



# **NAVIGATING INDONESIAN MARITIME POLICIES**

**CONSTRUCTIVE, DISTORTIVE, AND ACCELERATIVE**

TRI ACHMADI & Riant Nugroho

**NAVIGATING INDONESIAN  
MARITIME POLICIES:  
*Constructive, Distortive, and  
Accelerative***

Editor

**Riant Nugroho  
Tri Achmadi**

## **Greetings**

Director General of Marine Transportation  
Ministry of Transportation  
Republic of Indonesia

Assalamualaikum Wr. Wb.

The Ministry of Transportation's Directorate General of Marine Transportation is pleased to have Institut Teknologi Sepuluh Nopember (ITS) in Surabaya and Rotterdam University of Applied Science (RUAS) in the Netherlands as partners in developing Indonesia's first Master Program in Marine Transportation Engineering. The program's success proves that society, particularly academia, has embraced it openly.

This book is a testament to our commitment and provides valuable insights into Indonesia's current marine transportation policies and the necessary agenda to move forward. We recognize that public policy in the maritime industry, particularly in marine transportation and port management, requires further support to ensure that policies are reliable and fully benefit the public.

I am delighted to welcome the release of this book and hope that it will benefit all, especially stakeholders in the field, in achieving Indonesia's vision as a global maritime fulcrum, as declared by President Jokowi in 2014.

Jakarta, September 17, 2022

Ir. Arif Toha Tjahjagama, DEA.

Director General of Marine Transportation

## **Foreword**

Head of the Department of Marine Transportation Engineering

The book "Navigating Indonesian Maritime Policies" is the result of the collaboration between two distinguished scientists, Tri Achmadi, Ph.D. and Dr. Riant Nugroho, who specialize in different academic fields. While Tri Achmadi focuses on marine transportation, Dr. Riant Nugroho is an expert in public policy. Both hail from the best universities in Indonesia.

This book is their second publication and was created as a teaching material for the Double Degree Master's Program in Maritime Transportation Engineering at the Sepuluh Nopember Institute of Technology (ITS), in partnership with the Rotterdam University of Applied Sciences (RUAS), and backed by the Ministry of Transportation of the Republic of Indonesia.

The work presented in this book is profound and challenges our collective thinking when it comes to public policies. Specifically, it focuses on maritime policies and highlights the need to identify constructive and accelerative policies, as well as those that are distortive. These distortive policies don't necessarily "disturb" the success of other policies. Instead, they exist because of policy incoherence, which needs to be a shared learning experience.

Both authors worked earnestly with students to identify the

policy challenges related to the development of Indonesia's maritime business. Their aim is to create intellectual wealth and practical solutions. We hope that this book will serve as a reference for academics and professionals alike to establish a rational foundation and realize better Indonesian maritime policies in the future.

Dr.-Ing. Ir. Setyo Nugroho

Head of the Department of Marine Transportation Engineering  
Institut Teknologi Sepuluh Nopember (ITS) Surabaya.

# **NAVIGATING INDONESIA'S FUTURE MARITIME POLICIES: A VISION FOR PROSPERITY**

Riant Nugroho & Tri Achmadi

Indonesia's archipelagic attractiveness holds immense potential for economic growth, global prominence, and sustainable development. The country's maritime policies are crucial in realizing this potential, drawing insights from the past and envisioning the future. Recently, a mix of successes and challenges marks Indonesia's maritime journey. The nation's archipelago has emerged as a maritime center. However, the policy implementation has been complex. The discussions of this edition provided a retrospective view of policies that propelled progress or hindered development.

Indonesia's constructive policies have been pivotal in its maritime growth. Several policies supporting local businesses, referred to as the "people's economy," have empowered small economic actors. The exploration of maritime highway optimization, the people's shipping policy, and other constructive frameworks show a nation laying a solid foundation for growth and influence. However, the discourse acknowledges the distorted policies, such as the Lobster Seed Export Policy and Marine Transportation Empowerment Training, which have unintended negative consequences. Then, constructive criticism treats these policies as opportunities for learning and refinement.

As Indonesia moves towards the future, the discourse focuses on constructive policies. The optimization of maritime highway policies fosters an environment conducive to growth and efficient maritime operations. This exploration serves as a canvas on which a vision for the nation's maritime policies is painted, propelling the country towards economic prosperity, global prominence, and sustainable development.

Developing Indonesia's maritime sector is critical for inclusive growth and democratization of opportunities. The shipping policy emphasizes the importance of small economic factors contributing to the maritime sector's strength and dominance. A future that includes yacht ship tourism convenience policies positions Indonesia as a global destination, leveraging its maritime beauty for economic gains. However, the book's narrative stresses the need for proactive measures and accelerated policies to anticipate the future's challenges. The maritime sector is dynamic and requires visionary policies anticipating needs and challenges. The book highlights high logistics costs as a formidable hurdle that casts a shadow on the nation's economic competitiveness and growth potential. Policymakers must strategically unravel these logistical challenges through policy adjustments and a holistic transformation of the logistics ecosystem. The discourse presented in the book highlights demand-supply imbalances, suboptimal port performance, and inefficiencies in maritime and land value chains. Policymakers must strategically rearrange each challenge to craft a maritime landscape that propels Indonesia towards a harmonized and efficient future.

This book provides a detailed analysis of Indonesia's strategy. It includes critical questions that policymakers and stakeholders should consider. To keep up with the challenges, stakeholders need to be proactive and refine their policies. By doing so, they can turn challenges into opportunities for innovation. This is especially important in the maritime sector, where logistical challenges require strategies to navigate. It may benefit policymakers, scholars, and industry professionals to discuss ways to improve the existing frameworks governing the maritime sector. It is a living document that adapts and evolves with the industry's changing landscape. The discourse emphasizes the importance of strategic planning, timely action, and a forward-looking approach. Accelerated policies anticipating and responding to challenges are needed to keep pace with the rapidly changing maritime sector.

Indonesia's journey into the future requires a judicious blend of foresight, adaptability, and agility. The discourse transforms into a blueprint for navigating the ever-evolving landscape of the maritime sector, urging stakeholders to address inconsistencies and inefficiencies collectively. The discourse concludes with a call to action, urging policymakers, scholars, and industry professionals to harmonize their efforts and align policies with Indonesia's aspirations for a sustainable future. The insights provided in the discourse serve as a guide for navigating the uncharted territories of the future, offering a retrospective analysis and a forward-looking vision. The maritime future envisioned is one where policies harmonize with economic growth, sustainability, and global dominance. Indonesia is urged to embrace the essence of accelerated policies, to be proactive in



navigating the challenges and seizing the opportunities swiftly and effectively. The discourse serves as a beacon, guiding the nation towards a future of sustainable growth, prosperity, and dominance in the global maritime arena.

**CHAPTER 1**  
**CONSTRUCTIVE MARITIME**  
**POLICY**

## **CHAPTER 1.**

### **CONSTRUCTIVE MARITIME POLICY**

Rendi Ferdillah et al.<sup>1</sup>.

