

## **Indonesia's Nickel Export to China After the 2020 Ban: Prospects, Challenges, and the Islamic Trade Policy Perspective**

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### **Abstract**

Indonesia's raw nickel ore export ban, implemented in January 2020, has reshaped the structure of Indonesia–China nickel trade from raw ore dependence toward processed nickel production and downstream industrialization. Five years after the ban, however, the policy requires not only economic assessment but also normative evaluation, particularly regarding value distribution, foreign capital dominance, environmental harm, and labour protection. This article examines whether Indonesia's post-ban nickel downstreaming policy aligns with Islamic trade policy principles. Using a qualitative normative approach, the study analyzes secondary data and policy literature through the principles of 'adl, ta'awun, prohibition of exploitation, amanah, maslahah, and la dharar. The findings show that the export ban corrected a structurally unequal trade pattern by reducing raw ore exports, encouraging domestic processing, and strengthening Indonesia's position in the global nickel value chain. The policy also reflects state amanah by seeking to manage strategic mineral resources for public welfare. Nevertheless, the post-ban structure remains ethically incomplete. Chinese-affiliated firms continue to dominate refining capacity, raising concerns over unequal value capture, while environmental degradation and labour issues challenge the principles of maslahah and la dharar. The article concludes that nickel downstreaming is broadly consistent with Islamic trade ethics, but its ethical legitimacy depends on fair ownership structures, stronger environmental governance, labour protection, and equitable benefit-sharing with local communities.

**Keywords:** Indonesia-China trade; Islamic trade policy; Nickel down streaming; Resource governance

### **Abstrak**

*Larangan ekspor bijih nikel mentah Indonesia yang diberlakukan pada Januari 2020 telah mengubah struktur perdagangan nikel Indonesia–Tiongkok dari ketergantungan pada ekspor bahan mentah menuju produksi nikel olahan dan hilirisasi industri. Lima tahun setelah kebijakan tersebut, larangan ekspor nikel tidak hanya perlu dinilai dari aspek ekonomi, tetapi juga secara normatif, terutama terkait distribusi nilai tambah, dominasi modal asing, kerusakan lingkungan, dan perlindungan tenaga kerja. Artikel ini mengkaji apakah kebijakan hilirisasi nikel Indonesia pascalarangan ekspor selaras dengan prinsip kebijakan perdagangan Islam. Dengan menggunakan pendekatan normatif kualitatif, penelitian ini menganalisis data sekunder dan literatur kebijakan melalui prinsip 'adl, ta'awun, larangan eksploitasi, amanah, maslahah, dan la dharar. Hasil penelitian menunjukkan bahwa larangan ekspor telah memperbaiki pola perdagangan yang timpang secara struktural dengan mengurangi ekspor bijih mentah, mendorong pengolahan domestik, dan memperkuat posisi Indonesia dalam rantai nilai nikel global. Kebijakan ini juga mencerminkan amanah negara dalam mengelola sumber daya strategis untuk kesejahteraan publik. Namun, struktur pascalarangan ekspor masih belum sepenuhnya memenuhi standar etika Islam karena dominasi perusahaan terafiliasi Tiongkok*

*dalam kapasitas pemurnian, ketimpangan penguasaan nilai tambah, kerusakan lingkungan, dan persoalan ketenagakerjaan. Artikel ini menyimpulkan bahwa hilirisasi nikel secara umum sejalan dengan etika perdagangan Islam, tetapi legitimasi etikanya bergantung pada keadilan kepemilikan, penguatan tata kelola lingkungan, perlindungan buruh, dan distribusi manfaat yang adil bagi masyarakat lokal.*

**Kata kunci:** Hilirisasi nikel; Kebijakan perdagangan Islam; Perdagangan Indonesia-Tiongkok; Tata kelola sumber daya

## **Introduction**

Indonesia has emerged as the world's largest nickel producer and a central actor in the global mineral supply chain, particularly amid rising demand for stainless steel and electric vehicle batteries. For much of the 2000s and 2010s, however, Indonesia's nickel trade was largely characterized by the export of raw ore, especially to China, where the material was processed into higher-value products such as stainless steel and nickel pig iron (NPI). This trade pattern enabled Indonesia to earn mainly raw material prices, while a significant portion of industrial value added was captured abroad. Such an arrangement raises not only economic questions about value distribution, but also normative questions about justice, public welfare, and the ethical governance of natural resources.

