

INDONESIA'S MARITIME LOGISTICS POLICY: EXPANDING REGIONAL MARKETS AND ADDRESSING NON-TARIFF CONSTRAINTS IN SOUTHEAST ASIA (2020–2024)

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ABSTRACT

This study examines Indonesia's maritime logistics policy during 2020–2024 and its role in facilitating market expansion and reducing non-tariff barriers (NTBs) within the Association of Southeast Asian Nations (ASEAN). As the world's largest archipelagic state, Indonesia relies heavily on maritime transport, yet high logistics costs, estimated at 20–24 percent of total production costs, and persistent NTBs continue to constrain export competitiveness. Using descriptive and comparative methods, this research evaluates Indonesia's strategy through institutional reforms, infrastructure modernization, and regional cooperation mechanisms, while benchmarking performance against Singapore, Malaysia, and Thailand using indicators such as port efficiency, digital integration, and the Logistics Performance Index (LPI). The findings indicate measurable progress through customs digitalization under the National Single Window (NSW), implementation of the National Logistics Ecosystem (NLE), and participation in regional frameworks, including the ASEAN Single Window (ASW) and the ASEAN Customs Transit System (ACTS). These initiatives have reduced dwelling time, improved supply-chain predictability, and supported trade growth, with Indonesia's total trade value increasing from USD 304.76 billion in 2020 to USD 529.35 billion in 2022. Nevertheless, significant challenges remain, including regulatory fragmentation, uneven port development, limited digital interoperability, and inconsistent institutional capacity across regions. The study concludes that maritime logistics reforms have strengthened Indonesia's integration into ASEAN trade networks; however, sustained competitiveness will require deeper regulatory harmonization, systematic performance measurement, infrastructure equalization, and long-term bureaucratic modernization to effectively mitigate NTBs and secure durable market expansion.

Keywords: Maritime Logistics; Non-tariff Barriers; Market Expansion; ASEAN Integration; Trade Connectivity.

1. Introduction

As the world's largest archipelagic state, Indonesia exhibits an exceptionally high degree of dependence on maritime logistics as the principal backbone of both domestic and international goods distribution. More than 80 percent of global trade is transported

via sea lanes, underscoring the strategic importance of maritime transport in sustaining the global economy (UNCTAD, 2023). Maritime logistics constitutes a critical subsystem within the national logistics network, regulating the movement of goods and information through the

utilization of sea transportation as its core component (Wardiningsih & Mokodompit, 2025). With more than 17,000 islands and a coastline extending approximately 108,000 kilometers, Indonesia possesses a geographic endowment that, in theory, should enable it to assume a central role as a regional maritime fulcrum (Ramadhani et al., 2024). Yet, this geographic advantage has not been fully transformed into structural competitiveness, largely due to the limited effectiveness of Indonesia's national maritime logistics strategy in responding to regional trade challenges.

In the regional context, Southeast Asia has emerged as one of the fastest-growing economic regions in the world. The region recorded a collective Gross Domestic Product (GDP) of USD 3.6 trillion in 2022, reflecting significant dynamism in regional economic activity. Economic integration through the Association of Southeast Asian Nations (ASEAN), including the ASEAN Free Trade Area (AFTA) and the ASEAN Economic Community (AEC), has fostered an increasingly open and competitive market environment. Intra-ASEAN trade reached USD 769.9 billion, indicating the high intensity of cross-border goods flows among member states (ASEAN STATS, 2024). However, market liberalization has not automatically eliminated trade barriers. Rather, the core challenges of ASEAN economic integration have shifted from tariff reduction to institutional and cross-border logistical constraints.

Non-tariff barriers (NTBs) in Southeast Asia are complex and multidimensional, encompassing divergent technical standards, non-harmonized customs regulations, Sanitary and Phytosanitary (SPS) measures, and lengthy, costly administrative procedures. These barriers operate in a dual direction: first, as obstacles faced by Indonesian exports entering other Southeast Asian markets; and second, as domestic regulatory constraints within Indonesia that complicate the inflow and outflow of goods. Indonesia is recorded as one of the ASEAN member states with the highest incidence of non-tariff measures,

directly undermining trade efficiency and export competitiveness. This condition demonstrates that non-tariff barriers cannot be disentangled from the quality of the logistics system and the broader national strategy that underpins it.

At the regional level, ASEAN has developed several institutional frameworks aimed at mitigating non-tariff barriers and facilitating intra-regional trade flows. The ASEAN Single Window (ASW) was designed as an electronic customs data exchange platform among member states to accelerate clearance processes and enhance trade transparency (Akbar et al., 2025). In addition, the ASEAN Customs Transit System (ACTS) enables the cross-border movement of goods within ASEAN using a single customs transit document, thereby reducing transportation time and transaction costs (Yuninata et al., 2023). In the maritime domain, the ASEAN Single Shipping Market (ASSM) seeks to establish a more integrated shipping market through regulatory harmonization and improved port connectivity. Nevertheless, the effectiveness of these institutional arrangements depends heavily on the readiness of national infrastructure, the level of digitalization, and the coherence of each member state's logistics strategy, including Indonesia.

The limited effectiveness of Indonesia's maritime logistics strategy is reflected in the continued burden of logistics expenses on domestic production and distribution activities, which remain considerably higher than regional benchmarks (Syifa & Tohir, 2025). Furthermore, Indonesia's ranking of 61st in the 2023 World Bank Logistic Performance Index (LPI) indicates structural deficiencies in port efficiency, customs procedures, and the utilization of digital technologies (World Bank, 2023). Existing maritime logistics strategies have yet to optimally support the implementation of ASEAN frameworks such as ASW and ACTS. Consequently, maritime logistics strategy constitutes a critical entry point for understanding why Indonesia continues to lag behind in regional trade integration

despite its substantial geographic and economic potential.

This study can be understood through three interrelated analytical dimensions. First, there is a clear economic urgency stemming from Indonesia's persistently high national logistics costs, which account for approximately 20–24 percent of total production costs. Such a cost structure significantly burdens domestic producers and constrains trade competitiveness. Enhancing the efficiency of maritime logistics, therefore, holds substantial potential to reduce trade-related costs, strengthen supply chain integration, and improve the overall competitiveness of Indonesian goods in regional markets.