To promote the effective development and growth of businesses and the maritime community, an outstanding public policy is required. The Indonesian government has made significant efforts to provide excellent policies in the maritime sector that support the growth of small economic actors, also known as "people's economy". The aim is to ensure that these national businesses can seize opportunities in the national maritime sector and become the main players, not just in number but also in strength and dominance. Currently, there are ten policies that are considered relevant to the development of the national maritime business as follows

1. Optimization of the maritime highway policy
2. Cabotage principle policy
3. General policy on the management of national marine and fishery resources
4. People's shipping policy
5. Classification policy for Indonesian-flagged ships
6. Yacht ship tourism convenience policy
7. Obligation to use national sea transportation policy

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<sup>1</sup> Rendi Ferdillah, Fajar Gumelar, Feri Ardiyanto, Tia Natalia, Muhammad Raehan Khaeruddin, Fadel Muhammad, Muhammad Akbar, Nur Ilman Habil, dan Ananda Firsta Tea Relevania Purnama

8. Online seafarer's book policy
9. Provision of foreign (international) tourism conveniences policy
10. Maritime tourism policy

The following analysis describes and explains these policies and provides readers with an understanding of their strengths and weaknesses.

### *Maritime Highway Policy Optimization*

Indonesia is a country that is made up of many islands and has the largest maritime territory and second-longest coastline in the world. This makes it rich in energy reserves, fishing potential, marine tourism potential and strategic shipping routes. These resources can be used to strengthen Indonesia's geopolitical, economic and maritime cultural power. In order to take advantage of these resources, Indonesia has implemented the Maritime Highway concept. This concept involves planning sea transport routes, providing subsidies for sea transport, revitalizing people's shipping and developing regional commodity-based industries. This is outlined in Presidential Regulation No. 27 of 2021 concerning the Implementation of the Public Service Obligation for the Transport of Goods from and to the Underdeveloped, Remote, Outermost, and Border Areas.

Maritime development is a key priority for President Jokowi's Vision and Mission for long-term development. The Ministry of Transportation, along with Bappenas and state-owned enterprises, has planned the Maritime Highway concept and its

supporting elements. Various activities have been carried out to realize this concept. One important factor for its success is the provision of subsidies or Public Service Obligation (PSO) to the Maritime Highway fleet. This ensures that ships can sail regularly even if they transport no cargo. The aim of Maritime Highway is to stimulate economic growth by providing affordable, regular and scheduled shipping services. The program is designed to reduce the price disparity between Java Island and other areas in eastern Indonesia. The government hopes that this policy will stimulate the growth of new economic centers and promote regional growth distribution.

The Maritime Highway program is a logistics distribution route system that uses scheduled freight ship transport from west to east and north to south of Indonesia. Its objective is to develop maritime economy, turning the sea into a connectivity base for production and marketing between regions/islands in Indonesia and regionally. By reducing logistics costs, the program aims to maintain the price stability of goods and commodities between regions to improve community welfare. As a state-owned company serving inter-island sea transportation, PT PELNI plays a strategic role in the economic and social wheels of the archipelagic community. The government assigns a public service obligation or PSO to PT PELNI to ensure that areas with limited transportation access are served.

### ***Definition of Policy***

Policies can be classified into two categories: public and private policies, according to Simatupang (2003). Public policy refers to

collective actions that are implemented through the government's legitimate authority to encourage, inhibit, prohibit, or regulate private actions by individuals or private institutions. Private policy, on the other hand, is an action carried out by an individual or a private institution that does not coerce other people or institutions. Public policy has two main characteristics: it is created or processed by governmental institutions or based on procedures set by the government, and it is coercive or influential over the private actions of the broader public.

Public policy plays a vital role in shaping the life of a nation and state. Although all countries face similar problems, the way they respond to these problems differs. This response is known as public policy. As public policy is the responsibility of the government, it is the actual form of every government's effort to manage the collective life referred to as "state" and "nation" (Nugroho, 2018).

### *Analysis, Research, and Policy Science*

Policy analysis is a process or activity of synthesizing information, including research results, to produce recommendations for public policy design options. From this definition, the basic characteristics of policy analysis can be formulated as follows:

1. Policy analysis is a process or activity of "synthesizing" information, meaning guiding various information,

including research results, to obtain a consistent conclusion.

2. One of the main sources of information for policy analysis is research results.
3. The output of policy analysis is the recommendation of decision choices or public policy design.
4. The clients of policy analysis are public policy decision-makers and groups interested in that government policy.
5. Policy analysis is client-oriented. Without this characteristic, policy analysis cannot be readily available for specific clients.

Public policy analysis has several branches, one of which is policy evaluation. The main reason why policy evaluation is carried out is that every public policy carries a risk of failure. There are two categories of policy failure: non-implementation and unsuccessful implementation. Non-implementation occurs when a policy is not executed as planned, while unsuccessful implementation happens when a policy fails to achieve the desired impact or end result despite being executed as planned. Policies at risk of failure are usually due to factors such as poor execution, subpar policy, or unfavorable external conditions. Public policy concerns the state's capacity to support its citizens and achieve its mission. It refers to every decision made by the government to manage public life and guide society towards its envisioned state.

Impact analysis, according to Dolbeare (1975), is the process of measuring the consequences of public policy. It focuses on what policy causes rather than what causes policy. Impact evaluation

is a way to assess the consequences or impacts of policy from various government programs. Policy evaluation studies differentiate between policy income/impact and policy output. Policy income/impact refers to the results and consequences of implementing a policy, while policy output refers to what has been produced due to the process of government policy formulation (Islamy, 1986).

### ***Distribution Process***

Distribution is the process of transferring goods from the place of production to various places or areas that need them. Kotler (2005) defines that distribution encompasses planning, implementation, and supervision of material flow to achieve the final product from the place of production while obtaining profit. Most companies state that the purpose of distribution is to deliver goods in the right quantity, at the right time, and at the lowest possible cost. The most crucial aspect of product distribution is transportation cost, which is significantly influenced by freight rates. Thus, high transportation costs will narrow the marketing area of a product. The length of marketing distribution depends on several rates, such as:

1. Producer and consumer distance; the farther the distance between the producer and the consumer, usually the longer the channel the product will go through.
2. Life-saving period of a particular product or how quickly a product degrades; implying that products that degrade quickly need to be received by consumers promptly, thus requiring a short and fast channel.



3. Production scale; meaning if production occurs on a small scale, the resulting product quantity will also be small, making it unprofitable for producers to sell it directly to the market.
4. The financial position of the company. Producers with strong financial conditions tend to shorten the trading channel. For effectiveness, daily asset operations must implement strategies developed based on supply chain structure and automation. The executed process is how to bring the right product to the right outlet and the right customer at the right time.

Ensuring that the target meets 100% customer demand is crucial to avoid any possibility of errors. The availability of supplies at the right place and right time every day is imperative. Without proper inventory management, other distribution processes cannot operate efficiently. Even express deliveries may not be possible without the right inventory. Therefore, for smooth daily operations, inventory must be managed and placed correctly at the right time and place.

### *Industrial Economy*

Industrial economics covers all economic sectors, including the maritime sector, especially the maritime transportation industry. According to KKBI, an industry is an activity of processing or refining goods using tools and equipment. According to Law No. 5 of 1984 on Industry, the industry is an economic activity that processes raw materials, raw goods, semi-finished goods, and/or finished goods into goods with higher value for their use,

including design and industrial engineering activities. Industrial economics studies the economic aspects of industry, focusing on the market and company aspects. Its purpose is to explain developments in the economic sector. Industrial Economics is a branch of microeconomics studying the relationship between market structure, industrial behavior, and industrial performance.

Industrial economics examines market and company structures, emphasizing empirical studies of factors influencing market structure, behavior, and performance. Industry behavior in this research will be descriptively analyzed. Industrial behavior analyzes behavior and the application of strategies used by companies in an industry to capture market share and defeat competitors. Industrial economics is a specialized skill in economics. It helps explain why markets need to be organized and how their organization affects the way industrial markets work. Industrial economics studies market and company structures, focusing on empirical studies of factors affecting market structure, behavior, and performance (Jaya, 2001).