In January 2020, Indonesia banned raw nickel ore exports, requiring all ore to be processed domestically before export a policy codified in Mining Law No. 3/2020 (Setiani, Valennia, & Rusni, 2024). The results were immediate: raw ore flows to China stopped, Chinese companies pivoted to building smelters on Indonesian soil, and Indonesia's nickel export revenues grew dramatically. This paper evaluates this policy shift through the lens of Islamic trade ethics. Since approximately 87 percent of Indonesians are Muslim, asking whether this major trade policy aligns with Islamic values particularly *'adl* (justice), *ta'awun* (mutual benefit), the prohibition of exploitation, and the state's *amanah* (trusteeship) over public resources is both academically relevant and practically important. With the research question: Does Indonesia's 2020 nickel export ban and the downstream industrialization it induced align with Islamic trade principles of *'adl*, *ta'awun*, the prohibition of exploitation, and the state's Amanah and where do challenges remain?

Despite Indonesia holding the world's largest nickel reserves, the country long received only raw material prices for its ore while China captured the far greater industrial value added through processing. The per-ton value of raw ore exported before the ban was roughly US\$150, compared to approximately US\$3,700 for processed nickel products (Soamole, 2025) a gap of 24 times that represents a structural inequity between a resource-rich supplier and its dominant industrial buyer. This imbalance is precisely what Islamic trade ethics, with its emphasis on fair

exchange (*'adl*) and the prohibition of exploitation (*ikhtikar, gharar*), identifies as unjust. Indonesia's 2020 export ban is a state-level intervention to correct this gap by requiring value addition before export.

Indonesia's downstream nickel policy has a decade-long regulatory history. Mining Law No. 4/2009 first required mineral processing before export. MEMR Regulation No. 11/2019 advanced the full ban to January 2020, and Mining Law No. 3/2020 elevated it to statutory status (Setiani, Valennia, & Rusni, 2024). After the ban, the number of operating smelters grew from about three to over 47 by 2023 (Tritto, 2023), and the per-ton export value increased from roughly US\$150 for raw ore to approximately US\$3,700 for processed products (Soamole, 2025). Per capita income in nickel-producing provinces such as North Maluku and Central Sulawesi grew markedly between 2020 and 2022 (MEMR, 2025), and the ban has been confirmed as the primary driver of the processed export surge (Nurul, 2026). Baumgartner (2023) situates this policy within the broader global trend of resource nationalism in developing economies, while Putra and Samputra (2023) note that the revenue and rent gains from the ban, though large, have not been distributed evenly raising redistributive challenges that remain unresolved.

China is Indonesia's largest nickel export destination and its dominant investor in downstream processing. Unable to import raw ore after the ban, Chinese companies built smelting operations inside Indonesia most notably through the Indonesia Morowali Industrial Park (IMIP) in Central Sulawesi. Chinese-affiliated entities now control an estimated 75 percent of Indonesia's nickel refining capacity (C4ADS, 2025). While value addition now formally occurs within Indonesia, the majority of industrial profits still flow to Chinese shareholders, and environmental and labour concerns at some facilities have been documented (Mongabay, 2024). Setiawan and Liu (2025) examine the joint venture and industrial park development model through which this investment was structured, finding that while these arrangements formally involve Indonesian partners, control and profit-sharing terms have generally favoured the Chinese side.

Islamic trade ethics are grounded in the Quran and the Sunnah and provide a set of normative principles for evaluating commercial arrangements. Four principles are central to this study. *First*, *'adl* (justice and fairness) requires that every party in a trade receive fair and proportionate compensation. The Quran commands: "Give full measure when you measure, and weigh with a balance that is straight" (Al-Isra: 35). In international trade, this means commercial arrangements must not systematically enrich one country while underpaying the other (Aunillah & Ahmad, 2025). *Second*, *ta'awun* (mutual cooperation) means that trade

partnerships between nations should be structured for genuine mutual benefit, not one-sided extraction (Qayyimah & Huda, 2024). *Third*, Islamic ethics prohibit *ikhtikar* (monopolistic hoarding to gain unfair advantage) and *gharar* (excessive uncertainty or information asymmetry that harms the weaker party) both of which apply when dominant buyers use market power to keep resource prices artificially low (Chapra, 1992; Rosly, 2005). *Fourth*, the state (*wali al-amr*) has an Islamic duty (*amanah*) to manage natural resources as a public trust, directing mineral wealth toward the welfare of the community rather than allowing it to be exported cheaply for others to profit from (Wahab, 2017; Abdul Kareem, 2021). Chapra (1992) emphasizes that Islamic economics treats justice not as an optional complement to efficiency but as a precondition for any legitimate trade which means a transaction that is technically voluntary but structurally exploitative remains impermissible under Islamic law.