Second, there is a pressing dimension of regional competition. Within Southeast Asia, countries such as Singapore and Malaysia possess more advanced infrastructure and more coherent regulatory frameworks, positioning them more favorably in the context of ASEAN economic integration. Their relative readiness in port efficiency, digitalization, and trade facilitation mechanisms provides them with a structural advantage. Without an adaptive and forward-looking maritime logistics strategy, Indonesia risks further marginalization within the increasingly competitive regional trade architecture.

Third, there is an urgency related to policy harmonization, particularly in light of the predominance of non-tariff barriers that continue to impede the flow of goods and undermine national export competitiveness. The persistence of regulatory fragmentation, both domestically and across ASEAN member states, highlights the need for greater alignment between Indonesia's internal regulatory framework and regional trade facilitation mechanisms.

Taken together, these dynamics underscore the strategic significance of this research for strengthening Indonesia's position within the Southeast Asian trade architecture. The study aspires to contribute to the formulation of more comprehensive and coherent policy recommendations,

particularly in the domains of maritime logistics development and the management of non-tariff barriers. Ultimately, this research seeks to deepen scholarly and policy-oriented understanding of maritime logistics strategy as a critical instrument for navigating regional challenges and optimizing the opportunities presented by ASEAN economic integration.

2. Literature Review

2.1 The Dynamics of Economic Integration in ASEAN

ASEAN economic integration constitutes an evolving and dynamic process, with the ASEAN Free Trade Area (AFTA) serving as one of its principal pillars. According to Abidin (2019), in his article "Integrasi Ekonomi Regional dalam ASEAN Free Trade Area," the establishment of AFTA represented a collective strategic response by member states to enhance their competitiveness in the face of expanding global free trade regimes. While AFTA was normatively framed as a mechanism to improve member states' welfare through trade liberalization, its implementation has generated a range of complex challenges. For developing economies such as Indonesia, liberalization not only provides expanded market access but also intensifies structural pressures, including heightened labor competition and increased dependence on imported goods conditions that may strain domestic industries and reduce policy autonomy.

The dynamics of ASEAN integration extend beyond trade in goods to encompass the movement of factors of production, capital flows, and investment regimes, all of which ultimately influence national economic growth trajectories. Rotinsulu et al. (2020), in their study "Analysis of Indonesia Exports to ASEAN Countries and Their Effect on Economic Growth in the MEA Era," offer further empirical insight by examining the contribution of Indonesia's exports to ASEAN markets. Their findings suggest that although exports to ASEAN function as a driver of Indonesia's economic growth,

export performance within the region has not been consistently stable. Periodic fluctuations and trade deficits indicate that the gains from regional integration are neither automatic nor linear. Instead, they are contingent upon each member state's adaptive capacity, structural competitiveness, and institutional readiness in responding to regional market competition.

Taken together, these strands of literature establish a critical analytical foundation. The institutional consolidation of AFTA and the ASEAN Economic Community (AEC) has generated structural opportunities for market expansion. However, it has simultaneously intensified competitive pressures and shifted the locus of trade barriers from tariffs to non-tariff measures. The issues of import dependence and trade deficits highlighted in prior studies signal potential weaknesses in Indonesia's logistical efficiency and product competitiveness. In this context, maritime logistics strategy emerges as a decisive variable. It is not merely a technical mechanism for facilitating the physical distribution of goods or reducing transportation costs. Rather, it functions as a strategic instrument for addressing non-tariff barriers, enhancing supply chain reliability, and strengthening Indonesia's export competitiveness. Effective maritime logistics can thus enable Indonesia to move beyond passive participation in ASEAN market expansion and instead actively capitalize on the opportunities presented by Southeast Asia's evolving economic architecture.

2.2 The Impact of Non-Tariff Barriers in ASEAN

From a spatial-economic perspective, Jovanovic in *Evolutionary Spatial Economics* (2020) conceptualizes non-tariff barriers as multidimensional constraints that reshape the geographic structure of economic activity. According to his argument, NTBs do not merely obstruct the movement of goods; they also distort investment patterns, supply chain configurations, and the spatial concentration of logistics hubs. By increasing "economic distance" beyond actual

geographic distance, NTBs incentivize the concentration of trade and logistics activities in jurisdictions with more favorable regulatory environments, while marginalizing others. Such dynamics can exacerbate regional disparities and undermine balanced economic development. For Indonesia, understanding these spatial implications is crucial for designing a maritime logistics strategy that not only mitigates barriers but also strategically positions national ports as competitive regional hubs within Southeast Asia.

At the institutional level, Garuda Wiko and Fatma Mutia Kinanti, in their article "*Elimination of Non-tariff Barriers of Trade in Goods in the ASEAN Region: Will It Ever Work?*" (2021), contend that efforts to eliminate NTBs in ASEAN face significant obstacles due to divergent national interests and varying levels of institutional capacity among member states. Despite the existence of ASEAN frameworks aimed at trade facilitation, implementation at the national level often remains weak and inconsistent. This institutional gap produces persistent regulatory uncertainty and sustains relatively high cross-border logistics costs within the region. Their findings suggest that without robust political commitment and meaningful regulatory harmonization, non-tariff barriers will continue to function as structural impediments to integration.

Consequently, Indonesia's maritime logistics strategy must adopt a proactive and diplomatically oriented approach. Beyond improving internal efficiency—such as port performance, customs digitalization, and supply chain coordination—it must also actively engage in regional forums under the Association of Southeast Asian Nations (ASEAN) to promote regulatory simplification and mutual recognition agreements on technical standards. In this sense, maritime logistics policy operates not only as an economic instrument but also as a form of strategic economic diplomacy aimed at reducing non-tariff barriers and strengthening Indonesia's competitive

position within the evolving regional trade architecture.

2.3 Strengthening Inter-Regional Infrastructure Reconfiguration

The reconfiguration of inter-regional infrastructure, particularly in the context of maritime connectivity and regional integration, constitutes a fundamental prerequisite for enhancing the resilience and efficiency of Indonesia's national logistics system. Rumaji and Adiliya (2019), in their study *"Port Maritime Connectivity in South-East Indonesia: A New Strategic Positioning for Transshipment of Tenau Kupang,"* argue that maritime infrastructure reconfiguration represents a strategic effort to transform a geographically peripheral area into an integrated node within global logistics networks. Their research highlights the potential of Pelabuhan Tenau Kupang as a transshipment hub for Central and Eastern Indonesia, contingent upon strengthened connectivity and supporting infrastructure.

