 billion, indicating a 5.79% decline in comparison to January 2013 (year on year), when it amounted to US\$ 15.38 billion. The decrease in the value of exports can be partially due to non-oil and gas exports, specifically ore, slag, and metal ash, which experienced a significant decline of 70.13% in January 2014. The export value dropped to only US\$ 291.8 million, marking a substantial decrease from the previous month of December 2013, when it amounted to US\$ 997 million. The Directorate General of Taxation projected a potential decrease in government revenue amounting to Rp. 20 trillion in 2014 as a result of the prohibition on the exportation of raw minerals, as viewed from the government's fiscal standpoint. This policy is perceived as displaying boldness by prioritising medium and long-term benefits over short-term gains.

According to the Indonesia Economic Quarterly 2014 report published by the World Bank, there exists a negative outlook on the efficacy of the government's export ban policy. This paper highlights three key factors that elucidate the potential inadequacy of the mineral export prohibition in generating short- and medium-term value for Indonesia.

Initially, it should be noted that the imposition of an export embargo does not inherently guarantee the influx of fresh investments in domestic processing and refining sectors. In addition to being significantly influenced by the economic calculations of individual companies, investment in processing also takes into account a country's proportion of ore production relative to global production. Indonesia's ore production for Copper, Lead, and Zinc constitutes a mere 2% of the overall global production. Regarding Nickel, the downstream strategy has the potential to generate processing investments in the near future. This is due to Indonesia's prominent position as the second-largest global exporter of nickel and the primary provider of low-grade nickel to Chinese Nickel Pig Iron (NPI) manufacturers. Nevertheless, it is plausible that Chinese NPI producers may potentially obtain their supply of low-grade nickel ore from alternative sources, such as the Philippines, in the medium and long run.

Additionally, there is a significant constraint on the global market demand for refined minerals. An illustrative instance involves the dominance of copper concentrate, with a purity level of up to 30%, which accounts for 96% of the worldwide copper market. Conversely, a mere 4% of the market is allocated to pure copper. Given the prevailing market conditions, it is uncertain if the anticipated value addition through exports would be effectively achieved.

Furthermore, the immediate impact of the prohibition on the exportation of raw minerals may not necessarily result in an instant escalation of processed mineral prices on a global scale. Apart from nickel, Indonesia lacks sufficient influence to exert a significant impact on world prices. Hence, the prospect of augmenting government revenue via price escalations may not inevitably materialise. Moreover, the responsibility to construct processing facilities places supplementary demands on domestic enterprises, so diminishing their profitability and consequently resulting in a decrease in tax revenue for the government (Rizal Budi Santoso, et al, 2023).

The Indonesia Economic Quarterly report published by the World Bank in 2014 expressed a negative outlook on the efficacy of the government's decision to implement a restriction on resource exports. This study elucidates three crucial factors that explicate the limited potential for the prohibition on mineral exports to yield substantial economic benefits for Indonesia

within the immediate or intermediate timeframe.

To begin with, it should be noted that the implementation of an export embargo does not inherently guarantee the influx of fresh investments into domestic processing and refining sectors. In addition to being significantly influenced by the economic factors specific to each company, investment in processing operations also takes into account a country's proportion of ore output relative to global production. Indonesia's ore production for Copper, Lead, and Zinc is a mere 2% of the global production. Regarding Nickel, the implementation of downstream regulations in the near future has the potential to entice domestic processing investments. This is due to the fact that Indonesia has the position of being the second-largest global exporter of Nickel and also serves as the primary source of low-grade Nickel for Chinese Nickel Pig Iron (NPI) manufacturers. However, it is worth noting that NPI producers in China may potentially acquire low-grade Nickel ore supply from other nations, such as the Philippines, in the medium to long future.

Furthermore, there exists a significant constraint on the global market need for refined minerals. As an illustration, it can be observed that the demand for copper concentrate, characterized by a grade of up to 30%, holds a significant majority share of approximately 96% in the global copper market. Conversely, the remaining 4% is attributed to the demand for pure copper. In the given market context, the anticipation of generating value through exports may not inevitably come to fruition.

Moreover, it is important to note that the prohibition of raw material exports does not necessarily guarantee a subsequent rise in global prices for processed minerals. With the exception of Nickel, Indonesia lacks sufficient leverage to exert a significant impact on global prices. Hence, the prospect of augmenting state revenue via price hikes may not come to fruition. Moreover, the responsibility to construct processing facilities imposes an extra onus on domestic enterprises, so diminishing their profitability and consequently resulting in decreased tax revenue for the government (Rizal Budi Santoso, et, al, 2023).