Several studies have examined the overlap between Islamic economics and fair-trade principles. Aunillah and Ahmad (2025) show that both frameworks share commitments to justice (*adl*), balance (*tawazun*), and public welfare (*maslahah*), and that Islamic ethics go further by prohibiting speculation, hoarding, and exploitative pricing. Amiur (2014) links these principles to the concept of *thaman al-mithl* which is the just price that reflects a commodity's genuine value arguing that raw commodity pricing structures that leave producing countries with a fraction of their resource's true value fail the Islamic test of fair exchange. Qayyimah and Huda (2024) further establish that Islamic trade policy must be evaluated not only for economic efficiency but for fairness, protection of local producers, and the prohibition of arrangements that create economic dependency in Muslim-majority states. Taken together, these studies provide the normative foundation for assessing not only whether Indonesia's export ban was justified, but whether the post-ban ownership and investment structure it produced meets Islamic standards of equitable exchange.

Although Indonesia's raw nickel export ban was introduced in 2020, its significance has become increasingly evident in the following years as the policy reshaped Indonesia's position in the global nickel value chain, intensified Chinese investment in domestic processing facilities, and generated new debates over value distribution, environmental sustainability, labour protection, and state control over strategic minerals. Therefore, examining the policy in 2026 is not merely a retrospective assessment of a past regulatory measure, but a critical evaluation of its continuing consequences for Indonesia's economic sovereignty and ethical governance of natural resources. From the perspective of Islamic trade policy, this issue is particularly relevant because the success of downstream industrialization cannot be measured

solely by export growth, but must also be assessed in terms of justice, mutual benefit, public welfare, prevention of harm, and the equitable distribution of resource-based prosperity.

## Methods

This study uses a qualitative normative approach, which is standard in Islamic economics research (Marzuki, 2017). The goal is not to estimate statistical effects but to evaluate whether Indonesia's nickel export policy aligns with Islamic trade principles. Four principles form the analytical framework: (1) *'adl* (justice and fair exchange); (2) *ta'awun* (mutual benefit and cooperation); (3) the prohibition of exploitative structures (*ikhtikar* and *gharar*); and (4) the state's *amanah* and duty to protect public welfare (*maslahah 'ammah*). Each principle is applied to both the pre-ban raw ore trade and the post-ban downstream industrialization.

The research object is Indonesia's nickel export policy and its bilateral trade relationship with China, covering the pre-ban period (2015–2019) and the post-ban period (2020–2023). Data were collected through systematic secondary sources: trade statistics from UN Comtrade and INSG (2024); investment and ownership data from C4ADS (2025) and Tritto (2023); provincial income data from MEMR (2025); legal policy texts from Setiani, Valennia, & Rusni (2024) and Santoso, Dermawan, & Moenardy (2024); and environmental and labour reports from Mongabay (2024). Data analysis followed a normative-evaluative method in which each of the four Islamic trade principles was operationalized as an evaluative criterion and applied systematically to the factual evidence, producing a structured assessment of whether the policy meets, partially meets, or falls short of each standard. Secondary data provide the factual basis for the normative evaluation. Trade and value data come from UN Comtrade, INSG (2024), and Soamole (2025). Investment and ownership estimates are drawn from C4ADS (2025) and Tritto (2023). Provincial income data come from MEMR (2025). Policy documents are sourced from Santoso, Dermawan, & Moenardy (2024) and Setiani, Valennia, & Rusni (2024). These data are used descriptively, not as an independent empirical study.

## The Post-Ban Transformation of Indonesia's Nickel Trade with China

Five years after the implementation of Indonesia's raw nickel export ban, the policy can no longer be viewed merely as a regulatory restriction on mineral exports. It has become a turning point in the restructuring of Indonesia's nickel trade with China, shifting the bilateral relationship from the export of raw ore toward the production and export of processed nickel products. Since January 2020, Indonesia has prohibited nickel ore exports and required domestic processing before export, a policy that has significantly altered the country's position

in the global nickel value chain (IEA, 2024; Guberman, 2024). The ban also pushed Chinese firms to invest directly in Indonesian smelting and industrial park facilities in order to maintain access to nickel resources, thereby transforming China’s role from a dominant buyer of raw ore into a major investor in Indonesia’s downstream nickel sector (Carnegie Endowment, 2023). However, the post-ban transformation also reveals a more complex reality: while Indonesia has gained higher export value and stronger strategic relevance in global mineral supply chains, questions remain regarding ownership, value distribution, foreign capital dominance, and the extent to which the benefits of down streaming are retained for national and public welfare.