Investment in modern port facilities and efficient logistics networks is considered essential to attract international shipping routes and reduce dependence on foreign hubs. In this regard, infrastructure reconfiguration extends beyond mere physical development; it entails the strategic repositioning of a territory within international logistics maps. The proposed development of Kupang as a transshipment hub is envisioned not only to shorten economic distances but also to deepen market integration across Indonesia's eastern regions. If successfully implemented, it may serve as a replicable model for similar initiatives in other strategically located regions.

Complementing this perspective, Amin et al. (2021), in *"Impact of Maritime Logistics on Archipelagic Economic Development in Eastern Indonesia,"* contend that strengthening integrated maritime logistics infrastructure across regions is a foundational condition for promoting economic growth and equitable development in archipelagic states. Their findings underscore that persistent development

disparities between Western and Eastern Indonesia are largely attributable to weak connectivity and underdeveloped inter-island logistics infrastructure.

They propose that infrastructure reconfiguration should prioritize the establishment of an efficient hub-and-spoke network model, in which major ports function as consolidation centers linked to smaller surrounding ports. Such a configuration would facilitate smoother goods distribution, reduce logistics costs, and ultimately enhance the competitiveness of local products in regional markets. By addressing both geographic fragmentation and operational inefficiencies, this strategy directly supports market expansion and mitigates structural barriers that have historically constrained Indonesia's economic integration within Southeast Asia.

Taken together, these studies underscore that inter-regional infrastructure reconfiguration is not solely a domestic development agenda but also a strategic instrument for strengthening Indonesia's position within regional trade networks. In the broader context of ASEAN economic integration, maritime infrastructure upgrading and spatial restructuring form an essential pillar in overcoming logistical constraints and reinforcing Indonesia's competitiveness amid intensifying regional competition.

2.4 Maritime Logistics Policy Recommendations within Sea Transportation Networks

Policy recommendations concerning maritime logistics within sea transportation networks have increasingly emphasized the importance of digital transformation, infrastructure integration, and governance reform as key drivers of logistics efficiency. Brunila et al. (2021), in *"Hindrances in Port Digitalization? Identifying Problems in Adoption and Implementation,"* argue that maritime logistics policy should prioritize digital interoperability among ports and logistics stakeholders. Their study finds that fragmented information systems, limited

data-sharing mechanisms, and inadequate technological readiness significantly reduce the effectiveness of port operations. Consequently, policymakers should promote standardized digital platforms, strengthen information exchange protocols, and invest in technological capacity building across port communities. Such measures are considered essential for improving supply chain visibility, enhancing operational efficiency, and facilitating seamless maritime logistics networks.

At the regional level, Zamroni Salim et al. (2017), in *“ASEAN BRIEFS: Maritime Logistics Sector in ASEAN: Exploring Opportunities and Addressing Key Challenges,”* highlight the need for regionally coordinated policy measures to address non-tariff barriers across Southeast Asia. They argue that regulatory harmonization and the standardization of customs procedures among ASEAN member states are critical steps toward facilitating smoother trade flows. Persistent challenges—such as variations in port clearance procedures, documentation requirements, and vessel technical standards—can be mitigated through strengthened implementation of mechanisms such as the ASEAN Single Window (ASW), particularly within the maritime logistics domain. Their recommendations also underscore the importance of enhanced cooperation in digital infrastructure development, including electronic data exchange systems to improve transparency and accelerate cargo processing. Coordinated regional policies, therefore, are seen as instrumental in fostering a more competitive and integrated trade environment, enabling Indonesia to more effectively pursue market expansion within Southeast Asia.

Meanwhile, Agung Kwartama et al. (2025), in *“Implikasi Pembatasan Global pada Jaringan Transportasi Laut dan Logistik dalam Perdagangan Internasional di Indonesia,”* propose policy recommendations centered on resilience and digital transformation. Their study reveals the vulnerability of Indonesia’s sea

transportation network to global shocks, including pandemics and geopolitical conflicts that disrupt supply chains. To address these vulnerabilities, they advocate for the diversification of shipping routes, investment in smart port technologies to automate port operations, and the strengthening of national logistics reserve capacities. Additionally, they recommend establishing an integrated maritime logistics data center to monitor and optimize goods movement in real time. Such measures, they argue, would enhance Indonesia’s competitiveness by mitigating non-tariff barriers arising from global uncertainty while simultaneously preparing national infrastructure for deeper integration into Southeast Asian markets.

Collectively, these three strands of scholarship converge on the importance of coordinated, innovative, and efficiency-oriented policy design in strengthening maritime logistics competitiveness. Their recommendations extend beyond domestic sea transportation network reform, providing a strategic foundation for addressing non-tariff barriers and expanding Indonesia’s market presence in Southeast Asia through an integrated and sustainable logistics approach.

3. Research Method

This study employs a descriptive and comparative research design to analyze Indonesia’s maritime logistics strategy in addressing non-tariff barriers and supporting market expansion within Southeast Asia during the 2020–2024 period. The descriptive method is utilized to systematically examine the formulation and implementation of Indonesia’s maritime logistics policies, including regulatory reforms, infrastructure development, digitalization initiatives, and participation in regional cooperation mechanisms. Through this approach, the study identifies the institutional, infrastructural, and policy-related factors that influence the effectiveness of Indonesia’s logistics system and evaluates the extent to which national

strategies align with ASEAN trade facilitation frameworks.

The comparative method is applied to assess Indonesia's maritime logistics performance relative to Singapore, Malaysia, and Thailand, countries that possess more advanced logistics systems and stronger positions within regional supply chains. The comparison focuses on several indicators, including port efficiency, customs performance, logistics digitalization, trade facilitation mechanisms, and overall logistics competitiveness. Benchmarking against these countries enables the identification of best practices and policy lessons relevant to Indonesia's maritime logistics development.

Primary data were collected through semi-structured interviews conducted between August and November. A total of two interviews were undertaken using purposive sampling, whereby participants were selected based on their expertise, professional experience, and direct involvement in maritime logistics activities. Interview participants included representatives from port authorities, shipping companies, logistics service providers, exporters, customs practitioners, and academic experts specializing in maritime transportation and trade facilitation. For example, key informants included officials from Trade Ministry, and a representative from Tanjung Priok. This sampling approach was chosen to ensure that respondents possessed specialized knowledge relevant to maritime logistics policy and operational implementation. Semi-structured interviews were guided by open-ended questions addressing logistics efficiency, regulatory barriers, digital integration, port performance, and ASEAN trade facilitation initiatives. Interviews were recorded, transcribed, and analyzed systematically.

