

Indonesia's nickel export restriction policy: alternative on environmental approach for Article XI:1 GATT justification

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Abstract

Purpose – This paper aims to analyse the aspects of the demonstration process of Indonesia's regulation on nickel export restriction for its eligibility to be excluded from Article XI:1 GATT. It also analyses the possibility of the use of an environmental approach in the demonstration process and for an alternative measure in its implementation.

Design/methodology/approach – The paper uses a normative research method in conducting its analysis. It analyses Indonesia's nickel export restriction policy based on the European Union's claim regarding quantitative restriction, with the international trade governance in the WTO framework, and certain international trade principles. The study also involves certain WTO jurisprudence to give a comprehensive analysis to the case.

Findings – This paper finds that Indonesia still needs to provide a complete and comprehensive demonstration to prove its eligibility for exclusion from Article XI:1. Demonstrating merely based on an economic approach is inadequate to convince the panel in Indonesia – measure relating to raw material for justification under Article XI:2. This study further finds that both parties generally focus on the economic aspect, which leaves room for conflict of interest. Other aspects with a lower probability of conflict of interest, such as the environmental approach, could be an alternative for the implementation.

Originality/value – This paper fulfils the need to provide a scientific analysis of the application of Indonesia's nickel export restriction policy, including its proceedings in WTO's dispute settlement body, which is essential for international trade governance enforcement.

Keywords Indonesia-EU trade dispute, Indonesia's nickel export restriction, Quantitative restriction justification

Paper type Research paper

1. Introduction

Indonesia has become one of the most potential countries in natural resource reserves, leading the country to advantage in energy commodity trade. One of the leading natural resource commodities in Indonesia is nickel, which also has made Indonesia the biggest nickel producer in the world, with 52% of the world of nickel reserves located in Indonesia (Indonesian Ministry of Energy and Mineral Resources, 2020). With technological advances and the increasing of electrification demand, nickel demand in the market rises as it becomes one of the core components of lithium battery used in various electronic devices, including the electric vehicle (Lim, 2021). One of the reasons that lead to the increasing nickel demand for lithium battery purpose in electric vehicles is because of energy transition reason specifically in transportation, which leads to massive development of EV industry.



Electric vehicle development grows rapidly considering its environmentally friendly characteristics (Lim, 2021). The increase of awareness regarding green energy transition in the society, along with the environmental actions and also the implementation of environmental-related legal instruments, have strengthened the EV industry development. This kind of development in the EV industry certainly brings up a positive impact on facing environmental problems that urge to be solved. This also strengthened electric vehicle's bargaining position as a solution for environmental problems in a long-term investment for economic and environmental aspects.

In facing the condition of increasing nickel demand, including its potential benefit whether for economic or environmental aspects, Indonesia applies several measures as its nickel management policy. Nickel ore efficiency policy takes place to support the nickel downstream strategy, which is applied through nickel ore export ban and domestic processing requirements for nickel ore.

Indonesia limits its nickel export by regulating the regulation of Minister of Energy and Mineral Resources Number 11 of 2019 (Indonesian Ministry of Energy and Mineral Resources, 2019). On the other hand, this regulation affects and triggers several adjustments that create an impactful provision on international trade practices, specifically in nickel ore export which has become Indonesia's leading commodity.

There are several export provision applied along with Indonesia's regulation that creates a disruption in nickel trade and triggers responses from countries involved in nickel trading chain. These responses are based on the assumption that there is inconsistency between the existing nickel regulation and the international trade provision in GATT 1994. The provisions mentioned above are described as follows:

- Nickel ore with <1.7% concentration (known as limonite ore) export restriction (Article XI:1).
- Domestic processing requirements (Article XI:1).

These provisions whether directly or indirectly create a barrier in the international nickel trading chain where Indonesia is crucially involved as one of the biggest suppliers in the market. Therefore, the regulation takes Indonesia to the dispute that takes place from the European Union's claim to the dispute settlement body (DSB) in the WTO (World Trade Organization, 2021). The European Union's claim towards Indonesia's regulation refers to the quantitative restriction provision in GATT 1994, henceforth becoming EU's legal basis in the dispute settlement process. The European Union assumes that the impact that comes from the application of Indonesia's restriction is creating a trade-distorting effect that is inconsistent with the fair trade principle.

The dispute settlement process in the DSB was started on 22 November 2019, which was initialized by a consultation request by the European Union to the DSB based on its claim towards Indonesia's policy. With the consultation did not resulting a conclusion for both parties, the process then entered the panel stage, and the panel was composed in 22 February 2021. On 30 November 2022, the panel issued its final report based on its findings on the EU's claim and measures implemented by Indonesia [1]. In its final conclusion, the panel concluded that Indonesia's policy in nickel ore export restriction and the domestic processing requirement are inconsistent with respect to Article XI:1. Although this inconsistency has the chance to be excluded from the provision in Article XI:1, based on the Article XI:2, the panel saw that Indonesia has failed to demonstrate its actual implementation condition and the regulation applied to be able to meet the condition within the scope of Article XI:2 and become excluded from the quantitative restriction policy in

Article XI:1. In this regard, at the panel stage of the dispute settlement process, Indonesia has failed to defend its argumentation and position on implementing its nickel export policy.