### ***Maritime Highway and Its Benefits for Industry***

Maritime Highway is a concept of maritime logistics transportation aimed at connecting major ports in Nusantara. The creation of connections between seaports in Indonesia facilitates the distribution of goods to areas that are unreachable or not yet reached. According to Presidential Regulation Number 70 of 2017, Maritime Highway is an effective sea connectivity in the form of ships that sail regularly and on

schedule from West to East Indonesia. Maritime Highway aims to reach and distribute logistics to remote, border, outermost areas, and ensure the availability of goods and price disparity to improve community welfare. Maritime Highway is a maritime transport concept to enhance maritime logistics transportation, impacting an easier distribution process and more consistent staple goods prices throughout Indonesia. Maritime Highway is not merely a highway above the sea but a barrier-free shipping route connecting regions through ports in Indonesia (Ari, M.2020).

The Ministry of Transportation appointed PT PELNI as the executor of ISSN 2355-4721 Execution of the Maritime Highway Program PT. Indonesia National Shipping in the Journal of Transportation & Logistics Management - Vol. 04 No. 01, March 2017 as the organizer of the public service obligation (Public Service Obligation) for cargo transportation in the context of implementing the Maritime Highway program as stated in Presidential Regulation No. 2 of 2016. The Maritime Highway program has been running; how is its implementation in terms of routes, volume, and transportation frequency? To make this qualitative research more directed, the scope of discussion is limited to the implementation of the Maritime Highway program with a route from Sorong to eastern Indonesia, with data collection methods through data documentation, literature study, and interviews with Crew KM. SABUK NUSANTARA as the executor of the Maritime Highway program. Benefits in the Route field from Sorong to Eastern Indonesia, allowing logistics to be distributed quickly.

### *Conclusion*

Broadly speaking, the "Maritime Highway" policy is one of the initiatives of the Indonesian government aimed at addressing the price disparities between the western regions of Indonesia (primarily Java) and the eastern regions, leveraging maritime transport. The government designated PT Pelayaran Nasional Indonesia (PELNI) to implement the Maritime Highway program from November 2015. This program provides scheduled ship services from the western regions of Indonesia to its eastern counterparts and vice versa. This research aims to analyze the execution of the Maritime Highway program by PT PELNI, focusing on aspects of routes, frequency, and volume of transported goods, limited only to the route from Surabaya to Eastern Indonesia. The findings show that the routes and frequency of Maritime Highway are consistent, while the volume has increased since its inception. These three aspects (route, frequency, and volume) are interrelated, suggesting that the government should further enhance the efficiency of these aspects. By doing so, the primary objective of the Maritime Highway, which is to reduce price disparities in Eastern Indonesia, can be fully realized.

Maritime Highway represents a logistic distribution system using large ships connecting main ports to smaller inter-island ports. It's envisioned to bridge the logistics distribution to the remote areas of the country and create practical and efficient shipping routes for the transport of people, goods, and animals between islands. This system is believed to address the challenges related to the availability of logistics in far-flung regions. The consistency of these routes is viewed positively by

the researchers. The potential benefits of having a consistent route system include:

1. The government or PT PELNI, as the implementor of the Maritime Highway program, can indirectly control the availability of goods on the predetermined routes.
2. It can establish orders in destination cities in line with market demands.
3. It can serve as a benchmark for a more accurate assessment of PT PELNI's performance.

### *Cabotage Policy*

Cabotage is a principle that grants exclusive rights or privileges to merchant ships flagged by a particular country. These ships are allowed to transport goods and people to and from ports within that country, and should be owned or operated by citizens or entities established under the laws of that country while flying its flag. The application of this principle is recognized in maritime laws and practices worldwide, and embodies a nation's sovereignty in managing its domestic transport, without it being seen as unwarranted protection or favoritism to domestic enterprises, leading to unfair competition.

In Indonesia, the cabotage principle has been established through Inpres no. 5/2005 and Law Number 17 of 2008 concerning navigation. The Presidential Instruction no. 5 of 2005 on Empowering the National Maritime Industry mandates the consistent application of the cabotage principle, formulating policies, and taking necessary steps according to respective roles

to empower the national maritime industry.

According to Article 8 of the Maritime Law, domestic maritime transportation activities should be conducted by national shipping companies using Indonesian-flagged ships manned by Indonesian crew members. Meanwhile, foreign ships are prohibited from transporting passengers and/or goods between islands or ports within Indonesian waters, as stated in the second point of the same article. Article 56 emphasizes the development and acquisition of a national maritime fleet in a holistic manner with the support of all relevant sectors.

Article 57 clarifies that the government must empower the national maritime transport industry by providing financing and tax facilities, facilitating long-term contractual partnerships between cargo and ship owners, and ensuring fuel availability for transportation. Moreover, the government should strengthen the national shipbuilding industry by establishing integrated shipbuilding industrial zones, developing design, research, and national shipbuilding development centers, using as much local content as possible, and facilitating technology transfers.

The primary goal of the cabotage principle is to protect the nation's sovereignty and provide the widest possible business opportunities for national maritime transport companies. In Indonesia, domestic maritime transport plays a strategic role in national development, impacting the economy, social, cultural, political, defense, security, and facilitating national mobility and interaction. The birth of this principle aims to improve and stabilize the maritime industry in Indonesia, limiting foreign

involvement and ensuring the dominance of Indonesian-flagged ships in their waters.

The objectives of implementing the cabotage principle include:

1. Reducing dependence on foreign ships.
2. Facilitating the flow of goods, services, and people throughout the archipelago.
3. Providing job opportunities for citizens.
4. Acting as a reliable component and supporting the National Defense and Security System (Hankamnas).

During a 2013 seminar in Balikpapan, the cabotage principle was outlined with various points, such as:

1. Domestic transport activities are carried out by:
  - a. National shipping companies.
  - b. Using national maritime transport.
  - c. Manned by Indonesian nationals
2. Foreign ships are prohibited from transporting passengers and/or goods to any island or port within Indonesian waters.
3. Existing foreign ships serving domestic maritime transport can operate for a maximum of three years since this law was enacted.
4. Anyone operating foreign ships for this purpose within Indonesian waters can be imprisoned for up to five years and
5. Fined up to IDR 600,000,000 (six hundred million rupiah)

### *Empowering the Maritime Industry*

This policy was issued to optimize the empowerment of the national maritime industry, instructing relevant ministers, such as the Ministers of Finance and Industry, to consistently apply the cabotage principle, formulate policies, and take necessary steps to empower the national maritime industry. The content of Inpres Number 5 of 2005 covers six regulatory aspects:

1. Trade
2. Finance
3. Transportation
4. Industry
5. Energy and Mineral Resources
6. Education and Training

### *Implementation of the Cabotage Policy*

Initially, this principle faced opposition, especially from domestic shipping companies, mainly because most had contracts with foreign ship owners. The emergence of this principle forced renegotiations. Moreover, domestic shipping companies preferred renting foreign ships over owning due to the high investment costs. However, with stricter government oversight and the mandatory nature of the cabotage principle, the domestic maritime industry started to flourish, with an increase in the number of national maritime companies and Indonesian-flagged ships.

### *Growth in Ship Numbers*



Based on data from the Directorate of Marine Traffic and Transport, the Ministry of Transportation, over the past 5 years (2016-2020), the ownership of the national maritime fleet increased by 11.35% with 33,770 ships. This is a significant increase compared to 2005, which had 6,041 ships. The number of domestic shipping companies also rose, totaling 4,252 in 2020.