Secondary data were obtained from government reports, ASEAN publications, World Bank databases, logistics performance reports, and academic literature. To capture developments throughout the 2020–2024 study period, the research does not rely solely

on the 2023 Logistics Performance Index (LPI). Instead, it incorporates additional indicators, including annual trade statistics, port throughput data, dwelling time records, customs performance reports, National Logistics Ecosystem (NLE) implementation reports, and ASEAN trade facilitation indicators. These longitudinal data provide a broader assessment of trends and policy developments across the entire period under investigation.

Data analysis was conducted using both qualitative and comparative analytical techniques. Interview transcripts were analyzed through thematic analysis. Following transcription, responses were coded and categorized into major themes, including logistics efficiency, port infrastructure, customs procedures, digitalization, regulatory coordination, and non-tariff barriers. Patterns emerging across respondents were subsequently interpreted to identify recurring challenges and policy priorities.

For the comparative component, the study employs benchmark analysis by comparing Indonesia's performance against Singapore, Malaysia, and Thailand across selected logistics indicators. Comparative findings are organized according to four analytical dimensions: port efficiency, customs performance, digital integration, and trade facilitation effectiveness. Cross-country comparisons are used to identify policy gaps, evaluate Indonesia's relative position within ASEAN, and determine best practices that may contribute to strengthening Indonesia's maritime logistics strategy. To enhance validity, findings from interviews were triangulated with secondary sources, including government publications, international databases, and academic studies. This triangulation process helps ensure consistency between stakeholder perspectives and empirical evidence while improving the reliability and credibility of the research findings.

4. Results and Discussion

4.1 Indonesia's Maritime Logistics Strategies in South East Asia

Indonesia's maritime logistics strategy in Southeast Asia demonstrates notable progress through the strategic utilization of regional institutions to accelerate integration and reinforce its position within regional supply chains. The implementation of the ASEAN Single Window (ASW) provides a concrete example of how Indonesia leverages a shared institutional framework to expedite export–import documentation and reduce uncertainty in customs procedures. Indonesia's National Single Window (NSW), interconnected with 18 government agencies and covering more than 92 percent of export–import transactions, reflects a significant degree of institutional consolidation. This integration has not only facilitated trade flows but also enhanced transparency and bureaucratic accountability within the national logistics system (Coordinating Ministry for Economic Affairs, 2016).

Nevertheless, the effectiveness of ASW implementation continues to face technical constraints, including uneven digital readiness among domestic agencies and partial data incompatibility with certain partner countries. Despite these limitations, Indonesia's active engagement in the development and expansion of ASW signals a strong commitment to lowering logistics costs and strengthening its credibility as a state capable of aligning with regional standards in contemporary trade governance.

Digitalization constitutes an additional pillar of Indonesia's strategy to reinforce maritime supply chains. The operational readiness of the Indonesia NSW for electronic data exchange indicates a broader bureaucratic transformation toward more modern and transparent logistics governance. The expansion of ASW to include supplementary documents—such as Ocean Booking Confirmation and quarantine documentation—illustrates recognition that efficiency depends not only on regional regulatory harmonization but also on the modernization of national digital

infrastructure (ASEAN Secretariat, 2015). However, persistent challenges, including disparities in data standards, limited technical capacity in certain regions, and platform fragmentation across agencies, continue to affect the pace of Indonesia's digital integration. To achieve more competitive logistics connectivity within ASEAN, Indonesia must strengthen system interoperability while simultaneously enhancing human resource capacity in the logistics sector.

Beyond regional mechanisms, the implementation of the National Logistics Ecosystem (NLE) since 2020 marks a significant domestic reform in Indonesia's maritime logistics governance. The introduction of a Single Submission system across 46 ports has streamlined business processes, while the development of collaborative logistics platforms and the expansion of a Single Billing scheme have unified multiple port service payments under an integrated framework. By 2023, NLE implementation had reached 97 percent coverage, supported by the consolidation of maritime Single Submission systems across major ports and improvements in port spatial planning, including container terminal zoning and railway synchronization at Tanjung Priok (Karina et al., 2024). The Prospera 2023 study further indicates that NLE implementation accelerated logistics processes and significantly reduced costs across 14 national ports, underscoring its contribution to improving maritime logistics efficiency.

More broadly, Indonesia's maritime logistics strategy in Southeast Asia reflects a simultaneous effort to enhance connectivity, expand markets, and mitigate trade barriers through the effective utilization of regional frameworks. Active participation in mechanisms such as the ASEAN Single Window (ASW), the ASEAN Customs Transit System (ACTS), the National Logistics Ecosystem (NLE), and the ASEAN Single Shipping Market (ASSM) demonstrates that institutional integration at the ASEAN level can reduce trade

uncertainty and improve cross-border distribution efficiency.

However, the optimization of this strategy requires sustained internal reform, continued infrastructure modernization, and strengthened domestic institutional capacity. Only through the alignment of national policies with regional mechanisms can Indonesia fully capitalize on market integration opportunities while systematically addressing non-tariff barriers. By reinforcing this synergy, Indonesia holds the potential to enhance its economic integration, elevate its maritime logistics competitiveness, and consolidate its position as a strategic distribution hub in Southeast Asia.

4.1.1 Market Expansion Strategy

The expansion of Indonesia's market presence in Southeast Asia during the 2020–2024 period cannot be separated from the maritime logistics strategy implemented throughout these years. Referring to Table 4.1, data from Badan Pusat Statistik (BPS) indicate that Indonesia's trade surplus increased significantly from USD 21.62 billion in 2020 to USD 54.45 billion in 2022. This upward trend reflects, in part, the growing role of maritime connectivity in facilitating export distribution to ASEAN member states.

Export performance, which reached USD 291.9 billion in 2022, was not solely driven by favourable global demand conditions but was also supported by accelerated goods movement through integrated maritime logistics systems. The utilization of mechanisms such as the ASEAN Single Window (ASW) at major ports contributed to streamlining customs documentation and reducing clearance time (Ministry of Home Affairs, 2025). Given that sea transportation accounts for more than 90 percent of Indonesia's trade volume, the effectiveness of maritime logistics has become a decisive factor in ensuring the accessibility of Indonesian products to regional markets.