Considering its objective in implementing the policy, Indonesia responded to the report and announced to appeal the panel's report to the appellate body to defend its position and argument on facing the EU's claim. With respect to the dispute settlement mechanism in the DSB, Indonesia still got the chance to gain justification under Article XI:2 and become eligible to be excluded from Article XI:1.

As the regulator that has authority on its nickel reserves, including its regulation, the Indonesian government put environmental protection provision, which are regulated in the Law No 4/2009 as their basis for implementing the regulation and dealing with the European Union's claim. As the panel report shows the inconsistency between Indonesia's policy with the GATT provision, Indonesia manages to underly its argumentation by involving the Mineral and Coal Mining Law No 4/2009 and the Law No. 32/2009 on the Protection and Management of the Environment in its appeal. This research will focus on the analysis of the environmental approach eligibility as an alternative demonstration and also as an alternative measure. The analysis intends to provide a conclusion from questions related to Indonesia's nickel export dispute with the EU, which include:

- Q1. What aspect of the challenged measure should be demonstrated to become eligible to fall within the Article XI:2 exclusion?
- Q2. What measure could be feasible for an alternative measure that accommodates the best output for both parties and is consistent with the GATT regulation?

2. Research method

This research is conducted through a qualitative legal method that uses secondary data, literature, existing research and publication in a conceptual analytical framework towards the European Union's allegation of the quantitative restriction imposed by Indonesia in Permen ESDM on nickel commodity.

The literature review method will be used in this research to analyse the legal basis in this research, where the primary legal materials are sourced from the regulation of Minister of Energy and Mineral Resources Number 11 of 2019, GATT 1994, Indonesian Mineral and Coal Law Number 4 of 2009 *jo* Mineral and Coal Law Number 3 of 2020 and the secondary legal materials as the complementary reference in this research is sourced from the Presidential Regulation Number 55 of 2019, recent publications, journals and other references such as books and internet sources.

3. Analysis on European Union's claim against Indonesia's nickel export restriction

3.1 Factual background

The European Union's claim in the DSB against Indonesia's policy is triggered by the trade disruption caused by the regulation that affecting international nickel trade market that applied by Indonesia. Before getting deeper into the impact of the applied regulation, several important points should be explained regarding the applied measures. The Regulation of Minister of Energy and Mineral Resources Number 11 of 2019 is a technical regulation that follows up Indonesia nickel law in Article 102 Indonesian Mineral and Coal Law Number 4 of 2009 *jo* Mineral and Coal Law Number 3 of 2020. The Article 102 itself regulates value-adding requirements on mineral product, including nickel. The provision in Article 102 implies that increasing economic values can be performed by raising value-addition of the

minerals mined domestically and to optimally contribute to the economic benefits of the state (Krustiyati *et al.*, 2022). The lack of smelter facilities in Indonesia caused the implementation of the restriction (to realize the value-adding requirements) to be postponed several times until it was lawfully applied through the Regulation of Minister of Energy and Mineral Resources Number 11 of 2019.

On the other hand, there are several factors besides the regulation which directly affect commodity products policy (in this case, refer to nickel), that also take part as the regulation application background. Those affecting factors are environmental protection and the economy, which become potential from the optimization of the emerging EV industry through Indonesia's nickel downstream strategy. This strategy aims to develop the EV industry by creating an efficiency in nickel use to realize both economic and environmental goals. In relation to economic stimulation, the environmental protection factor presents the background in the readiness and competency aspect to face climate change and global warming caused mostly by conventional vehicle emission (Ismiyati *et al.*, 2014).

Indonesia is implementing various environmental strategies such as by ratifying the Paris Agreement in Law Number 16 of 2016 [2]. The nationally determined contributions (NDCs) which are the implementation strategy for the agreement, also take part in the implementation plan, which becomes Indonesia's responsibility to the commitment for multi-sector realization (Indonesian Ministry of National Development Planning, 2021). Through the attached NDCs document, Indonesia is being responsible for reducing the greenhouse gases to 29% below the business as usual amount in 2030 and below 41% by involving international support [3]. To realize the existing target, the Indonesian government has created several strategies, one of which is in low carbon and emission strategy through a fundamental development in the renewable energy industry to create economical resilience in energy and transportation sector by escalating energy efficiency action and energy consumption behaviour. Furthermore, targets in the NDCs on energy efficiency and climate resilience through the electric vehicle actually becomes an actual step, marked with the application of the Presidential Regulation Number 55 of 2019, which is intended to stimulate the electric vehicle program.

In supporting the targets in energy efficiency and preparing supporting facilities for renewable energy, Indonesia builds an ecosystem for the battery industry and mines products that are essential for the industry under Indonesia Battery Corporation (IBC). The consortium involves several state-owned enterprises in the nickel mining sector and other upstream sectors company (MIND ID) that have a role in the supply chain towards the downstream industry sector, such as the State Electricity Company (PLN) (Wareza, 2021). This EV stimulating scheme, which is part of the nickel product downstream strategy, aims to maximize the existing nickel potential.