Supporting factors for implementing the cabotage policy include:

1. It meets the needs of national shipping companies.
2. Formation of a supervisory team by the government.
3. Simplification of ship ownership documentation.
4. Tax incentives and financing support.

*The challenges of the Cabotage Principle are as follows:*

1. Domestic shipping companies are not yet capable of providing specific types of vessels to support offshore exploration and exploitation activities.
2. The investment cost for acquiring large vessels.
3. The absence of long-term contracts between cargo owners and vessel owners.
4. Low quality and quantity of human resources.
5. The Cabotage Principle is considered to empower only well-established shipping entrepreneurs.
6. The Cabotage Principle is also seen as not involving grassroots maritime operators, who play a more central role in logistics distribution, especially for essential needs

- in remote and underdeveloped areas (3T regions).
7. Concerns about the application of the Cabotage Principle as an attempt to replace established players with new ones.

### *Conclusions*

The cabotage policy in Indonesia reflects the country's assertiveness in protecting its maritime sovereignty and promoting its domestic maritime industry. By giving preference to Indonesian-flagged ships and ensuring they are operated by nationals, the policy aims to empower the national maritime industry, reduce dependence on foreign ships, and promote national pride. Although initial reactions to the policy were mixed, with concerns about its practicality and potential to disrupt maritime businesses, the consistent application and supportive measures have led to an increase in the number of Indonesian-flagged ships and bolstered the domestic maritime industry. This move can serve as a blueprint for other countries looking to strengthen their maritime sectors.

### *Management of Marine and Fisheries Resources Policy*

Indonesia's vast marine resources attract both local and international fishermen, providing significant benefits to local communities. However, these resources also face threats from illegal fishing, particularly by foreign vessels. To address these challenges, the Indonesian government needs to strengthen law enforcement in its waters.

Under the leadership of former Minister of Maritime Affairs and Fisheries, Susi Pudjiastuti, the government began intensifying law enforcement against foreign vessels involved in illegal fishing. One of her notable policies was to sink these vessels, which received mixed reactions from various parties. Critics argued that it was expensive and imprudent, risking diplomatic tensions. On the other hand, proponents believed that it sent a clear message about Indonesia's commitment to protect its maritime resources.

Over time, it became clear that a balanced approach combining strict law enforcement with diplomatic engagement and international cooperation was necessary to effectively safeguard Indonesia's marine resources.

According to UNCLOS 1982, which serves as the foundation of international maritime law, coastal states have sovereign rights and specific jurisdiction over the natural resources within their Exclusive Economic Zone (EEZ). The EEZ for each coastal state cannot exceed 200 nautical miles. Within this zone, coastal states have the authority to board, inspect, detain and undertake necessary legal prosecution to ensure the establishment of legislation issued by the coastal state.

In Indonesia, UNCLOS is used as a reference for the establishment of Law No. 45 of 2009 on Fisheries. In Article 69 paragraph (4), it states:

"Investigators and/or fisheries supervisors can take specific actions in the form of burning and/or sinking foreign-

flagged fishing vessels based on sufficient preliminary evidence."

From this article, if a foreign fishing vessel is proven to be involved in illegal fishing in Indonesian waters, then Indonesia, as a coastal state, has the right to preserve and protect its coastal marine wealth. Indonesia can take legal action in the form of sinking the vessel. Thus, this policy can be used as an option to deter fish theft perpetrators. However, upon deeper examination, various cases of fish theft are partly caused by unclear maritime boundaries of Indonesia, where overlapping occurs between Indonesia and neighboring countries. Hence, the relevant government bodies are expected to accelerate the negotiation process in determining maritime boundaries to provide legal clarity.

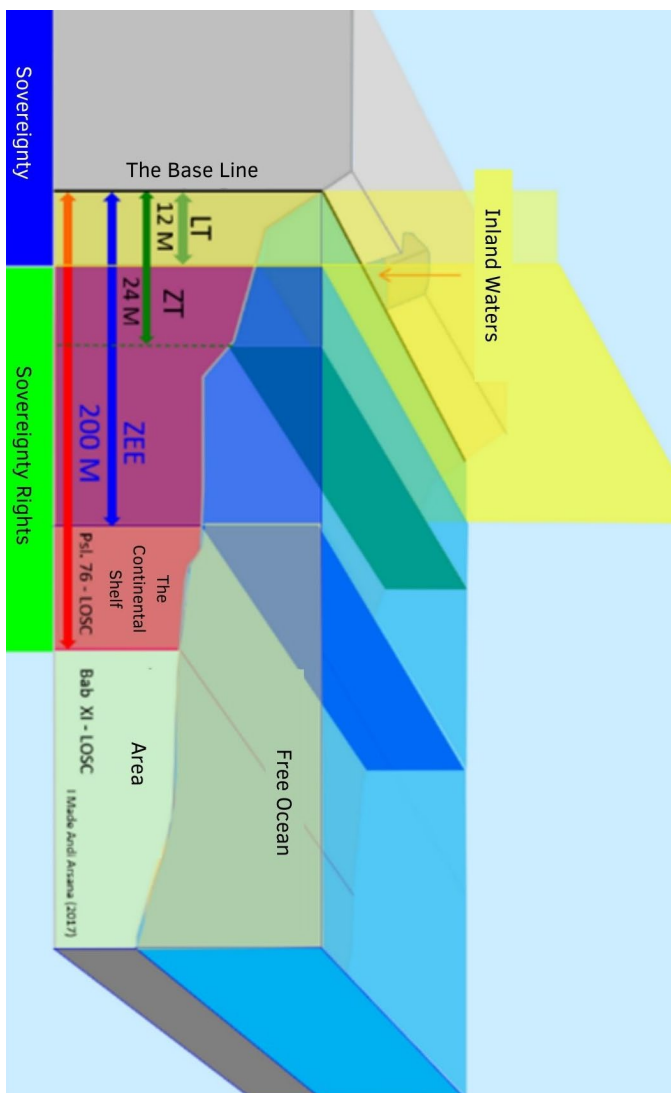


Figure 2.

## *Maritime Economy Concept*

There are two closely related concepts: marine economy and maritime economy. The marine economy is understood as economic activities conducted in coastal and marine areas that utilize Natural Resources and marine environmental services to produce goods and services. The maritime economy, often referred to as the 'blue economy,' encompasses all marketable activities related to the sea, from the use of marine resources, maritime areas, or around these spatial units, including maritime transport, shipbuilding industry, ship maintenance, development, and port operation along with related industries and services. Strategies and Policies for the Development of Maritime Economy in Indonesia consist of:

1. Changing the national development paradigm from land-based development to ocean-based development. Through this shift, ports and maritime fleets (Maritime Highway) will progress and become more efficient.
2. The policy for developing the Maritime Economy in Indonesia is to accelerate the development of maritime infrastructure and connectivity, building Maritime Highway, deep-sea ports, logistics, shipbuilding industry, believed to reduce national economic inefficiency and enhance the competitiveness of domestic products.
3. Another form of the maritime economy development policy in Indonesia is preparing five major ports: Belawan Port in North Sumatra, Tanjung Priok Port in

Jakarta, and ports in Surabaya, Makassar, and Kalimantan.

4. Another maritime economy development policy in Indonesia is preparing a regulatory framework that aligns with all parties. Since regulations in each ASEAN country vary greatly, regulatory harmonization is needed.