These developments suggest that the success of Indonesia's market expansion should not be understood merely as a function of trade dynamics or commodity cycles. Rather, it represents a direct reflection of improvements in maritime distribution efficiency, including enhanced timeliness of shipments, reduced logistics costs, and strengthened supply chain reliability. In this sense, maritime logistics strategy has functioned not only as a technical instrument of trade facilitation but also as a structural enabler of Indonesia's deeper economic integration within Southeast Asia.

Table 4.1 Indonesia's Trade Balance Data for the 2020–2024 Period (in million US dollars)

YEAR	EXPORT	IMPORT	TRADE BALANCE
2020	163.191,8	141.568,8	+21.623,0
2021	231.609,5	196.190,0	+35.419,5
2022	291.904,3	237.447,1	+54.457,2
2023	258.774,4	221.886,2	+36.888,2
2024	264.703,4	233.658,7	+31.044,7

Source: Processed from the Data Center and Information System of the Ministry of Trade

The relationship between market expansion and maritime logistics strategy becomes increasingly evident as port infrastructure develops and modernizes, directly enhancing Indonesia's export capacity to ASEAN markets. Empirical findings indicating a positive regression coefficient between exports to ASEAN and Indonesia's economic growth suggest that increases in export performance contribute directly to GDP expansion. Strategic infrastructure projects, such as Pelabuhan Kuala Tanjung and Pelabuhan Patimban, alongside the expansion of airports and road networks, have not only strengthened cargo handling capacity but also accelerated connectivity between domestic production centers and regional trade hubs.

Improved port efficiency has reduced vessel dwelling time and shipping costs, thereby enhancing the competitiveness of

Indonesian exports in ASEAN markets that are highly sensitive to delivery speed and reliability. Total trade value increased significantly from USD 304.76 billion in 2020 to a peak of USD 529.35 billion in 2022, reflecting substantial growth in Indonesia's trade volume during this period. This upward trajectory underscores that expanded maritime capacity functioned as a structural component ensuring that Indonesian products could meet rising regional demand, while simultaneously preserving export resilience amid global economic volatility.

Indonesia's market expansion strategy has also relied on the integration of maritime logistics through regional mechanisms such as the ASEAN Single Window (ASW) and the ASEAN Customs Transit System (ACTS), both of which aim to reduce administrative bottlenecks that historically impeded trade flows. Through ASW, electronic document exchange accelerates export clearance procedures and minimizes the risk of vessel delays at destination ports. Meanwhile, ACTS facilitates more efficient cross-border land-sea logistics routes, particularly for manufactured and industrial goods requiring high mobility across ASEAN member states. This integration has strengthened regional supply chain connectivity and enhanced delivery-time predictability—an increasingly critical factor in price-competitive markets. In this regard, maritime logistics strategy operates not merely as a mechanism of distribution efficiency but as a strategic instrument for market expansion, enabling Indonesia to more fully capitalize on intra-ASEAN trade potential.

Within the broader framework of ASEAN integration, Indonesia's market expansion has further been shaped by investment policy reforms and sustained governmental support for strategic sectors. The enactment of the Omnibus Law on Job Creation and trade liberalization commitments under the ASEAN Trade in Goods Agreement (ATIGA) have contributed to a more conducive business environment for both domestic and foreign investors, particularly in the logistics and

maritime sectors. Incentives for priority industries, export product diversification, and regional trade promotion initiatives—such as Indonesia's participation in ASEAN trade exhibitions—have expanded opportunities for firms to deepen market penetration.

Nevertheless, the effectiveness of these policy measures remains contingent upon the capacity of Indonesia's maritime logistics system to provide fast, reliable, and regionally compliant distribution services. Sustainable export growth therefore depends on the synergy between trade reform and maritime logistics capacity enhancement. Together, these elements illustrate that long-term market expansion within ASEAN requires coordinated structural transformation encompassing regulatory reform, infrastructure modernization, and logistics system integration.

4.1.2 Strategy to Reduce Non-Tariff Barriers

Based on an analysis of recent studies (2020–2024), non-tariff barriers (NTBs) remain a substantial challenge in Southeast Asia despite the implementation of free trade arrangements under the ASEAN Free Trade Area (AFTA). Among the most prevalent NTBs affecting ASEAN member states, including Indonesia, are Sanitary and Phytosanitary (SPS) measures and Technical Barriers to Trade (TBT). SPS regulations are commonly imposed on agricultural, fisheries, and food products, with stringent requirements concerning food safety, halal certification, maximum pesticide residue levels, labeling, and packaging standards. For instance, as one of the world's major fisheries producers, Indonesia has faced repeated export rejections of tuna shipments to the European Union due to non-compliance with food safety standards and residue regulations. Between 2007 and 2017, at least 15 cases of Indonesian tuna rejection were recorded in the EU market, resulting in estimated losses of IDR 1.54 billion (Astagia et al., 2022). This case illustrates how compliance gaps in SPS standards can directly undermine export competitiveness and disrupt market access.

Beyond SPS and TBT measures, complex customs and administrative procedures continue to impede trade flows. Although ASEAN has introduced the National Single Window (NSW) system to streamline customs processes and enhance transparency, exporters from Indonesia still encounter prolonged inspections at destination ports. For example, Indonesian food products have experienced extended clearance procedures in Thailand, while pharmaceutical products have faced similar challenges in Singapore. Such delays extend transit time and increase logistics costs, indicating that regulatory harmonization among ASEAN member states remains incomplete. The persistence of procedural divergence undermines the objective of seamless intra-regional trade and perpetuates inefficiencies within supply chains.

Non-tariff barriers also manifest in the form of import quotas and licensing requirements that restrict the volume of certain products entering domestic markets. For example, Thailand has imposed restrictions on steel imports from Indonesia on the grounds of import surges exceeding established thresholds (Aprillia & Kusuma, 2020). Policies of this nature are frequently criticized as disguised protectionism, as they appear inconsistent with the normative commitments to regional economic integration.

Collectively, these findings underscore that reducing non-tariff barriers requires more than formal tariff liberalization. It demands deeper regulatory harmonization, mutual recognition of standards, improved institutional coordination, and strengthened compliance capacity at the national level. For Indonesia, addressing NTBs must therefore be integrated into its broader maritime logistics and trade strategy to ensure that export expansion within ASEAN is not undermined by persistent regulatory and administrative constraints.