Practically, the regulation of Minister of Energy and Mineral Resources Number 11 of 2019 becomes the key to support the downstream strategy. On the other hand, the regulation also applies two measures which initiate an international trade dispute. The export ban and domestic processing requirement leads to the EU's claim to the DSB. The restriction on nickel ore export is considered to apply a trade disruption which is inconsistent with the GATT.

3.2 Proceedings in World Trade Organization's dispute settlement body

There are several impacts on the EU's nickel-based product market and the international trade between both countries caused by Indonesia's regulation. According to the EU, the European stainless steel industry reached its lowest point in January 2021 as a result of the Indonesian policy (Reuters, 2021). This fact is one of the impacts that led to EU's

consultation request to the DSB as the steps to settle an international trade dispute based on WTO's procedure. The EU claimed that the restriction on raw nickel export is inconsistent with the international trade regulation based on the General Agreement on Tariff and Trade 1994, specifically on the prohibition of quantitative restriction [4].

In the consultation stage, the EU underlie its claim on Indonesia's nickel export restriction policy on several reasons based on the dispute settlement document, DS592: Indonesia – Measures Relating to Raw Materials, which reasons are:

- Nickel export restriction policy in the Regulation of Minister of Energy and Mineral Resources Number 11 of 2019, including the domestic processing requirements, domestic marketing obligations and export licensing requirements, appears to be inconsistent with Article XI:1 of the GATT 1994;
- The prohibited subsidy scheme appears to be inconsistent with Article 3.1(b) of the SCM Agreement; and
- The failure to promptly publish the challenged measures appears to be inconsistent with Article X:1 of the GATT 1994 [5].

Hitherto, the settlement of the EU's claim on Indonesia's nickel policy has reached the panel report issued on 30 November 2022. Through its report, the panel concluded that the export ban and domestic processing requirement (DPR) are inconsistent with the GATT 1994. Under Article XI:1 regulation, the panel interprets that the export ban is a "prohibition" and the DPR is a form of "restriction". Regardless of its form, whether it is a prohibition or restriction, both measures still have the chance to be excluded as long as both measures are eligible under the conditions regulated in Article XI:2.

To gain the exclusion under Article XI:2, as mentioned before, the panel should analyse the challenged measure whether it satisfies the condition of "temporarily applied" for "essential product" to "prevent or relieve critical shortage". According to the panel's report, it seems that measures implemented by Indonesia have failed to satisfy the requirements under Article XI:2. The panel's analysis itself conducted based on data, fact and demonstration provided by both parties. In this regard, Indonesia has failed to demonstrate and provide evidence of the required conditions.

3.3 Panel interpretation on Article XI GATT in Indonesia's nickel export restriction policy

3.3.1 *Export ban.* The export ban is a measure that initialized the EU's claim to Indonesia's policy by seeing this as a trade issue. Technically, the export ban is more likely to appear as an implication of the primary provision, which regulates the value-adding mechanism by conducting domestic processing requirements [6]. In other words, this creates a limitation for export access and resulting in an export ban on nickel ore.

In determining the relevance between Indonesia's regulation and the definition of "export ban" in the scope of Article XI:1 GATT, the panel refers to two components in Indonesia's regulation, which are "explicit language" and "impact". Regarding the "explicit language", the panel thinks it shows the design and framework as a nickel ore export restriction. According to the EU's claim, regardless of the wording component of the regulation, Indonesia's policy through MEMR 11/2019 by making the export of nickel ore illegal after 1 January 2020 and removing any exclusion of such measure is a form of export restriction and return to the "status quo ante" of a complete prohibition [7].

Indonesia does not take any issue with the panel's analysis considering that the Article XI:2(a) exclusion is eligible to be applied if the measure falls within the scope of

Article XI:1 [8]. Therefore, the panel clearly concludes that it is an export restriction within the scope of Article XI:1.

3.3.2 Domestic processing requirements. By all reasons and forms of the application of the policy, including the export ban, the DPR becomes an introductory instrument that is applied and actualized through a technical refining procedure. Regarding the regulation of DPR, whether in Law No 4/2009 or other technical regulations such as the MEMR 11/2019, Indonesia argues that the DPR is a measure which applied internally and not as a "border measure" as regulated and falling within the scope of Article XI:1 [9].

Responding to Indonesia's argument, the panel considers that the parlance of "internal" and "border measure" is a technique to distinguish the primary obligation which falls within GATT general regulations such as the most favoured nation, tariff measure, quantitative restriction and the national treatment [10]. Although Indonesia argues that the DPR is an "internal measure", on the other hand, Indonesia also acknowledges that the MEMR 25/2018 is a requirement for export [11]. Considering Indonesia's claim that the final product of the refining process is not in the form of nickel ore anymore but other forms of nickel such as ferro nickel and nickel matte, the panel is convinced that the measure gives no possibility for the export of nickel ore. The panel concludes that the DPR creates a situation where there is no nickel ore available for export, and that such a condition falls within the regulation under the Article XI:1 [12].

3.3.3 Eligibility for exclusion under Article XI:2(a). Since the early stage of "Indonesia – Measures Relating to Raw Materials", the aspect that is emphasized is whether Indonesia satisfies the criteria within Article XI:2(a) and is eligible to be excluded from Article XI:1 GATT. Technically, Article XI:2(a), which becomes Indonesia's primary appeal towards the application of Article XI:1, refers to three elements that should be satisfied cumulatively [13].