Starting with goal 14 of the SDGs which agrees upon the sustainable management of oceans, seas, and their resources, Indonesia's fisheries and maritime development policies must be based on a commitment to preserving the balance between conservation and responsible use of marine resources. Goal 14 of the SDGs is concretely detailed for the next five years. In the National Medium-Term Development Plan (RPJMN) 2020-2024, it's mentioned that capture fisheries development is spatially based following the geographic delineation of 11 Fisheries Management Areas (WPP). A sustainable fisheries management indicator is utilizing Fish Resources (SDI) below 80% of the maximum sustainable yield (MSY). This indicator governs the sustainability of the utilized SDI to remain sustainable. Sustainable fisheries management and consideration of fish resource stocks are development targets in SDG 14. Efforts to achieve this sustainable management and utilization are outlined in the National Medium-Term Development Plan (RPJMN) 2020-2024, which mandates fisheries development through the Fisheries Management Area (WPP) approach.

In its implementation, the WPP requires several breakthrough steps, including institutional and functional transformation and

strengthening data collection and other refining steps. The WPP should no longer be seen solely as a stock calculation base, with a "fit for all" approach, but WPPs should begin to be managed based on the individual characteristics of each, such as biota conditions, carrying capacity up to the socio-economic conditions of the community in the WPP. The management of this WPP must be equipped with accurate data and information as a prerequisite in determining the right management model referred to as a science-based policy.

### ***Knowledge-Based Management Approach***

Regarding the knowledge-based management approach to support resource sustainability and economic growth in WPP (Fisheries Management Area), setting inputs and outputs for certain types becomes an important factor. The number of ships and the use of fishing gear as well as the quantity and size of the catch can only be determined using accurate data through study and analysis of available data. In other words, the government can have policies based on scientific studies (science-based policy) in determining the use of fishery resources in a WPP. This includes determining the continuation of fishing gear operations, such as trawls or cantrangs. This study can also be used as a basis to determine the direction of fisheries management that can accommodate fishermen to operate using alternative or modified fishing gear.

Bappenas has implemented a science-based policy through a bioeconomic study for shrimp resources in WPP 718, which is expected to be replicated for other fisheries in different WPPs.



This developed bioeconomic study will broaden the understanding of ecosystem-based fishery management and support decision-making through a science-based shrimp fishing policy in Aru-Arafura waters. Using a dynamic simulation approach based on empirical data and primary data, supported by data from similar studies in several countries, the bioeconomic analysis of shrimp in the Arafura Sea shows that high economic potential can be achieved by controlling the optimal number of allowable ships. From the two types of shrimp fishing gear sampled representing the majority of the fleet operating, namely fleets targeting white shrimp and banana shrimp (banana fleet) and targeting tiger shrimp and banana shrimp (tiger fleet), it is estimated that the economic benefit per ship is between Rp 25 billion-Rp 50 billion per year. To achieve optimal economic utilization, an optimal ship allocation is needed, ranging from 50-70 ships, and gradually evaluated according to the biological capacity of shrimp in the Arafura Sea.

A bioeconomic approach is also being conducted for *cantrang* fisheries, amid policies to replace *cantrang* fishing gear, which is suspected of providing high economic value but can damage marine ecosystems and threaten the sustainability of fishery resources due to its low selectivity. This study will delve into how to properly manage *cantrang* fisheries to prevent ecosystem damage, but also not cause broad social and economic impacts. As tools, bioeconomics is the best instrument to measure fish stock conditions and the maximum economic benefits that can be obtained.

Hopes from this study can conclude whether the introduction of new policies can be applied by enforcing management rules and limiting the number of ships that adhere to ecological and economic balance, namely the proposed optimal number of ships (optimum effort). Furthermore, the bioeconomic study will support the tuna fisheries supply chain study, specifically Tuna Longline starting at the end of 2021.

### ***WPP Management Principles according to Bappenas***

The policy of managing marine fisheries based on spatial divisions like WPP can be used as a basic reference that regulates the use of sustainable fishing gear in each WPP. Each WPP will have a Fisheries Management Unit as the responsible manager. Each unit will be responsible for compiling a Fisheries Management Plan (RPP) that contains various strategic management plans aimed at resolving fisheries issues in the related WPP. The use of fishing gear and the welfare of coastal communities are two of many issues that are of concern in the formulation of the RPP.

The RPP formulation must also comply with the principles in the Ecosystem Approach to Fisheries Management (EAFM) indicators. The principle of sustainability in EAFM can assess the carrying capacity of waters in the utilization of fishery resources. It is hoped that the RPP, based on comprehensive bioeconomic and social studies and accurate EAFM indicators, can determine whether a WPP can grant operational permits for ships with fishing gear like cantrang or its substitutes in certain quotas and

time frames so that the welfare of coastal communities can be maintained.

Bioeconomic research on various types of fisheries, such as shrimp fisheries in Arafura, cantrang fisheries in Pantura, and others, is the initial sequence of a concrete and very essential roadmap to be carried out. This is useful to be a basis in considering the continuation of various fishing activities, which are essentially economic activities. Having accurate calculations in creating a balance between environmental management and community welfare in accordance with the mandate of the Sustainable Development Goals (SDGs) is a development goal.

### ***People's Maritime Policy***

According to Law Number 17 of 2008 regarding maritime transport, PELRA is defined as "a traditional public endeavor with distinct characteristics, responsible for transport in waters using sailboats, motor sailboats, or simple motorized boats flying the Indonesian flag and within a specific size."

### ***Development of People's Maritime***

The people's maritime experienced its peak development between 1975 and the late 80s. This was attributed to the motorization program of the People's Maritime fleet in 1974. Subsequent developments positioned Pelra as a maritime transport mode connecting islands. The community uses it for individual transportation or cargo. Initially, the people's maritime served to transport goods for traders throughout the

archipelago, even reaching foreign lands. The national maritime industry experienced a decline, including the maritime transport of People's Maritime.

In 2005, the Government issued Presidential Instruction No. 5 of 2005 on the Empowerment of the National Maritime Industry. The boats of the people's maritime, which are part of the national maritime industry, are also included for empowerment, as mandated in Presidential Instruction No. 5 of 2005 and especially by the Maritime Law No.17 of 2008.

### ***Role of People's Maritime***

The people's maritime has five economic roles, which are undeniably crucial:

1. Connecting regional and local feeder ports.
2. Serving national transshipment activities on a regional or local scale with small-scale service volumes and relatively close reach.
3. Feeding secondary or tertiary main ports and regional or local ports.
4. Transporting commodities, nine staple goods, construction materials, and fertilizers.
5. Regional development, especially in Eastern Indonesia, is crucial. In reality, the people's maritime connects national activity centers.

### ***Issues in People's Maritime***

The government, through the Coordinating Ministry for Maritime and Investment Affairs (Kemenko Marves) represented by the Assistant Deputy (Asdep) for Infrastructure and Transportation, discussed the Action Plan for Empowerment of People's Maritime Sea Transport in a special meeting on June 11, 2021. The coordination meeting was attended by practitioners of the people's maritime from the Central Representative Council of People's Maritime in Jakarta, Regional Representative Council of East Java, Branch Leadership Council of the Pelra Association in Tanjung Pinang, DPC Pelra Surabaya, DPC Pelra Bima, and DPC Pelra Makassar.

At the meeting, practitioners lamented the main challenge facing Pelra was the lack of policies and regulations favoring them, making it difficult for them to grow. The development of people's maritime (pelra) serves to fulfill the need for non-containerized sea transport, pioneering fleets, and traditional trading fleets flying the Indonesian flag. Pelra not only reaches remote areas but also reduces price disparities by supporting the Maritime Highway program.

In general, seven issues faced by the people's maritime can be identified:

1. The government pays very little attention to the development of people's maritime.
2. Pelra requires support to transition from traditional to modern technology to better meet safety and speed aspects.