Tabel 4.2 Implementation of Indonesia's Non-Tariff Barrier Reduction Policies (2014–2024)

Policy Area	Policy Instrument	Implementation Period
Standard Harmonization	AHS and SNI	2015-2024
Custom Digitalization	National Single Window (NSW)	2017-2024
Regional Cooperation	Bilateral Customs Agreement; ASEAN Anti-Dumping Mechanism	2018-2024
MSMEs Support	Government-Supported Microcredit Scheme (KUR) & Export Training Program	2016-2024
Targeted Sectoral Intervention	Palm Oil Diplomacy; Enhancement of Fisheries SPS Standards	2019-2024

Source: Compiled and processed from various journal articles and online sources

The strategy to reduce non-tariff barriers will be highly effective if it is integrated with improvements in maritime logistics quality. Strengthening cooperation through the ASEAN Single Window (ASW) has proven capable of reducing dwelling time at Tanjung Priok from 3–4 days to 2.54 days as of October 2024, with operations now running 24 hours a day. This demonstrates that digitalization can significantly lower transaction costs (KEMENHUBRI, 2019).

The implementation of the ASEAN Customs Transit System (ACTS) also has the potential to cut several non-tariff barriers, particularly those related to transit procedures. However, its utilization remains limited due to misalignment with port readiness and national monitoring systems.

On the other hand, policies such as Peraturan Presiden Nomor 26 Tahun 2012 concerning the Blueprint of the National Logistics System serve as an important foundation for logistics policy integration. Nevertheless, its effectiveness has been constrained by overlapping authority between central and regional governments (Ricardianto et al., 2019). Thus, Indonesia's strategy for reducing non-tariff barriers requires stronger synchronization between domestic reforms and the utilization of regional mechanisms to ensure that administrative, technical, and regulatory obstacles are reduced consistently.

Indonesia's success in addressing non-tariff barriers ultimately depends on the state's ability to strengthen institutional capacity, enhance product standards, and ensure that digitalization is implemented in an integrated manner. Regional collaboration through Association of Southeast Asian Nations platforms remains a crucial instrument for accelerating regulatory harmonization and expanding market access. However, long-term success requires consistent commitment to bureaucratic modernization and infrastructure improvement. If internal consolidation is effectively executed, Indonesia has strong potential to systematically reduce non-tariff barriers while simultaneously enhancing its maritime logistics competitiveness in Southeast Asia.

4.2 Comparison of Intratrade Logistics Among ASEAN Member States

4.2.1 Indonesia vs Singapura

The maritime logistics performance of Indonesia and Singapore demonstrates a striking disparity, reflecting fundamental differences in governance models, infrastructure development, and system

integration. Singapore consistently ranks among the top countries globally in the Logistics Performance Index (LPI), whereas Indonesia continues to work toward improving its standing. This divergence is not limited to physical infrastructure alone. It also encompasses operational efficiency, supply chain reliability, and the regulatory frameworks established by each country. In essence, the contrast highlights broader structural differences in how both nations manage and optimize their maritime logistics sectors.

To illustrate these differences, a comparison of several key indicators can be summarized in the following table:

Table 4.3 Comparison of Maritime Logistics Performance between Indonesia and Singapore

Performance Indicator	Singapore	Indonesia	Remarks
Logistics Performance Index (LPI) 2023 Ranking	Rank 1 globally	Rank 61 globally	Supply Chain Capability and Responsiveness
Ship Dwell Time	1–2 days	4–5 days	Efficiency affects cost-to-serve
Port Infrastructure	Smart port, automated, deep-water	Fragmented & uneven capacity	First-mover advantage
Digitalization	Integrated Port Community System (NSW < blockchain, automated yard)	Implementation of INSW and Inaportnet not yet evenly distributed	Different levels of digital maturity

Source: (Adapted from Nasution, 2025)

Singapore's dominance in maritime logistics performance stems from massive and sustained strategic investments in high-technology infrastructure and the seamless implementation of fully integrated digital systems. Ports in Singapore, such as PSA Singapore terminals and Jurong Port, are equipped with automated cranes, advanced yard management systems, and digital platforms that integrate all stakeholders, from shipping lines and logistics providers to customs authorities.

This integration is enabled by the implementation of the National Single Window (NSW), which allows for single submission of documents, significantly reducing processing time and bureaucratic complexity. In contrast, although Indonesia has undertaken modernization efforts at major ports such as Pelabuhan Tanjung Priok and Pelabuhan Tanjung Perak, it continues to face challenges related to infrastructure fragmentation between hub and feeder ports, as well as suboptimal implementation of digital systems such as Inaportnet and the Indonesia National Single Window (INSW) across all operational levels. Consequently, Indonesia's logistics processes often still involve physical documentation and repetitive coordination procedures, which directly contribute to prolonged dwell times.

Beyond infrastructure and technology, operational efficiency and connectivity represent another major differentiating factor. Singapore has strategically positioned itself as a global maritime hub, linking hundreds of ports worldwide with extremely high shipping frequency. This density generates economies of scale, lowers per-unit logistics costs, and ensures schedule reliability. The container productivity rate (crane moves per hour) at Singapore's ports ranks among the highest globally, directly reducing vessel turnaround time.

Meanwhile, Indonesia's logistics performance remains constrained by operational inefficiencies, including longer loading and unloading times, poorly managed truck queues at port gates, and limited seamless inter-island connectivity. Dependence on numerous small-capacity ports also creates bottlenecks within the domestic supply chain. Ultimately, these structural constraints contribute to higher overall logistics costs and affect Indonesia's national competitiveness in the maritime sector.

4.2.2 Indonesia vs Malaysia

The maritime logistics performance of Indonesia and Malaysia presents a more balanced pattern compared to the gap

observed with Singapore, although Malaysia still outperforms Indonesia on several key indicators. Both countries are major maritime powers in Southeast Asia, characterized by archipelagic and peninsular geographies. However, their governance approaches and management outcomes differ significantly.

Malaysia, through a strategy focused on developing regional hub ports such as Port Klang and Port of Tanjung Pelepas, has succeeded in achieving a stronger position in global logistics rankings. These ports function as major transshipment centres and benefit from concentrated investment, operational efficiency, and integrated logistics ecosystems. Meanwhile, Indonesia, despite having a far greater number of ports and a much larger territorial expanse, continues to face challenges in aligning infrastructure expansion with overall operational efficiency. The fragmentation of port development, disparities in regional capacity, and coordination constraints have limited the optimization of its maritime logistics network.