Another potential consequence resulting from the enforcement of regulations on downstream activities and the ban on exporting raw mineral materials is the potential rise of illicit exports (Kompas, 2023), as well as significant unauthorized nickel mining operations (Tempo, 2023). When law enforcement is ineffective, it is common for a country to observe a decline in tax revenue due to the utilization of under-invoicing methods during the exportation of goods, even when there are no export restrictions in place. The implementation of an export limitation on nickel ore, along with the introduction of a domestic benchmark mineral price (HPM) that is significantly lower, up to 50%, than global prices, has led to the unauthorized exportation of nickel ore. This problem exhibits a notable prevalence among individuals who own IUP licenses but do not possess any affiliations with smelting plants. Another advantage linked to the implementation of nickel downstreaming is the comparatively modest compensation obtained by workers, mostly attributable to the capital-intensive characteristics of smelting activities. The marginal impact stemming from the creation of jobs is quite low, highlighting the need for fair allocation across both international and domestic labor pools. Many Chinese smelting firms choose to hire workers from China, including those with limited skills, which may disregard the potential benefits of prioritizing local individuals for these roles (Agustinus Yoga Primantoro, 2023).

In addition, it is worth noting that local enterprises holding IUP (Izin Usaha Pertambangan, or

Mining Business License) that are not associated with smelters also encounter a substantial decrease in their earnings as a result of the exceedingly low Domestic Benchmark Mineral Price (HPM) for nickel ore. The concentration of nickel extraction and processing-based industrialisation is primarily limited to a few local locations due to the absence of operational upstream and downstream businesses. As a result, these places have become tightly interconnected with the global market. The lack of domestic market demand leads to the near-exclusive exportation of semi-finished goods from nickel smelters, thus allowing foreign firms to reap the advantages of value creation through downstream activities.

The aforementioned explanations and descriptions support the assertion that the policy of downstreaming, which entails the prohibition of raw nickel ore exports, is intended to enhance value-added in the domestic production chain and reduce reliance on the global market as a provider of inexpensive raw materials (Wibisono, 2023). The downstreaming policy, which has been significantly shaped by economic nationalism, has paradoxically resulted in Indonesia becoming more deeply entangled in the dynamics of global capitalism. Specifically, Indonesia has emerged as a major supplier of semi-finished nickel products, with significant involvement from Chinese capital as the primary driving force (Yusuf Wibisono, 2023). Hence, it is imperative for Indonesia to adopt a cautious approach towards the formulation and implementation of mineral downstreaming policies. According to Patunru (2015), it is imperative to use caution when dealing with downstreaming. The author references Albert Hirschman (1958), an influential proponent of the downstreaming theory, who advocated for the implementation of downstreaming policies within the context of import substitution. According to Hirschman's (1958) analysis, within the context of a progressively interconnected regional and global production network, the act of downstreaming can be perceived as regressive due to its requirement of relocating resources that may not be in alignment with the comparative advantages of the individual country (Hirschman, Albert. 1958).

Hence, it is imperative for the government to reassess its approach to industrialisation centered around mining, which heavily relies on external sources of finance and technology. In the absence of a comprehensive technology transfer strategy, the establishment of proficient human capital and the implementation of ownership acquisition plans by domestic business entities, the practice of mineral downstreaming can be perceived as a contemporary manifestation of colonialism. This approach entails a deliberate strategy to exploit domestic natural resources at low costs in order to fulfill the demands of global capitalism.

In order to effectively tackle the challenges associated with mineral downstreaming policies and the prohibition on raw mineral exports, it is imperative for the Indonesian government to undertake specific measures. These measures encompass conducting a comprehensive evaluation and review of the Mining Law, which governs the mandate for mining companies to engage in domestic downstreaming. This evaluation should encompass a thorough examination of all pertinent issues and the potential ramifications stemming from the implementation of downstreaming policies. In order to establish legal clarity in policies pertaining to downstream activities that contribute to domestic economic growth, the following specific measures can be implemented:

- a. Stakeholder consultation: When developing downstreaming policies, it is crucial to conduct comprehensive consultations with pertinent stakeholders, such as mining firms, downstream industry participants, and local governments. The integration of perspectives from diverse stakeholders can facilitate the attainment of a more robust agreement.
- b. Establishment of a coherent legal Framework: It is imperative to guarantee that policies for the