3. Facilities at the people's ports are still inadequate. Warehouses and docks at People's Maritime Ports don't facilitate smooth boat operations because the docks constructed don't match the boat lengths.
4. Management patterns are still traditional/familial.
5. Management capabilities and skills of the crew members (ABK) are very low.
6. Some Pelra conditions still persist but struggle to grow due to lack of financial assistance and support from both the government and banks.
7. There's a lack of policies and regulations favoring Pelra, making their growth challenging.

### ***Presidential Regulation Number 74 of 2021 on the Empowerment of the People's Maritime Transport***

The policy solution proposed is the creation and establishment of Presidential Regulation No. 74/2021 on the Empowerment of Maritime Transport for the People. This policy aims to strengthen the maritime business for national interests and empower the people's economy in small and medium-scale enterprises, enhance resilience in connectivity and services to inland and/or waters areas, maintain the nation's cultural heritage, and support the program of public service obligation for goods and passenger transport at sea, taking into account safety and security, as well as the capability and capacity of the ships.

### ***Conclusion***

#### ***Program Execution***

Several executions have been developed by the Directorate General of Sea Transportation for the people's maritime transport. First, regarding market share, it is developed by reducing the travel time of the people's maritime fleet so it can compete with other fleets and increase the people's maritime transport cargo share. Second, in terms of cargo, it is expanded by allowing the opportunity to visit every port with cargo prospects, with all ports providing special docks for the people's maritime transport, adequate capacity for these docks, and also adequate facilities. Third, in terms of construction aspects and types, the programs include:

1. Utilizing shipbuilding materials that align with technological conditions and advancements.
2. Ships designated for general goods, animals, and passengers transport.
3. Crewing in accordance with regulations.
4. Implementing sea transport to small islands and connecting remote ports throughout Indonesia and cross-border to neighboring countries.
5. Insurance is mandatory for people's maritime transport ships, and they can be used by creditor banks.

Fourth, in terms of ship funding, the programs are:

1. Government or non-bank financial institutions support shipbuilding capital.
2. Providing interest subsidies for shipbuilding as granted to the construction of low-cost apartments.

3. Establishing a non-bank financial institution specifically for financing and capitalizing on the people's maritime transport.

Fifth, in terms of business aspects, the programs are:

1. Changing the traditional mindset towards openness.
2. Proper and sincere management arrangements.
3. Management development conducted by DPP Pelra for its members is crucial for the sustainability and existence of people's maritime transport throughout the archipelago.
4. Enhancing partnerships between cargo owners and PELRA, especially for services in remote areas.

Sixth, concerning human resources, the programs are:

1. Education and training are carried out at designated ports.
2. A coordinator for education and training is appointed with a license from Dirjen Hubla.
3. The curriculum is tailored to the required education levels.
4. A flexible schedule is adjusted according to needs.
5. The duration of education is adapted to the educational curriculum.

### *Classification for Indonesia's Flagged Ships*



Indonesia's inclusion in the White List based on the Tokyo MoU 2020 Annual Report is a global recognition of Indonesia's Port State Control (PSC). It also enhances the world's trust in the safety and security aspects of shipping in Indonesia, making Indonesian ports competitive with ports in other countries worldwide. The shift of Indonesia's position from the black list to the grey list and now to the white list is due to the hard work of the Directorate General of Sea Transportation, particularly KPLP, over the last three years. In 2018, the Directorate General of Sea Transportation issued a circular on the supervision of Indonesian-flagged ships going abroad. This Circular UM.003/11DJPL-18 instructed that Indonesian-flagged ships sailing overseas should be inspected by the ship safety inspection officer, along with the Foreign Ship's Seaworthiness and Security Inspection Officer, more commonly known as PSCO (Port State Control Officer).

BKI (Biro Klasifikasi Indonesia) or the Indonesian Classification Bureau is an Indonesian state-owned enterprise appointed as the sole national classification body to classify both Indonesian and foreign commercial ships operating regularly in Indonesian waters. The Indonesian Classification Bureau (BKI) ranks as the 4th classification body in Asia after Japan, China, and Korea. It's the only national classification body in charge of classifying Indonesian-flagged commercial vessels and foreign-flagged ships operating regularly in Indonesian waters.

BKI's classification activity classifies ships based on their hull, engine, and electrical systems with the goal of providing a technical assessment of the ship's seaworthiness. Moreover, BKI

is trusted by the government to conduct statutory surveys and certification on behalf of the Republic of Indonesia, including for the Load Line, ISM Code, and ISPS Code. BKI was established by implementing technical standards in design, construction, and marine survey activities related to floating facilities, including ships and offshore constructions. These standards are formulated and released by BKI as technical publications. Ships designed and built based on BKI standards receive a Classification Certificate from BKI. The issuance of the certificate occurs after BKI completes a series of required classification surveys.

As an independent, self-regulating Classification Body, BKI has no interest in the commercial aspects related to ship design, shipbuilding, ship ownership, ship operation, ship management, ship maintenance/repair, insurance, or leasing. BKI also conducts research and development to improve the quality and standards, which are published for stakeholders interested in ship classification services.

Observing the increase in activities and developments as well as a promising business prospect, in 1977 the Indonesian Government, as the owner of BKI, sought to enhance BKI's business independence by changing the organizational status to a Limited Liability Company, or PT (Persero). This was reinforced through Government Regulation (PP) No. 1 of 1977 concerning the Conversion of the State Company Biro Klasifikasi Indonesia into a Corporation (Persero). The emergence of the Minister of Transportation Regulation No: PM 7 of 2013, regarding the Classification Obligation for Indonesian-flagged

Ships in the Classification Body, among its provisions are:

Article 2:

(1) Indonesian-flagged ships are required to be classified by a classification body with criteria:

- a. a length between the forward and aft perpendicular of 20 (twenty) meters or more;
- b. a gross tonnage of GT 100 (one hundred Gross Tonnage) or more; or,
- c. powered by a main propulsion engine of 250 HP or more.

(2) Indonesian-flagged ships, as referred to in paragraph (1), operated for the Indonesian Regional Navigation Area must be classified by the Indonesian Classification Bureau or dual-class with a recognized foreign classification body.

(3) Indonesian-flagged ships operating internationally can be classified by the Indonesian classification bureau or a recognized foreign classification body or dual class between the Indonesian Classification Bureau and a recognized foreign classification body.

From the above Ministerial Regulation, it can be concluded that Indonesian-flagged ships, both serving domestic and international routes, are required to have a classification from BKI or are required to be dual-class if they have previously been classified by a Classification Bureau from another country. This certainly burdens Shipping Companies in their production costs and is considered to monopolize the market by relying on

government policies. However, in response, the Ministry of Transportation issued the Minister of Transportation Regulation No: PM 61 of 2014 concerning Amendments to the Minister of Transportation Regulation No. PM 7 of 2013 regarding the Classification Obligation for Indonesian-flagged Ships in the Classification Body, which amended Article 2 paragraph (1), and deleted paragraphs (2), (3), (4), and (5). The Government's policy in abolishing this obligation certainly has advantages and disadvantages, with advantages including:

1. Reducing the operational costs for Shipping Companies.
2. Providing the greatest opportunity for foreign classification bodies to exist in the territory of the Republic of Indonesia.
3. Creating healthy competition between Classification Bureaus by prioritizing services and competitive prices.
4. Providing new job opportunities with the establishment of foreign Classification Bureau branches in Indonesia.
5. Improving the capabilities of Indonesian surveyors due to the requirement to use Indonesian national surveyors in foreign classification bureau branches.