**Table 1.** The Post-Ban Transformation of Indonesia–China Nickel Trade

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Indicator	Pre-Ban Structure	Post-Ban Development	Main Implication
Main export pattern	Indonesia exported substantial volumes of raw nickel ore, particularly to China	Raw ore exports declined sharply after the January 2020 ban, while processed and intermediate nickel products expanded	Indonesia reduced dependence on raw commodity exports
Indonesia’s position in the value chain	Supplier of primary mineral input	Host country for smelting, refining, and downstream nickel processing	Indonesia moved upward in the nickel value chain
China’s role in the sector	Dominant buyer and offshore processor of Indonesian nickel ore	Major investor, operator, and shareholder in Indonesian smelters and industrial parks	Dependence shifted from raw-ore trade to investment-led industrial dependence
Domestic processing capacity	Limited smelting capacity before the ban	Rapid expansion of smelting and processing facilities after 2020	The ban accelerated domestic downstream industrialization
Ownership and control	Processing value was largely captured outside Indonesia	Chinese-affiliated firms control around 75% of Indonesia’s nickel refining capacity	Value addition occurs in Indonesia, but value capture remains contested
Normative issue	Unequal value capture from raw ore exports	Higher export value accompanied by concerns over ownership, labour, environment, and distribution	The policy requires evaluation through ‘adl, amanah, ta’awun, maslahah, and la dharar

Source: Author’s compilation based on UN Comtrade trade statistics; INSG (2024) for global nickel market data; Guberman, Schreiber, and Perry (2024) for Indonesia’s nickel export ban and trade transition; C4ADS (2025) for Chinese ownership and control of nickel refining capacity; Tritto (2023) for Chinese investment and industrial park development in Indonesia’s nickel sector; and official data from the Indonesian Ministry of Energy and Mineral Resources for domestic smelting development.

The transformation presented in Table 1 indicates that Indonesia’s 2020 nickel export ban significantly altered the structure of its nickel trade with China. The most visible change was the decline of raw nickel ore exports and the growing importance of processed and intermediate nickel products in the bilateral trade relationship. This shift suggests that the ban succeeded in reducing Indonesia’s dependence on raw commodity exports and encouraged the relocation of processing activities into Indonesian territory (Guberman, Schreiber, and Perry, 2024; INSG, 2024; Nurul, 2026). In this sense, the policy strengthened Indonesia’s position in the nickel

value chain by compelling value addition to occur domestically rather than allowing the main industrial benefits to be captured abroad.

Table 1 captures the major transition in Indonesia's nickel trade after the export ban, but it does not fully explain who ultimately captures the value generated by that transition. This distributional question is central to the Islamic trade ethics analysis because an increase in export value does not automatically indicate a just and equitable trade structure. Baumgartner (2023) situates Indonesia's export ban within the broader framework of resource nationalism, in which resource-rich developing countries seek to renegotiate their position in global value chains and reduce dependence on the export of unprocessed commodities. From the perspective of Islamic trade policy, this policy orientation is consistent with the principle of *amanah*, which requires the state to manage strategic natural resources as a public trust for the welfare of its people, not merely as commodities for export revenue maximization (Wahab, 2017; Abdul Kareem, 2021). Grasia, Tjandra, and Setiawan (2024) similarly argue that the shift from raw ore exports to processed nickel products has repositioned Indonesia higher in the global nickel value chain, creating opportunities for employment, technology transfer, industrial capacity building, and long-term competitiveness. Nevertheless, these potential gains remain conditional upon the structure of ownership, profit-sharing, regulatory control, and the extent of domestic participation in downstream industries. The fact that Chinese-affiliated firms control a substantial share of Indonesia's nickel refining capacity, estimated at more than 75 percent, indicates that value addition now occurs within Indonesian territory but not necessarily under Indonesian control (C4ADS, 2025; Tritto, 2023). Therefore, although the post-ban transformation represents a positive structural correction from the standpoint of *'adl* and *amanah*, it remains incomplete in terms of distributional justice, *ta'awun*, and *maslahah* if the benefits of downstream industrialization are disproportionately captured by foreign capital rather than by the Indonesian state, workers, and local communities.