3.3.3.1 Essential product. The phrase "essential" refers to the condition of "absolutely indispensable or necessary". On its application, the panel agrees with the panel in "China – raw materials" regarding the definition of an essential product, which "may include a product that is an "input" to an important product or industry", including exhaustible natural resources. The panel finds that there are two things that could not demonstrate nickel as an essential product for Indonesia based on the definition mentioned above. First, Indonesia argues that the refinery facilities will be ready and properly established by 2026. Second, Indonesia also acknowledges that low-grade nickel ore is not considered an economically viable product [14].

Considering the definition of "input to important industry", the panel saw this as a condition that is predicted to happen in the future. While the facilities are not ready yet, nickel are only become "input" for the stainless steel industry, which is only a minor part of Indonesia's economy [15]. In addition, the panel also mentioned that Indonesia needed to demonstrate how the stainless steel and EV Industry becomes important for other industries.

3.3.3.2 Temporarily applied. As in the previous discussion, the case "China – raw material" becomes one of the panel's references for interpreting "temporarily applied" in "Indonesia – Measures Relating to Raw Materials". The term "temporarily applied" is described as "a measure applied in the interim to provide relief in extraordinary conditions to bridge a passing need". It must be finite, that is, applied for a limited time'. Pursuant to Indonesia's regulation, no regulation explicitly regulates that the policy will be applied temporarily, in a specific timeframe, or criteria for the policy to be withdrawn [16].

Indonesia provides several arguments to demonstrate that the challenged measure is applied several times temporarily. Historically, Indonesia argues that in 2012, the regulation only applied for 15 days and two weeks in 2019 before the consultation request by the

EU [17]. Responding to Indonesia's argument, panel saw that "temporariness" is not governed by specific regulation. It applied temporarily because of the condition that requires so. Indonesia refers to the panel in China – raw material regarding the criteria of condition that makes the policy withdraw and argues with respect to the establishment of refining facilities as its criteria. With no direct and contemporaneous evidence that the policy is applied in a specific and governed regulation regarding the timeframe or criteria, then the panel concludes that the DPR does not satisfy the "temporarily applied" element in Article XI:2(a).

3.3.3.3 Critical shortage. On interpreting the "critical shortage" element of Article XI:2(a), the panel refers to the nickel situation in Indonesia. The panel focused on the type of situation that could be classified as a "critical shortage" and the actual condition of the nickel reserve in Indonesia [18].

A critical shortage could be described as "those deficiencies in quantity that are crucial, that amount to a situation of decisive importance, or that reach a vitally important or decisive stage, or a turning point" [19]. One of the essential aspects from the definition that should be highlighted is "capable of being resolved". Thus, the panel argues that Article XI:2(a) could be used to overcome the lack of input of industry that is "critical".

Regarding its nickel reserve, Indonesia provides the "Maryono Report" and other relevant data to show the level of its nickel reserve [20]. The EU responded and argued that there are two issues with the submitted report, regarding the exclusion of low-grade nickel ore and a valid verification from a "competent person". Indonesia acknowledges that they have excluded the low-grade nickel ore as they refer to the economic viability of the product. Indonesia classified this with respect to the condition in lack of refining facilities, which causes the nickel ore cannot achieve its economic value.

Panel saw inconsistencies between the nickel ore reserve report and the utilization plan once the refining facilities are ready. Based on the plan, a potential upward trend will indicate sufficiency for at least until 2030 [21]. The existence of future prospects for nickel processing capacity diminished its reasonability as evidence for a critical shortage. Therefore, the panel concludes that Indonesia does not demonstrate the existence of an "imminent critical shortage" as its legitimation.

4. Comprehensive demonstration for Article XI:2 justification after panel's report

Referring to the panel report on Indonesia – Measures Relating to Raw Materials, specifically in analysing the consistency between Indonesia's export regulation and the Article XI provision, the crucial component of the panel's interpretation is the demonstration from both parties. Whether regarding the export ban or the DPR, Indonesia has been implementing the regulation for at least more than five years. In this regard, Indonesia is still unable to provide a complete factual demonstration and elaborate on the regulation, implications and the realization which has been actualized by implementing the regulation. Complete and comprehensive demonstration based on actual data and regulation becomes a key for both parties to defend their position and arguments, considering the panels rests the burden of proof on the parties' demonstration [22]. In this respect, Indonesia on the conditions regulated in Article XI:2(a) and the EU on Article XI:1.

Concerning the demonstration aspect based on the panel's report, the EU appears prepared with various data and evidence to prove Indonesia's measures are inconsistent with the GATT regulation, as mentioned in its claim. To complement its claim, the EU even provides a timeline regarding the implementation of Indonesia's measures, including the specific article on each regulation, forms of provision, and the impact. The EU also provides

a detailed demonstration of the DPR measure by describing the provision in the Law No 4/2009 and the MEMR 25/2018 [23]. In contrast to the EU, Indonesia as the respondent of the claim does not provide data that in fact, should be presented in more detail as a regulator. Indonesia instead provides a demonstration that shows ambiguity and inconsistency between one other argument through uncomprehensive data, unlike the EU.