An illustrative comparison can be seen in the following table:

Table 4.4 Comparison of Maritime Logistics Performance between Indonesia and Malaysia

Performance Indicator	Malaysia	Indonesia	Remarks
Logistics Performance Index (LPI) 2023 Ranking	Rank 31 globally	Rank 61 globally	Logistics Competitiveness
Ship Dwell Time	2–3 days	4–5 days	Time-based Competition
Port Infrastructure	Port Klang & Tanjung Pelepas Port (PTP) as global transshipment centers	Tanjung Priok & Tanjung Perak focus on domestic (and regional)	Differences in port strategic orientation
Digitalization	Paperless system, integrated customs	Fragmented, not yet fully digital	Trade Facilitation Index

Source: Adapted from Ade P. Nasution, *Academic Journal* (Nasution, 2025)

The primary factor underlying Malaysia's relatively stronger performance lies in its highly competitive, globally oriented port development strategy. Major ports such as Port Klang and Port of Tanjung Pelepas (PTP) function not only as gateways for Malaysia's domestic economy but also aggressively capture international transshipment cargo, even competing directly with Singapore.

Sustained investment in advanced technology, deep-water channels, and sophisticated cargo-handling facilities has positioned Malaysia's main ports as attractive choices for global shipping alliances. In contrast, the development focus of Indonesia's primary ports, such as Pelabuhan Tanjung Priok, remains largely centred on serving domestic trade and national export-import activities. Consequently, Indonesia's appeal as a regional transshipment hub remains limited, resulting in lower direct international shipping frequency and connectivity compared to Malaysia.

From the perspective of productivity and supply chain efficiency, Malaysia also demonstrates stronger performance, reflected in shorter dwell times. This advantage is driven by the adoption of digital systems and relatively more efficient customs procedures, although not yet at the level of Singapore. Malaysian port authorities have implemented paperless systems and integrated data platforms that facilitate pre-clearance processes and accelerate cargo flow.

Meanwhile, Indonesia continues to face more complex bureaucratic challenges and incomplete integration of systems such as the Indonesia National Single Window (INSW) across all operational layers of its ports. Dependence on physical documentation, multiple inspections, informal levies, and suboptimal coordination among port authorities, customs, and logistics operators contribute to longer cargo handling times and higher logistics costs.

Although both Indonesia and Malaysia are striving to enhance their maritime logistics performance, Malaysia has taken a

more strategic approach by positioning its ports as key nodes within global logistics networks. This strategic positioning has strengthened Malaysia's overall competitiveness. To narrow the gap, Indonesia must not only accelerate physical infrastructure development in its major ports but also fundamentally reform governance and bureaucratic structures within the maritime sector, while enhancing digital integration to create a smoother, more predictable, and cost-competitive logistics ecosystem.

4.2.3 Indonesia vs Thailand

The logistics performance of Indonesia and Thailand demonstrates a more comparable pattern than that observed with more advanced economies such as Singapore, although Thailand holds advantages in certain governance aspects and performance indicators. Data from the study by Muangthong and Suthikarnnarunai indicate that in Thailand, maritime transport accounts for more than 95% of total international freight volume and approximately 65% of its total trade value, a pattern broadly similar to Indonesia, given its archipelagic geographical characteristics (Muangthong & Suthikarnnarunai, 2011).

However, a significant distinction lies in Thailand's systematic approach to developing and monitoring its logistics performance, reflected in the establishment of the Sea Freight Transportation Index (SFTI) since 2006. This sustained commitment to performance measurement provides a strong empirical foundation for policy improvement, an area in which Indonesia still has room for institutional strengthening and refinement.

Tabel 4.5 Comparison of Maritime Logistics Performance between Indonesia and Thailand

Performance Indicator	Thailand	Indonesia	Remarks
Logistics Performance Index (LPI) 2023 Ranking	Rank 37 globally	Rank 61 globally	Global Supply Chain Integration
Maritime Performance Measurement	Sea Freight Index since 2006	No national index available	Evidence-Based Maritime Governance
Digitalization	Implementation of IoT, blockchain, and environmental sensors	Modernization in major ports	Smart Logistics Theory
Regional Connectivity	Compact geography ⇒ easier integration	Archipelagic state ⇒ higher coordination costs	Transport Geography Theory

Source: Compiled and processed from various journal articles and online sources

In terms of technology adoption and digital transformation, Thailand demonstrates more mature planning through the development of a comprehensive Smart Port framework. Research by Makkawan and Muangpan identified and validated 19 key indicators grouped into three primary domains: Smart Port Operations, Smart Environment/Energy, and Smart Safety/Security (Makkawan & Muangpan, 2023).

This framework serves not only as an academic guideline but has also been empirically tested at container terminals within the Eastern Economic Corridor (EEC). It incorporates specific strategies such as blockchain platforms, IoT-based cargo tracking, and smart environmental monitoring sensors. While Indonesia has also initiated “smart port” and digitalization programs, its approach remains relatively sectoral and has yet to be consolidated into a holistic and standardized performance measurement framework comparable to Thailand’s model.

Indonesia’s domestic logistics challenges are further compounded by its archipelagic geography. This condition requires not only the strengthening of

international hub ports but also efficient connectivity with numerous feeder and domestic ports dispersed across the archipelago—many of which face capacity constraints and technological limitations. In contrast, Thailand’s more compact geography allows for concentrated development of major maritime hubs such as Laem Chabang Port, which is well integrated with land-based logistics corridors.

These geographical differences directly affect overall logistics cost efficiency and cargo flow speed. Indonesia must allocate significantly greater resources to address inter-island connectivity gaps, which increases structural logistics complexity. Overall, although Indonesia and Thailand operate at relatively comparable stages within the global maritime logistics landscape, Thailand holds advantages in strategic planning, sustained performance measurement, and structured digital transformation frameworks. The existence of the Sea Freight Transportation Index (SFTI) and a measurable Smart Port framework provides Thailand with a clear roadmap to enhance efficiency and competitiveness.

To close the gap, Indonesia must not only accelerate infrastructure development but also emulate Thailand’s approach in building an integrated national logistics performance measurement system and promoting more systematic, end-to-end technology adoption across all logistics nodes, from international hubs to domestic feeder ports. From the broader comparison of Indonesia’s maritime logistics performance with Singapore, Malaysia, and Thailand, the principal finding indicates that Indonesia’s competitiveness gap largely stems from weak institutional integration, infrastructure fragmentation, and uneven digitalization.