### **The Pre-Ban Raw Ore Trade and the Problem of Unequal Value Capture**

Before the 2020 export ban, Indonesia's nickel trade with China was largely characterized by the export of raw ore and the external capture of industrial value added. Indonesia supplied nickel as a primary mineral input, while processing, refining, and conversion into higher-value products such as stainless steel and nickel pig iron were predominantly carried out outside the country. This structure placed Indonesia in a subordinate position within the global nickel value chain: it received the price of an unprocessed commodity, whereas the larger economic gains were realized by processors and manufacturers abroad. Although such trade may have been

formally lawful within a conventional market framework, it raises a serious ethical problem when assessed through the Islamic principle of ‘*adl*, because the main value generated from Indonesia’s natural resources was captured disproportionately by the stronger industrial actor.

The problem, therefore, was not simply that Indonesia exported nickel ore, but that the trade structure produced unequal value capture. Islamic trade ethics does not evaluate commercial exchange only on the basis of formal consent or legal validity; it also asks whether the exchange reflects fairness, proportionality, and the prevention of exploitation. The concept of *thaman al-mithl*, or a just and equivalent price, is relevant in this context because it requires that the value of a commodity be assessed in relation to its real economic benefit and not merely according to the bargaining power of the stronger party (Chapra, 1992; Amiur, 2014). When a resource-rich country receives only a small portion of the value ultimately generated from its mineral resources, while industrial actors abroad capture the larger share through processing and manufacturing, the transaction may be formally valid but ethically incomplete from the standpoint of ‘*adl*.

China’s dominant position as the principal buyer and processor of Indonesian nickel ore further intensified this imbalance. Such dominance created an asymmetrical trade relationship in which Indonesia had limited bargaining power over pricing, processing, and the distribution of downstream value. This condition may also be connected to the Islamic concern with *gharar*, not in the narrow contractual sense of uncertainty over the object of sale, but in the broader ethical sense of information asymmetry and unequal knowledge over the value generated after the commodity leaves the producing country (Rosly, 2005). The lack of transparency regarding how much value was extracted through subsequent processing made the pre-ban trade structure vulnerable to ethical criticism, particularly when the benefits of natural resource exploitation were not proportionately returned to the producing country and its people.

From this perspective, Indonesia’s export ban can be understood as a state intervention aimed at correcting a structurally unequal pattern of trade. By requiring nickel ore to be processed domestically before export, the policy attempted to narrow the gap between resource ownership and value capture. It shifted Indonesia’s role from merely supplying raw materials to participating more directly in industrial value creation. In terms of ‘*adl*, this represents a more equitable direction because it seeks to ensure that a greater portion of the economic value generated from Indonesia’s nickel resources remains within the country. Nevertheless, this correction should not be seen as complete merely because processing now occurs domestically. The ethical question of who controls the processing facilities, who captures the profits, and how the benefits are distributed remains central to evaluating whether the post-ban structure truly

fulfils the Islamic standard of justice in trade (Aunillah and Ahmad, 2025; Qayyimah and Huda, 2024).

### **State Amanah, Resource Sovereignty, and the Welfare Logic of Nickel Downstreaming**

From the perspective of Islamic economics, strategic mineral resources cannot be treated merely as ordinary tradable commodities. They are part of the wealth entrusted to the state and must be managed for the benefit of the wider community. This is closely related to the principle of *amanah*, which requires public authority to govern natural resources in a manner that secures public welfare, prevents exploitation, and ensures that the benefits of resource extraction are not captured only by a limited group of actors (Wahab, 2017; Qayyimah and Huda, 2024). In this sense, Indonesia's nickel export ban may be understood as an exercise of state responsibility over strategic resources. The policy was not simply a trade restriction, but a legal and economic instrument designed to prevent the continued export of low-value raw materials and to compel greater domestic value creation through downstream industrialization.

The welfare logic of the policy lies in its attempt to connect resource sovereignty with *maslahah 'ammah*. By requiring domestic processing before export, the state sought to retain a larger portion of the economic value generated from nickel within Indonesia. This includes not only higher export value, but also broader developmental effects such as employment creation, tax revenues, industrial capacity building, infrastructure development, and stronger bargaining power in the global mineral supply chain. From an Islamic governance perspective, such an intervention can be justified when it is directed toward public benefit and the protection of national economic interests, particularly where the previous trade structure allowed a resource-rich country to receive only limited gains from its own strategic minerals (Abdul Kareem, 2021).