Indonesia acknowledges the export ban measure to be classified as a quantitative restriction as regulated in Article XI:1 with respect to eligibility for exclusion under Article XI:2(a). This argumentation brought by Indonesia also invokes the panel to see that there are relevance and correlations between the export ban and the DPR. Indonesia argues that the DPR is not a measure that falls within the scope of the export measure but instead an "internal" mechanism, which recalls the early discussion regarding the eligibility of Article XI:1. Instead of providing a demonstration of the eligibility, Indonesia acknowledges that only the processed and refined product can be exported. This argumentation shows that no nickel ore exists in Indonesia to be exported and contradicts its argument regarding DPR as only an internal measure.

Practically referring to facts provided in the panel's report, the "essential product" aspect could be considered the most relevant aspect for Indonesia considering its enormous amount share of the world's nickel reserve. It is also followed by the probability of nickel ore demand escalation, such as for EV lithium battery industry development in various countries. However, these facts are still inadequate to demonstrate its relevance for Article XI:1 exclusion. These facts should be followed by a solid demonstration involving multiple aspects besides the economy to provide a reasonable basis.

The weakness of Indonesia's demonstration and its uncertain argumentation is not convincing the panel and defend its position on facing the EU's claim. The panel saw that if Indonesia's request to conclude that the existence of export ban makes the DPR irrelevance towards export activity is accommodated, Indonesia cannot fall within the exclusion under Article XI:2(a) for its export ban measure [24]. This will worsen Indonesia's position, which if such a condition occurred, there would be no exclusion eligible for Indonesia.

The comprehensive and complete demonstration provided by the EU has strengthened its position and convinced the panel of the claim it brought to the DSB. On the other side, Indonesia counters the claim with uncertain argumentation, showing a regulatory gap in implementation. With readiness by the EU on demonstrating its claim, Indonesia should also provide the same clearness of its demonstration as the EU to make this dispute as a solution-making instrument to realize Indonesia's objective while also being consistent with the GATT provision.

4.1 Stated (clear) timeframe and criteria for temporary application

The crucial issue in the proof of "temporarily applied" with respect to Article XI:2(a) by Indonesia on its applied regulation is that Indonesia did not mention any regulation which mainly regulates a specific timeframe or criteria on which condition that the measure could be lifted. This becomes a crucial issue for Indonesia as the governing parties of the measures, considering the EU as the complainant, could provide comprehensive and convincing data regarding the provision or even the implication of the applied provision.

One of Indonesia's arguments regarding "temporarily applied", which argues based on its application history of the policy states that the ban lasted only 15 days back in 2012 when the ban was initially applied. Also, in 2019, where the ban only lasted for two weeks before the EU requested consultation regarding the policy [25]. In this regard, Indonesia argues that was part of "temporary" in their application, which becomes one of their defenses.

Referring to the complainant's timeline demonstration, this kind of demonstration will not affect that much.

It should first refer to the definition to create a complete elaboration over this "temporary" parlance. In China – raw material, the appellate body agrees with the panel's interpretation that the parlance "temporary" refers to a definite application for a limited time [26]. Besides the time limitation aspect, it also refers to the criteria aspect, which aimed to be achieved by implementing a temporary measure. It can be concluded that "specific stated timeframe" and "criteria" becomes a reference for justification under the "temporary" condition.

The lack of proof for the "specific stated-timeframe" along with the unspecific demonstration for the "criteria" aspect comes from the ungoverned regulatory basis. In this regard, Indonesia only provides the demonstration for the "criteria" by which the measure could be lifted that mentioned in a "press release". Besides its lack of validity and not an instrument that legally binding, this press release also does not mention any further regarding the specific timeline of the technological aspect criteria is being available. This shows that this technological preparation does not provide any certainty in various aspects. A weak demonstration in this early aspect will indeed affect how far the other aspect will be consistent and relevant to the actual condition.

In this regard, Indonesia needs to elaborate further regarding the specific timeframe for implementing the measures, which a specific regulation should govern. This not being limited only by time aspects as described earlier but also further on the implementation assessment blueprint. This kind of blueprint could include several aspects, such as timeframe, strategic planning, goals and objective that are urgent and crucial to be temporarily applied to achieve a particular objective as well as environmental goals. For example, the long-term strategy for low carbon could be involved in elaboration. This Paris Agreement's following-up strategy includes a strategy for implementing energy efficiency measures and the use of decarbonized electricity in transport and buildings [27]. In the projection of energy sector development in this document, there are timelines and criteria for the mentioned strategy to complement the demonstration of "temporarily applied" by elaborating the strategy and the realization indicator.

The appellate body in China – raw material gives its additional perspective in interpreting the definition of "temporarily applied" in Article XI:2(a). The AB saw that "limited time", which becomes the definition of "temporary", itself, does not always have to be "fixed in advance" [28]. The AB widens the meaning of temporarily applied from the aspect of "time" to the purpose of "bridge a passing need". With respect to Indonesia's demonstration, this additional perspective provided by the AB could give a chance for Indonesia to gain justification for the "temporarily applied" condition based on the demonstration of "passing need".