The comparator countries achieve higher logistics effectiveness due to consistent port governance, clear hub development strategies, and standardized performance measurement and digital systems. Singapore excels through high-technology infrastructure and full digital integration; Malaysia has successfully

positioned its ports as global transshipment centres; and Thailand benefits from systematic measurement and digital transformation frameworks such as SFTI and its Smart Port model.

Conversely, Indonesia continues to face high dwell times, inefficient inter-agency coordination, and suboptimal inter-port connectivity. These findings underscore that, to enhance intratrade logistics competitiveness and strengthen its position within ASEAN trade networks, Indonesia must pursue more structural solutions—ranging from regulatory harmonization and accelerated port digitalization to the establishment of a national performance measurement system and the strengthening of integrated maritime connectivity.

4.3 The Role of Actors and Institutions in Optimizing Indonesia's Maritime Logistics

The central government, particularly the Ministry of Trade, the Ministry of Transportation, and the Coordinating Ministry for Maritime Affairs and Investment, plays a pivotal role in promoting market expansion and addressing non-tariff barriers faced by Indonesia at the regional level. Informants frequently emphasize that many logistics barriers arise from misalignment with export regulations, quality standards, and cross-border licensing procedures (Bulan, 2025). Therefore, the central government acts as the primary agent responsible for harmonizing standards, negotiating market access, and strengthening regulations that support maritime distribution efficiency. Efforts to reinforce economic diplomacy and align logistics standards represent the strategic use of institutions as stable mechanisms of cooperation (Pattinussa & Tambunan, 2023).

State-owned enterprises (SOEs), such as Pelindo and national shipping companies, are also key actors frequently highlighted when discussing technical and infrastructural challenges in maritime logistics. These entities face obstacles, including high dwelling times, fragmented port capacity,

and insufficient digitalization in cargo in-and-out systems.

To address these challenges, institutional solutions focus on port integration, digitalization through the National Logistics Ecosystem (NLE), and enhanced cargo flow transparency. Informants stress that stronger inter-port institutional coordination is necessary to standardize services and meet export market demands (Bulan, 2025). Theoretically, port integration and digitalization reflect forms of “internationalized governance” that reduce uncertainty through shared rules and cross-border system interoperability.

Business actors and exporters are often the most directly affected by non-tariff barriers such as certification requirements, quality standards, and inspection procedures imposed by destination countries. Informants note that many exporters, particularly MSMEs, lack adequate information regarding foreign market regulations, resulting in difficulties in meeting export standards (Bulan, 2025).

Here, industry associations such as Asosiasi Logistik dan Forwarder Indonesia (ALFI) and Gabungan Perusahaan Ekspor Indonesia (GPEI), as well as commodity-based associations, play an essential role in disseminating information, providing assistance, and promoting quality standardization. Relevant institutional solutions include the establishment of export information centers, simplification of certification SOPs, and collaboration with regional standardization bodies. These associations and regulatory institutions function as supporting institutions that create more symmetrical information flows and facilitate compliance with international rules to reduce trade barriers.

Other key actors include regional and international institutions such as the Association of Southeast Asian Nations (ASEAN), Asia-Pacific Economic Cooperation (APEC), and International Maritime Organization (IMO), which establish technical standards and maritime frameworks. Informants emphasize that non-

tariff barriers often stem from differing operational standards and procedures in export destination countries, making regulatory harmonization essential.

Institutional solutions frequently proposed include strengthening the ASEAN Single Window (ASW), expanding Mutual Recognition Arrangements (MRAs), and enhancing port-to-port cooperation. These regional institutions function within a “rules-based order,” encouraging repeated cooperation among states and economic actors, thereby reducing uncertainty and increasing incentives for compliance.

Finally, academics and research institutions play an important role by providing empirically grounded recommendations on maritime logistics. They serve as epistemic actors, offering data, policy analysis, and evaluations of existing regulatory effectiveness. Research contributions support the government and SOEs in formulating market expansion strategies that are more adaptive to global supply chain dynamics. Institutional solutions emerging from these actors often include the establishment of maritime policy forums, joint research working groups, and the integration of research data into national logistics planning.

From a liberal institutionalist perspective, these epistemic actors constitute part of transnational networks that strengthen governance through information provision and institutional capacity building at the domestic level.

5. Conclusion

Indonesia’s maritime logistics strategy during the 2020–2024 period demonstrates a gradual transformation toward a more integrated, efficient, and regionally connected logistics system. The implementation of the ASEAN Single Window (ASW), the National Single Window (NSW), and the National Logistics Ecosystem (NLE) has accelerated customs processes, improved transparency, and strengthened coordination among government agencies. At the same time,

investments in strategic ports such as Tanjung Priok, Tanjung Perak, Kuala Tanjung, and Patimban have expanded maritime connectivity and enhanced Indonesia’s capacity to participate in regional supply chains.

Indonesia’s active engagement in ASEAN initiatives, including the ASEAN Customs Transit System (ACTS) and efforts toward the ASEAN Single Shipping Market (ASSM), further reflects its commitment to reducing trade frictions and strengthening regional economic integration. Nevertheless, the effectiveness of these initiatives continues to be constrained by regulatory fragmentation, uneven infrastructure development, digital interoperability challenges, and variations in institutional capacity across regions. These structural issues remain significant obstacles to achieving a fully integrated maritime logistics system.

The findings indicate that maritime logistics reforms contributed to substantial trade expansion during the early years of the study period, with Indonesia’s trade value increasing significantly between 2020 and 2022. However, the subsequent moderation in export performance and trade balance indicators during 2023–2024 demonstrates that logistics improvements alone cannot fully insulate the economy from broader global economic pressures, commodity-price fluctuations, and shifts in international demand. This trajectory suggests that while maritime logistics reforms have strengthened Indonesia’s competitiveness and resilience, their long-term effectiveness depends on the ability to adapt to changing external conditions.

Overall, Indonesia has made meaningful progress in strengthening its integration within ASEAN trade networks and reducing logistical constraints that contribute to non-tariff barriers. Future policy efforts should focus on accelerating regulatory harmonization, expanding digital interoperability, improving connectivity in less-developed regions, and establishing systematic performance-monitoring

mechanisms. Equally important is the need to continue lowering logistics-related costs toward levels that are more comparable with leading ASEAN economies. Achieving these objectives will be essential for enhancing trade competitiveness, supporting sustainable

market expansion, and securing Indonesia's position within regional value chains in an increasingly integrated Southeast Asian economy.

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