However, the fulfilment of *amanah* cannot be measured only by the increase of export revenues or the expansion of smelting facilities. A policy may strengthen resource sovereignty at the macro level while still falling short in terms of equitable distribution at the local level. Although the post-ban period has generated significant welfare gains, including higher value added and economic growth in nickel-producing regions, these gains do not automatically ensure justice for all affected communities. Putra and Samputra (2023) caution that the revenue and rent gains from Indonesia's nickel boom have not been distributed evenly, indicating that the welfare effects of downstreaming remain uneven and contested. This suggests that the state's *amanah* is only partially fulfilled if resource rents are not transparently shared with

producing regions, workers, and communities directly affected by mining and smelting activities.

Therefore, the Islamic evaluation of Indonesia's nickel downstream policy must go beyond the question of whether the state has the legal authority to restrict raw mineral exports. The more fundamental question is whether that authority is exercised to produce *maslahah 'ammah* in a substantive sense. This requires that downstream industrialization be accompanied by fair revenue distribution, protection of labour rights, environmental responsibility, technology transfer, and meaningful participation of domestic actors. The export ban represents an important step toward correcting the previous pattern of unequal value capture, but its ethical legitimacy under Islamic trade policy depends on whether the resulting industrial structure genuinely advances public welfare, economic sovereignty, and distributive justice.

### **Reassessing Ta'awun in Indonesia–China Nickel Industrial Cooperation**

The post-ban nickel relationship between Indonesia and China appears, at first glance, to reflect the principle of *ta'awun*, or mutual cooperation. Indonesia benefits from higher export value, expanded domestic smelting capacity, employment creation, and a stronger position in the global nickel supply chain. China, at the same time, secures continued access to nickel resources needed for stainless steel production, battery supply chains, and its broader industrial strategy. Compared with the pre-ban raw ore trade, the post-ban structure therefore seems to offer a more reciprocal arrangement because both countries obtain economic advantages from downstream industrial cooperation.

However, *ta'awun* in Islamic trade ethics cannot be reduced to the fact that both parties gain something from a transaction. It also requires proportionality, fairness, and the absence of domination by the stronger party. A trade or investment relationship may appear mutually beneficial at the aggregate level, but still fail to satisfy the ethical standard of *ta'awun* if one party controls the capital, technology, production facilities, and profit distribution more extensively than the other. In this regard, the post-ban Indonesia–China nickel relationship requires closer normative scrutiny. The shift from raw ore exports to domestic processing has not eliminated dependency; rather, it has transformed the form of dependency from commodity trade dependence into investment-led industrial dependence.

This concern is particularly evident in the ownership and control structure of Indonesia's nickel refining sector. Chinese-affiliated firms are reported to control more than 75 percent of Indonesia's nickel refining capacity, indicating that a substantial part of downstream value creation takes place within Indonesian territory but remains closely tied to foreign capital and

corporate control (C4ADS, 2025). Pratama (2024) similarly argues that partnership in the nickel value chain must be assessed not only by the presence of foreign investment, but also by whether Indonesia has sufficient control over technology, decision-making, profit allocation, and long-term industrial upgrading. If a partner owns and operates a dominant share of processing facilities while relying on Indonesia's land, labour, and mineral resources, the relationship cannot automatically be described as equal cooperation.

The structure of joint ventures and industrial parks further illustrates this tension. Setiawan and Liu (2025) find that many of the investment arrangements supporting Indonesia's nickel industrial parks provide Chinese investors with significant influence over operational decisions and profit distribution. This condition challenges the ethical substance of *ta'awun* because the benefits of cooperation may not be distributed proportionally between Indonesia and China. While Indonesia obtains employment, infrastructure, and export growth, China may continue to capture a dominant share of profits, technology control, and strategic leverage in the downstream supply chain.

Therefore, the key issue is not whether Indonesia–China nickel cooperation produces benefits for both sides, but whether those benefits are balanced, fair, and supportive of Indonesia's long-term economic sovereignty. From an Islamic trade policy perspective, *ta'awun* requires cooperation that strengthens both parties without creating dependency, exploitation, or unequal bargaining power. The post-ban nickel relationship has moved beyond the earlier pattern of raw ore extraction, but it has not yet fully resolved the problem of asymmetric control. For this reason, the Indonesia–China nickel partnership can be considered partially consistent with *ta'awun*, but it remains ethically incomplete as long as capital ownership, technological capacity, and profit distribution remain heavily concentrated in the hands of foreign investors.