4.2 Environmental approach on demonstrating essential product

According to the panel's report, Indonesia sees nickel ore as an "essential product" from three different perspectives, becoming a basis for its historical and utilization plan-based argumentation. Economically, the mining industry has become one of the most significant contributors to Indonesia's gross domestic product (GDP), where Indonesia's nickel ore shares 7% of world nickel production. Indonesia argues that this condition leads to significant state revenue and a large amount of employment. Nickel ore is also claimed as an indispensable input to the stainless steel industry, which contributes 3.94% of the total industrial GDP [29]. Although Indonesia claimed that such condition is essential for the

state's economic aspect, it is not adequate with respect to responding to the EU's claim and demonstration.

In this regard, underlying its argument on indispensable "input" to the present stainless steel industry seems irrelevant to Indonesia, considering the industry only contributes a small amount to Indonesia's GDP, unlike nickel mining as its upstream industry with 10% shares of GDP and a substantial share of employment. For an "essential product" aspect demonstration, the stainless steel argument seems not to be crucial enough. Indonesia could underly its argumentation to a more crucial aspect, such as environmental protection, instead of merely on economic and trade aspects in order to provide a more reasonable demonstration under "essential product".

In addition, Indonesia strengthened its early argumentation by providing facts based on China – raw material, where the Panel considers bauxite as an essential product for China [30]. Referring to Indonesia's demonstration in the nickel case, the fact provided regarding bauxite as an essential product seems irrelevant to what Indonesia has provided in its demonstration. In this case, China is able to factually demonstrate the input and output of its bauxite, which is essential for manufacture and construction as China's two primary industries. Instead, Indonesia provides data and demonstration that is not reasonable for the discussion.

Besides the reasoning mentioned above, some other perspectives and arguments are more feasible for Indonesia's condition and could be more reasonable to demonstrate the "essential product" concerning Indonesia's objective on environmental solution, which also becomes global agenda for the environment. The nickel ore could be elaborated and assessed in more detail to demonstrate the "essential product" by its position as a core component of the EV development plan to provide carbon emission solutions for the environment. This type of approach and perspective could have a bigger chance and more room for proof compared to the previous argumentation that emphasizes the economic aspect. The environmental approach to argumentation is also more reasonable, considering it has a lower probability of a state's conflict of interest compared to the economic and trade approaches.

Besides its economic benefit, the realization of the EV and nickel downstream strategy could have further implications on environmental protection and carbon emission, as mentioned in Indonesia's strategy for the Paris Agreement objective in NDCs. Increasing the use of the electric vehicle in replacing the internal combustion vehicle has proven to have a significant impact on reducing carbon emissions, which is crucial (Vidhi and Shrivastava, 2018).

Indonesia has to widen its elaboration regarding the "essential product" definition by involving factual data and facts regarding mining, regulation and environmental aspects. Various instruments could be assessed further to demonstrate the urgency of the applied measure for Indonesia, such as Perpres 55/2019 and the NDCs. In its report, the panel does not see nickel ore as an essential product, which based on Indonesia's argument that does not yet demonstrate its essentiality.

4.3 Environmental condition as a turning point for critical shortage interpretation

Indonesia's approach to viewing the "critical shortage" in Article XI:2(a) tends to be limited only to economic risk mitigation. Based on Indonesia's argument, nickel ore is considered an essential product, which is being banned for export to prevent its depletion at unsustainable rates in its relation as a critical "input" into EV Industry [31]. Indonesia argues that this measure mitigates the risk of the surge in nickel ore production and consumption. The future demand could lead to a deficiency in the quantity of nickel ore if the restrictions were

no longer applied. Although EVs have been involved in the discussion, the argument still needs to demonstrate the environmental benefit behind EV development, which could lead to economic efficiency, rather than only elaborate through EV and nickel economic perspectives.

As its demonstration, Indonesia provides data on its nickel reserves, both the proven and the probable reserves, from 2012 to 2020. This data only shows the reserve of high-grade saprolite ore that is considered "economically viable" by Indonesia and has a total lifespan of merely six years at the current production and consumption level [32]. The domestic nickel consumption data, which in Indonesia's argument is being focused on stainless steel industry input, also take part in the reserve amount that is being demonstrated. With respect to the "critical shortage" interpretation, the demonstration and argument provided by Indonesia are still away from eligibility under Article XI:2 if only focused on debatable reserves amount without demonstrating a direct relation to the consumption amount in the EV industry itself. In this regard, demonstrating the relation to the stainless steel industry does not represent its essentiality for Indonesia, considering its minor share in Indonesia's GDP, as mentioned in the previous discussion.

In addition to the environmental benefit demonstration mentioned earlier, the elaboration of the environmental aspect could be provided by Indonesia by involving the environmental output and objective assessment, such as in reducing carbon emissions. The fact that internal combustion vehicle contributes for more than 60% of the total emission (Ismiyati *et al.*, 2014). EV utilization, in this regard, could take part in environmental solutions for greenhouse gas reduction as a "turning point" that could be reached. In other words, this argument could shift the shortage impact perspective that is limited to "supply" and "demand", to a broader perspective involving the environmental aspect that is more globally impactful instead of merely fulfilling domestic industry interest. Reducing the carbon emission by applying mitigation measures could bring numerous energy, environmental, economic and resource impacts (Hao *et al.*, 2019).