On the other hand, perceived disadvantages include:

1. The reduced market share of BKI domestically as ships newly purchased by Shipping Companies already classified by another country don't need a new class from BKI, coupled with easier bureaucracy.
2. BKI not being given authority to supervise all Indonesian-flagged ships will result in limited

government supervision of Indonesian-flagged ships operating internationally.

### *Conclusion*

From the discussion above, it can be concluded that the removal of the obligation to use BKI Class will reduce BKI's strength in classifying Indonesian-flagged ships, but here lies the competition between IACS and BKI. This is influenced by ship owners who value the quality of foreign classification bodies, negative stigma towards BKI, mistrust towards BKI, expensive BKI rates, low quality of BKI human resources, and BKI's lack of international recognition, making it burdensome when sailing abroad. With the issuance of PM No. 61 of 2014, it provides the greatest opportunity for foreign classification bodies to operate more freely. The introduction of this regulation will make BKI strive to be a great classification bureau by improving the quality of its services so that it can compete with foreign classes entering Indonesia.

### *Facilitating Yachts in Indonesia*

As an archipelagic nation, Indonesia is blessed with incredible marine tourism potential. Located in the heart of the world's coral triangle, the charm of Indonesia's marine tourism can be witnessed from Sabang to Merauke. Marine tourism encompasses all recreational activities conducted in maritime or aquatic environments, including coastal areas, the surrounding islands, and ocean regions.

In fact, Indonesia boasts a total coastline stretching over 80,000 kilometers and an expansive maritime territory spanning 3.1 million square kilometers. However, not all of Indonesia's waters possess marine tourism potential. Factors such as strong waves, limited visibility, and the absence of coral reefs act as hindrances to marine tourism. Marine tourism comes in various forms, including the popular activities of snorkeling, diving, and watersports found in destinations such as Anyer, Bali, and Lombok.

For diving enthusiasts, the Eastern regions of Indonesia take the spotlight. Places like Bali, Lombok, Maluku, Manado, and the renowned Raja Ampat in West Papua are beloved by divers from both within and outside the country. For those who prefer beach tourism, Indonesia offers a plethora of options, from the southern beaches of Java to the eastern regions of the country, each with its own unique beauty.

The government, particularly the Ministry of Transportation, represented by the Directorate General of Sea Transportation, provides port services for tourist yachts entering and departing from 19 designated ports in accordance with the Minister of Transportation Regulation No. 123 of 2016 concerning Amendments to Minister of Transportation Regulation No. PM. 171 of 2015 on the Procedures for Services to Foreign Tourist Yachts in Indonesian Waters.

Capt. Wisnu Handoko, the Director of Sea Traffic and Transportation, explains that foreign tourist yachts are watercraft flying foreign flags, used by tourists for non-

commercial recreational purposes. It is emphasized that the tourism sector should be supported by all relevant agencies, including the Directorate General of Sea Transportation. Therefore, they promote the enhancement of the tourism sector by simplifying port services for foreign tourist yachts entering and departing from the 19 ports in Indonesia.

The 19 designated ports are Sabang Port, Belawan Port, Teluk Bayur Port, Nongsa Point Marina Batam, Bandar Bintan Port, Tarempa Port, Tanjung Pandan Port, Sunda Kelapa/Marina Ancol Port, Benoa Port, Tenau Port, Kumai Port, Tarakan Port, Nunukan Port, Bitung Port, Ambon Port, Saumlaki Port, Tual Port, Sorong Port, and Biak Port.

The designated entry and exit ports can be changed based on the development of visits by foreign tourist yachts and the readiness of facilities and infrastructure to provide services and support regional development. Port services for foreign tourist yachts are integrated, covering customs, quarantine, immigration, and port services. Therefore, port authorities must ensure the smooth delivery of services to foreign tourist yachts in the ports. Additionally, these foreign tourist yachts cannot be commercialized, rented to others, or used to change passengers or embark/disembark passengers while within Indonesian waters.

The Regulation of the Ministry of Transportation (Permenhub) No. 171 of 2015 on the Procedures for Services to Foreign Tourist Yachts in Indonesian Waters, which is derived from Presidential Regulation No. 105 of 2015, contains the following provisions in Article 4, paragraphs (1) and (2):

1. To support the smooth provision of services to foreign tourist yachts in ports, port authorities must provide services in accordance with the procedures for ship and cargo services applicable at 18 designated entry and exit ports, as determined by the Presidential Regulation.
2. The facilitation of services for foreign tourist yachts (Yachts) is to be conducted in an integrated manner, encompassing customs, quarantine, immigration, and port services.

These regulations indicate Indonesia's strong support for the development of maritime tourism in the country, particularly for foreign yachts. However, it's worth noting that the implementation of these regulations has been a subject of debate and discussion, especially concerning the readiness of Indonesian ports to accommodate foreign vessels.

### ***Conclusion***

The specific policy for yachts has both advantages and disadvantages. The advantages of this policy are as follows:

1. It supports an increase in foreign tourist visits.
2. It promotes economic growth, especially in tourist regions.
3. It creates job opportunities in the tourism and creative economy sectors.
4. It has the potential to enhance the investment climate for marina development in areas with marine tourism potential.



However, there are some disadvantages to this policy:

1. The marine tourism ecosystem is not well-connected and supportive, particularly concerning human resources and infrastructure.
2. The process of obtaining permits for foreign vessel entry is time-consuming.
3. There is a lack of information, promotion, and marketing systems for tourist attractions in remote areas.
4. The presence of corruption deters foreign yachts from visiting Indonesia.

In summary, the Minister of Transportation Regulation No. PM 171 of 2015 provides substantial support and convenience for foreign yacht tourists. Nevertheless, the situation on the ground is far from perfect. The synergy among stakeholders remains weak, and there is a lack of supporting facilities in yacht destination areas, resulting in minimal development of marine tourism for foreign yachts. This should encourage the government to formulate policies that strengthen synergy and integrity in services, ensuring that foreign tourists comfortable and content during their time in Indonesia.

### *The Necessity of National Maritime Fleet*

Indonesia is renowned as an archipelagic nation rich in natural resources, such as oil and natural gas, mining products, and agriculture. Therefore, it is no surprise that Indonesia is one of

the world's major suppliers of these commodities. As a key global supplier, Indonesia has the potential for significant export and import cargo transportation. However, this potential has not been optimally utilized due to the relatively limited number of national vessels available to transport these goods. According to a study by the National Development Planning Agency (*Bappenas*) in 2019, the national shipping sector has often been criticized for being the main cause of the international trade deficit, with 42% of the deficit in ocean freight resulting from the use of foreign-flagged vessels in export and import activities.

This issue is further reinforced by data from the Ministry of Transportation, which states that within a five-year period (2015-2019), the usage of Indonesian-flagged vessels for export and import transportation was minimal, accounting for only 5% of the available potential each year. One of the efforts that can be made to address the trade deficit and optimize Indonesia's high export and import potential is for the government to implement the Beyond Cabotage program in Indonesia. Beyond Cabotage is a program for the export and import of Indonesian goods using vessels owned and operated by national shipping companies and manned by Indonesian crew. The goal of implementing Beyond Cabotage in Indonesia is to help the country maximize its foreign trade as an engine of growth by securing foreign exchange potential from lost freight revenue, which has been estimated at IDR 120 trillion per year.