### **Ethical Challenges of Nickel Downstreaming**

The post-ban nickel downstreaming policy has generated important economic gains, but it has also produced several ethical challenges that must be addressed from the perspective of Islamic trade policy. These challenges include market concentration, foreign ownership dominance, environmental degradation, labour protection, and the distribution of benefits to local communities. This point is important because downstream industrialization cannot be evaluated only through export growth, investment inflows, or the expansion of smelting facilities. From an Islamic perspective, economic transformation must also be assessed according to *la dharar*, *maslahah*, *'adl*, and distributive justice.

The first challenge concerns market concentration and ownership structure. As discussed earlier, Chinese-affiliated firms control a substantial share of Indonesia's nickel refining capacity, estimated at more than 75 percent (C4ADS, 2025). This condition creates a new form of structural concentration in the post-ban nickel industry. Although the export ban reduced Indonesia's dependence on raw ore exports, it did not fully eliminate dependency in the downstream sector. Instead, dependency has shifted from dependence on foreign buyers of raw ore to dependence on foreign capital, technology, and industrial control. From the standpoint of Islamic trade ethics, this situation raises a concern over whether the benefits of nickel downstreaming are distributed fairly or remain concentrated among dominant investors.

The second challenge relates to environmental harm. Nickel mining and smelting activities in areas such as Central Sulawesi and North Maluku have been associated with water and soil pollution, deforestation, pressure on coastal ecosystems, and disruption of fishing communities (Mongabay, 2024). These impacts are ethically significant because Islamic economic governance does not permit economic growth to be pursued at the expense of ecological balance and community livelihoods. The principle of *la dharar* requires that harm be prevented or removed, while the concept of *maslahah* requires development policy to produce public benefit without creating greater damage. Therefore, stricter environmental enforcement, transparent monitoring, and community-based compensation mechanisms are necessary to ensure that nickel downstreaming does not contradict the ethical foundation of Islamic trade policy.

The third challenge concerns labour protection and industrial justice. Reports on several nickel industrial areas have raised concerns regarding workplace safety, wage fairness, limited career advancement for Indonesian workers, and the protection of labour rights in foreign-operated facilities (Mongabay, 2024). In Islamic trade ethics, workers are not merely production inputs, but human subjects whose dignity, safety, and rights must be protected. Fair wages, safe working conditions, and opportunities for skill development are part of the ethical requirements of *'adl* and *ta'awun* (Amiur, 2014). The prophetic teaching that workers should be paid before their sweat dries reinforces the moral obligation to ensure that industrial expansion does not sacrifice labour welfare. Thus, the success of nickel downstreaming must also be measured by the extent to which it improves the lives and dignity of the workers who sustain the industry.

The fourth challenge is the distribution of benefits to local communities. Nickel-producing regions may experience economic growth, infrastructure development, and employment expansion, but these benefits are not always evenly distributed. Communities living near mining and smelting areas often bear the environmental and social costs of

industrialization, while the largest financial gains may be captured by corporations, investors, or central-level actors. This creates a distributive justice problem. From the perspective of amanah and maslahah ‘ammah, the state has a responsibility to ensure that local communities receive fair benefits from the exploitation of natural resources located in their regions. Revenue-sharing, local employment guarantees, environmental restoration, and meaningful community participation are therefore necessary to make downstreaming ethically legitimate.

Table 2 summarizes the evaluation of Indonesia’s nickel export ban and downstreaming policy against the main Islamic trade principles. The table shows that the policy has produced several positive outcomes, particularly in correcting the previous raw-ore trade structure and strengthening domestic value creation. However, it also reveals that the post-ban nickel industry still faces unresolved ethical challenges related to ownership, market concentration, environmental harm, labour protection, and distributive justice.

**Table 2.** Assessment of Indonesia’s Nickel Down Streaming Policy Against Islamic Trade Principles

Islamic Trade Principle	Positive Contribution of the Export Ban and Downstreaming Policy	Remaining Ethical Challenge
‘Adl	Corrects the structurally unequal raw ore trade by requiring value addition within Indonesia before export	Ownership and profit distribution remain uneven due to the dominance of foreign capital in refining capacity
Ta‘awun	Creates a more reciprocal Indonesia–China industrial relationship compared with the previous raw ore trade	Cooperation remains asymmetrical when capital, technology, and operational control are concentrated in Chinese-affiliated firms
Prohibition of Exploitation, Gharar, and Ikhtikar	Reduces the earlier pattern of raw commodity dependence and limits monopsonistic exploitation of Indonesian ore	Foreign control of refining capacity may create a new form of structural concentration and dependency
Amanah and Maslahah ‘Ammah	Strengthens state control over strategic resources and supports value-added industrialization, employment, and public revenue	Benefits are not automatically distributed fairly to producing regions, workers, and affected communities
La Dharar	Provides a basis for demanding responsible industrial governance and stronger regulation	Environmental degradation, pollution, deforestation, and harm to local livelihoods remain serious concerns
Labour Justice	Opens opportunities for employment and industrial skill development	Wage fairness, workplace safety, labour rights, and career advancement require stronger protection