Factually, involving the environmental aspect in the argument could also be more reasonable for the proofing purpose. The AB in China – Raw Material saw that a deficiency in quantity that is crucial to reach a "turning point" could also indicate a "critical shortage" condition. Providing environmentally oriented demonstration will be more feasible and reasonable to reach a "turning point" condition, considering reaching such a turning point is also an agenda and goal for several multilateral environmental agreements such as the Paris Agreement and the SDGs. In this regard, the export restriction could be applied on an environmental basis to prevent a critical shortage.

5. Feasible implementation alternatives and strategy

5.1 The European union certification alternative

In complementing its claim, the European Union offers an alternative measure which also, in response to Indonesia's argument regarding the applied measures, is to secure compliance with laws or regulations regulated in Article XX(d) [33]. Indonesia argues that Law 4/2009 is the regulation that complies with the regulation itself. Indonesia also proposes Law 32/2009 as a policy framework to regulate the sustainable mining requirements with respect to the conservation of natural resources.

The panel saw that only Article 96(c) of Law 4/2009 could be classified as a "law or regulation" within Article XX(d). Article 57 of Law 32/2009 is inadequate to be interpreted more in detail, considering it does not meet the "law or regulation" classification under Article XX(d) [34]. The panel assumes the normative content in Article 57 of Law 32/2009 cannot be considered as an enforceable obligation which its compliance is guaranteed. The

panel's perspective in this regard left the analysis of whether Article 96(c) of Law 4/2009 falls within the purpose to "secure compliance" under Article XX(d).

Generally, as Indonesia proposes Article XX(d), the panel saw that the export ban and the DPR fall within the meaning of the article on securing compliance with Article 96(c) of Law 4/2009. In this regard, as the panel considers that this measure has multiple impacts, including on the economy and environment, the panel then saw that securing compliance to create such impacts is important. Next is to answer whether these measures have an effective contribution to the objective of Article 96(c). Regarding this effective contribution, the panel saw that Indonesia have failed to demonstrate both measures contribution to the policy.

In its report, the panel found that the applied measures are important for securing compliance with environmental protection, but, on the other side, the panel also saw that furtherance of the challenged measure objective is "minimal" and outweighed by the "trade restrictiveness" [35]. Therefore, to provide the final conclusion of Indonesia's proposals under Article XX(d), the panel compares the challenged measure with the alternative measure, which the complaining party considers to be more reasonable. In this regard, Indonesia, as the respondent, should also demonstrate the feasibility and reasonability of the proposed alternative measure for the application.

The export authorization is an alternative measure submitted by the European Union. According to this measure, the attesting document becomes an alternative for an export permit, which should be attached to prove that the mined nickel complies with all environmental requirements through a certification process [36]. The EU provided this alternative with respect to reducing its trade restrictiveness by also fulfilling the environmental objective.

In responding to the EU's alternative certification measure, Indonesia argues that the EU could not distinguish between this type of certification and the existing CnC certification process. Indonesia also considers that this alternative is creating other problems for the enforcement aspect, considering this alternative is not providing a solution for foreign demand anticipation. Regarding the CnC certification, the panel saw that both the alternative measure and the CnC certification are distinguished by the issued time for both certifications. The CnC certification is a pre-requisite for a mining license, whereas the alternative certification measure is on the export process. From this distinction, the panel concluded that the alternative certification measure is eligible for comparison.

Based on the demonstration provided by the EU, the panel agrees that the alternative certification measure is less "trade-restrictive" compared to the challenged measure, thus creating a possibility for an export permit. In addition, the panel saw that this alternative measure is feasible to Indonesia, although it could cost Indonesia for the implementation and creates a potential technical problem. But, it should also be highlighted that the panel is aware that the AB in China – Raw Material has found that an alternative measure is not viable under several conditions. Those conditions are "where the responding member is incapable of taking it, or where the measure imposes an undue burden on that member such as prohibitive cost or substantial technical difficulties". In this regard, both the panel and Indonesia should demonstrate more in detail their arguments regarding the eligibility for alternative measures and the implementation feasibility. Indonesia provides a demonstration that is not very parallel with the conception of the proposed alternative measure, and the panel provides a conclusion regarding feasibility based on a less parallel demonstration from Indonesia.

This conclusion could leave a possible implementation problem in the future because of the unmatched conclusion and demonstration. The misconception of Indonesia's

interpretation could not be directly considered a demonstration failure by Indonesia. The EU still has to provide a comprehensive demonstration, considering the burden of alternative measure identification is on the EU.

5.2 Other feasible alternative

The preliminary discussion for the challenged measure applied by Indonesia is regarding its consistency under Article XI:1 GATT concerning the quantitative restriction prohibition, followed by its exclusion in Article XI:2. Article XI:2 is being involved after the applied measure is interpreted as a quantitative restriction under Article XI:1 by the panel. Regardless of the exclusion possibility under Article XI:2, the alternative measure (certification process) also takes part as another solution to implement the policy. Considering Indonesia's argument on the possible problems that may occur by implementing the alternative measure, Indonesia still has another alternative that could be implemented by also being consistent with the GATT policy and following the environmental objective. Concerning various objectives behind the implementation of the applied measure, such as those for the environment, mining and economy, an alternative measure, regardless of its form, is still a solution rather than a nullification.