- dissemination of information and resources are clearly and precisely articulated, leaving no room for ambiguity or misinterpretation. Please provide a precise definition of the standards, criteria, and objectives associated with these policies. This measure will serve to mitigate any misinterpretations and mitigate the occurrence of legal problems in subsequent periods.
- c. Ensuring constant regulatory application: It is imperative to guarantee the constant and reliable application of downstreaming policies and associated regulations. This encompasses the surveillance and equitable and uniform implementation of legal measures to address breaches of policies.
 - d. Implementation of clear transition rules: It is imperative to establish unambiguous transition rules that enable mining businesses to effectively adjust to policy changes. This may encompass a clearly delineated implementation timeline and deliberate and methodical transitions.
 - e. Economic incentives, such as tax incentives or financial support, ought to be extended to enterprises engaging in downstream nickel mining investments. This has the potential to foster domestic economic expansion.
 - f. Continuous monitoring and Evaluation: Develop methods to ensure the ongoing monitoring and evaluation of the execution of downstreaming policies. Implement appropriate modifications depending on the findings of the evaluation.
 - g. Transparency and accountability should be prioritized in order to ensure that the decision-making process pertaining to downstreaming policies is conducted in a transparent manner. In order to ensure transparency and responsibility, it is imperative to establish robust accountability systems to address instances of deviance or misuse of authority.
 - h. Strong contractual agreements should be established in contracts between the government and mining firms to explicitly specify downstreaming and local investment obligations, as well as the corresponding punishments for any infractions.
 - i. Efficient dispute resolution: Offer efficient methods for the resolution of conflicts that may emerge between corporations and governmental entities or between corporations and external entities.

Implementing these measures can contribute to the establishment of legal certainty necessary for the effective implementation of downstream policies that enhance domestic economic value. By implementing well-defined laws, providing economic incentives, and fostering robust collaboration among governmental entities, corporations, and local communities, downstreaming policies can effectively facilitate the development of the nickel mining industry while concurrently promoting local economic expansion.

This will not only enhance the likelihood of successful policy implementation in dynamic regulatory environments but also enhance the industry's ability to attract foreign investment from prominent global car manufacturers and battery companies, as well as foster the adoption of best practices to address the intricate technical obstacles impeding progress. The overarching objective is to guarantee enhanced value augmentation for the advancement of the nation's economy.

Conclusion

The effective implementation of mineral downstreaming policies, as required by the Mineral and Coal Law, is hindered by the lack of consistency in the government's implementing regulations and the ban on nickel raw mineral exports. The implementation of many restrictions pertaining to the relaxation or easing of export licences is seen inequitable and

detrimental to productivity. The Mineral and Coal Law establishes explicit regulations regarding downstreaming policies and the restriction on exporting raw minerals. However, the government, specifically the Ministry of Energy and Mineral Resources, has implemented policies that offer flexibility for the exportation of specific nickel raw materials. Additionally, the government has demonstrated a biased approach towards mining companies by granting permits to select IUP and Contract of Work holders for the exportation of raw mineral materials. The presence of inconsistent downstreaming regulations and the ban of nickel raw ore exports has led to legal uncertainty, resulting in a decline in state revenue and the anticipated value addition from the downstreaming policy within the Indonesian mining sector.

Based on the assertions presented in the aforementioned conclusion, it is recommended that the government rigorously implement the legal regulations stipulated in the Mineral and Coal Law. It is imperative for the government to establish a cohesive framework for legislative rules pertaining to downstreaming policies and the restriction of raw mineral exports, in order to mitigate any potential contradictions.

In relation to the restriction on the exportation of unprocessed minerals, it is recommended that the government refrain from consistently granting relaxations on export permits through the implementation of regulatory measures. The frequent modifications to technical regulations pertaining to the same subject matter suggest that the policies concerning the downstreaming of minerals lack proper design. Consequently, it is imperative for the Mineral and Coal Law to establish specific criteria to determine the eligibility of mining companies for the exportation of raw minerals. The potential policy option for the government involves the contemplation of imposing a ban on the exportation of unprocessed minerals, specifically targeting major mining enterprises, regardless of their ownership status, be it foreign or state-owned. In contrast, it may not be necessary to impose a ban on the exportation of raw minerals by small and medium-scale mining enterprises, given their limited expertise in smelting operations. In order to regulate the exportation of raw minerals on a significant scale, the government may opt to enforce a Domestic Market Obligation policy, akin to the existing practice observed in the coal industry.

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