Source: Author’s analysis based on Islamic trade ethics literature and secondary data from C4ADS (2025), Mongabay (2024), Amiur (2014), Putra and Samputra (2023), and related policy literature.

Table 2 indicates that Indonesia’s nickel export ban is normatively defensible as a policy of resource correction and downstream industrialization, but its ethical success remains conditional. The policy has advanced ‘adl by reducing the earlier imbalance in raw ore trade, and it reflects amanah by asserting state responsibility over strategic mineral resources. However, the concentration of ownership, environmental externalities, labour concerns, and

uneven benefit distribution show that the post-ban nickel industry has not yet fully achieved the standards of *maslahah* and *la dharar*. In other words, Islamic trade policy supports the state's effort to move beyond raw commodity dependence, but it also requires downstreaming to be governed through fair ownership structures, stronger environmental safeguards, dignified labour protection, and a more transparent distribution of resource-based welfare to local communities.

In this regard, the ethical challenges of nickel downstreaming show that the success of Indonesia's post-ban policy cannot be measured solely by export growth, industrial expansion, or foreign investment. From the perspective of Islamic trade policy, downstreaming must be governed by a balance between economic benefit and moral responsibility. The principles of *'adl*, *amanah*, *ta'awun*, *maslahah*, and *la dharar* require the state to ensure that the wealth generated from strategic mineral resources is not concentrated among dominant investors, but is fairly distributed to workers, local communities, and the wider public. Environmental protection, labour dignity, transparent ownership, and equitable benefit-sharing are therefore not external concerns, but integral requirements of Islamic economic justice. Without these safeguards, nickel downstreaming may correct the old injustice of raw ore dependence while simultaneously creating new forms of dependency, harm, and distributive inequality.

## **Conclusion**

This article concludes that Indonesia's 2020 raw nickel export ban represents a significant post-ban transformation in Indonesia–China nickel trade and is broadly defensible from the perspective of Islamic trade policy. First, the policy shifted Indonesia's position from a raw ore supplier to a host country for processed nickel production, thereby increasing domestic value creation. Second, the pre-ban raw ore trade reflected unequal value capture because Indonesia received only the value of unprocessed minerals while greater industrial benefits were captured abroad, a structure that conflicted with the principle of *'adl*. Third, the export ban can be understood as an exercise of state *amanah* and resource sovereignty because it sought to manage strategic mineral resources for *maslahah 'ammah* through downstream industrialization, employment, public revenue, and stronger bargaining power. Fourth, Indonesia–China nickel cooperation after the ban reflects a partial form of *ta'awun* because both countries benefit economically, yet the partnership remains ethically incomplete due to asymmetrical control over capital, technology, ownership, and profit distribution. Fifth, the post-ban nickel industry still faces ethical challenges related to market concentration, environmental degradation, labour protection, and the uneven distribution of benefits to local communities. Therefore, while the

policy corrects the old injustice of raw ore dependence, its full alignment with Islamic trade ethics requires stronger governance based on ‘adl, amanah, ta‘awun, maslahah, and la dharar.

This study is limited to a normative-evaluative analysis based on Islamic trade ethics and secondary data concerning Indonesia’s nickel export ban and its downstream consequences. It does not conduct fieldwork in nickel-producing regions, measure the actual distribution of profits among investors, the state, workers, and local communities, or provide a quantitative assessment of environmental and labour impacts. Future studies should therefore examine the post-ban nickel industry through empirical socio-legal research, including interviews with policymakers, workers, local communities, industry actors, and religious-economic scholars. Further research may also compare Indonesia’s nickel downstreaming policy with other resource-rich Muslim-majority countries, assess the compatibility of mineral export restrictions with international trade law, and develop a more operational Islamic governance model for strategic natural resources. Such studies would help determine how downstream industrialization can move beyond export growth and become a genuinely just, sustainable, and welfare-oriented policy.

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