In this regard, tariff measure could become another solution that is consistent with the main policy regulated in Article XI:1. An environmental tax implementation in the applied measure could be a "win-win solution" for both parties. Several environmental tax categories could be applied based on the type of environmental damage, which are taxes on emission or waste, taxes on product and taxes on natural resources (Safitra, 2004). Technically, environmental taxes can be applied as an option to complement the DPR, which the panel considers as a trade-restrictive measure. Besides the environmental taxes generally falling within the scope of Article XI:1, it also creates permits and access to nickel ore export by applying a tariff. In other words, once access is opened, buyers have options such as buying in raw condition with an additional charge or buying in a processed condition with no tax imposed and having a higher product value.

The environmental tax could also become an instrument for the state's revenue as an "environmental cost" caused by the obstacle to realizing environmental goals from nickel ore export activity. In this regard, market-based instruments such as pollution taxes and tradable permits have a significant advantage over command and control regulations (Safitra, 2004). Regarding Indonesia's argument regarding refining facilities, the environmental cost can also be used to optimize the technology development. The faster the technology, including the nickel processing facilities for the downstream strategy, is prepared, the faster it will also create positive impacts. The economic value of nickel will be reached in a shorter period, the EV industry development in the downstream strategy will create the maximum economic benefit, and the environmental protection goals can be realized faster and more impactful.

6. Conclusion

After going through the consultation process and the panel stage, the panel in "Indonesia – Measure Relating to Raw Materials" has interpreted the applied measure from Indonesia's policy as a quantitative restriction based on Article XI:1 GATT. The export ban and the domestic processing requirement that Indonesia is applying through the latest regulation on MEMR 11/2019 are also ineligible for the exclusion under Article XI:2(a).

In the dispute settlement process, the proofing procedure becomes crucial for both Indonesia and the EU. In this case, the EU, which stands as the complainant, provides complete data and demonstration to challenge the applied measure. Indonesia, as the

regulator, otherwise provides a demonstration that needs to be more to defend its position in applying its nickel ore export restriction policy.

Indonesia's burden of proof is emphasized in Article XI:2(a) demonstration to be eligible for being excluded from Article XI:1. In this regard, Indonesia needs to prove that the applied measures are temporarily applied for the essential product to relieve or prevent a critical shortage. However, Indonesia otherwise shows weakness in the demonstration, whether in the argument, data or the involved regulation.

Indonesia's arguments, which focused on an economic approach, had a slight chance of being eligible for an exclusion. Besides the unclear argument, the economic considerations also did not provide certainty whether the mechanism or the performance and realization indicator. The economic approach has a big room for conflict of interest, which reduces its probability of being excluded from the quantitative restriction prohibition in international trade activity.

In defending its position, Indonesia could refer to the initial plan of the downstream strategy application on nickel management efficiency. This could be found in several environmental provisions, some involving global consent for environmental protection. Indonesia's NDC, which is the follow-up to the Paris Agreement, has several elements and aspects that could be provided in Indonesia's demonstration for Article XI:2. The natural resource management efficiency and energy transition optimization through EV could become a guideline for environmental protection aspect, including its timeline and criteria in realizing Indonesia's downstream strategy.

As the complainant, the EU provides an alternative measure that could be a solution to the dispute. Adding a certification process for nickel ore export activity became the solution provided by the EU, which Indonesia immediately denied for feasibility and relevance reasons. Even if the alternative measure is feasible, this still generally involves merely an economic aspect. In this regard, the effective alternative measure requires a broader approach by involving other aspects, such as the environment, considering it is not only for the economic aspect but also for environmental purposes.

Notes

1. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R.
2. Adoption of the Paris Agreement (UN Climate Change Conference COP 21).
3. Enhanced Nationally Determined Contribution. Indonesia's implementation strategy on the ratification of the Paris Agreement on Law No. 16/2016.
4. Article XI:1 of the General Agreement on Tariff and Trade, concerning Quantitative Restriction Prohibition.
5. Consultation request WT/DS592/1 G/L/1345 G/SCM/D127/1.
6. Regulated in the Ministry of Energy and Mineral Resources Regulation No. 11/2019.
7. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.37, para 7.40.
8. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.38.
9. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.2.1.2.

10. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.57.
11. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.50.
12. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.85.
13. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.22.
14. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.95, 7.96.
15. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.101.
16. WTO Appellate Body Report, China – Measures Related to The Exportation of Various Raw Materials, WT/DS394/AB/R, WT/DS395/AB/R, WT/DS398/AB/R, 30 January 2012.
17. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.104, 7.115.
18. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.145.
19. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.135.
20. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.140.
21. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.144.
22. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.21.
23. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, Table 2, Table 3, Figure 5.
24. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.63.
25. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.104, 7.115.
26. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.112.
27. Indonesia Long-Term Strategy for Low Carbon and Climate Resilience 2050.
28. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.112.
29. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.87.
30. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.88.
31. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.126.

32. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.129. Table 4.
33. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.309.
34. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.201.
35. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.201.
36. WTO, Indonesia – Measures Relating to Raw Materials: Report of the Panel (30 November 2022) WT/DS592/R, para 7.312.

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