The journey of implementing Beyond Cabotage in Indonesia began in October 2012 with the establishment of the Task Force Beyond Cabotage. In 2013, there was a change in the Term of

Trade from the Free on Board (FOB) scheme to the Cost Insurance and Freight (CIF) scheme. Subsequently, from 2017 to the present, the government issued Minister of Trade Regulation (*Permendag*) No. 82 of 2017, which was later revised to *Permendag* No. 80 of 2018, and subsequently revised again to *Permendag* No. 40 of 2020. The latest revision is *Permendag* No. 65 of 2020 regarding the Use of National Shipping and Insurance for the Export and Import of Certain Goods. This regulation obliges coal and crude palm oil (CPO) exporters and rice and government procurement importers to use national shipping and insurance. Despite the government issuing several policies and regulations to support the implementation of Beyond Cabotage in Indonesia, it does not mean that there are no challenges in its implementation.

Some of the hindrances to implementation include the current use of the FOB term of trade for Indonesian commodity exports, while CIF is used for imports. This means that the destination country for exports has significant influence in determining the use of vessels for export, and a similar situation occurs during imports. Another factor is the occupancy of cargo for Indonesian-flagged vessels leaving for foreign destinations, which can reach 70% to 100%, but the opposite is true when these vessels return to Indonesia from the destination country. Another obstacle is policy overlaps and institutional issues, particularly regarding the numerous levies and law enforcement efforts at sea, leading to high operational costs. Furthermore, fiscal and monetary regulations, as perceived by industry players, do not fully support the national shipping sector.

***Policy Conflict: Minister of Trade Regulation No. 65 of 2020***

### *"Undermining" the regulation No. 40 of 2020*

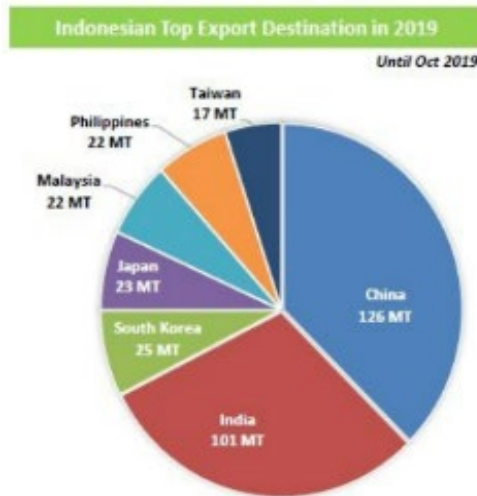
The Ministry of Trade issued Minister of Trade Regulation No. 65 of 2020, which revises Minister of Trade Regulation No. 40 of 2020 regarding the Terms of Use for National Maritime Transport and Insurance for the Export and Import of Certain Goods. The revised articles include Article 3, where the obligation to use national maritime transport and national insurance for coal and crude palm oil (CPO) exporters and rice importers is with vessels with a capacity of 10,000 deadweight tonnage. The required vessel size for the export of coal and CPO and the import of rice is significantly smaller compared to what was specified in Minister of Trade Regulation No. 40 of 2020, which required vessels of 15,000 DWT.

This development is regrettable because the limitation on the capacity of national maritime transport vessels for international transportation reduces Indonesia's opportunities to play a more substantial role in export and import activities, making it less competitive. The presence of Minister of Trade Regulation No. 65 of 2020 has dampened the spirit that was fostered by Minister of Trade Regulation No. 82 of 2017, where the country aimed for national entrepreneurs to play a more optimal role in export and import activities.

In response, the Indonesian National Ship-owners Association (INSA) essentially does not question the issuance of this regulation. However, the change from Minister of Trade Regulation No. 40 of 2020 to Minister of Trade Regulation No. 65 of 2020 has taken the shipping industry by surprise. Minister of

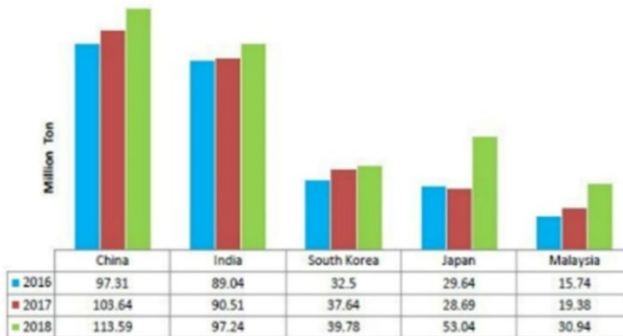
Trade Regulation No. 65 of 2020, which reduces the required capacity for national vessels for the transportation of coal, CPO, and rice to a maximum of 10,000 DWT, contradicts the spirit of the 15th Economic Policy Package by President Joko Widodo.

INSA remains optimistic about providing the required vessels to facilitate the export of coal, CPO, rice imports, and government goods funded by the state budget. Through the policy that obliges the use of national vessels for exports, business opportunities in providing vessels for coal, CPO, and rice transport become open for shipping companies in Indonesia. The implementation of this policy will have a positive impact on the national economy, reduce the service balance deficit, increase foreign exchange and tax revenue, and develop the shipping industry and its supply chain in Indonesia. Therefore, INSA hopes that the government will provide full support to ensure the successful implementation of this policy, including improving taxation policies. INSA believes that the government should not limit the capacity of vessels required for coal, CPO, or rice transport activities, so that this policy can genuinely have an impact on realizing Indonesia's vision of being independent, advanced, just, and prosperous.

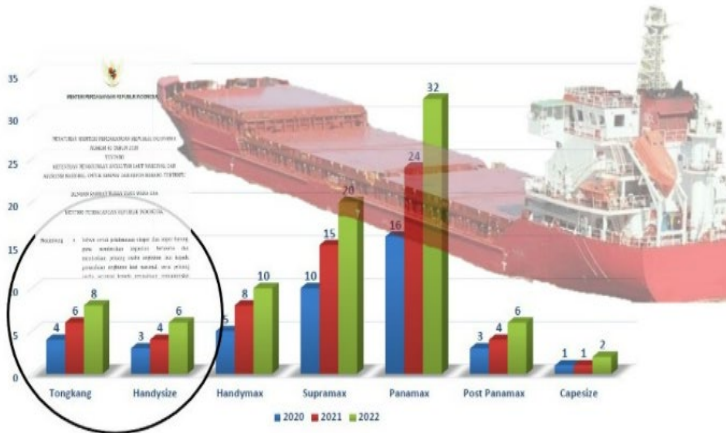


Meanwhile, Indonesia's coal exports to ASEAN countries (especially Malaysia, the Philippines, and Vietnam) are not significant, although they have seen some growth in recent years. Coal exports from Indonesia to China, India, South Korea, and Japan are dominated by bulk carriers, including supramax (50,000-55,000 DWT) and panamax (65,000-75,000 DWT) vessels, with few cape-size vessels (120,000-150,000 DWT).

**Top 5 - Indonesian Export Destination in 2016, 2017, and 2018**



**Destination Countries for Indonesian Coal Exports (APBI, 2020)**



In terms of volume, it is estimated to be less than 5% of our total exports. There are exports of thermal coal to Singapore, the Philippines, Myanmar, Vietnam, and Malaysia, as well as semi-soft coking coal (non-thermal) to Japan. These regulations still do

not fully address the aspirations of coal exporters to avoid disruptions and additional costs.

### ***Online Seafarer Book***

In accordance with Minister of Transportation Regulation No. KM. 30 of 2008 regarding Seafarer Identity Documents, every crew member on a commercial vessel with a tonnage of 35 GT or more, for motor vessels with a tonnage of 105 GT or more, and for traditional vessels or fishing vessels with a length of 12 meters or more is required to have a Seafarer Book. However, with the issuance of the online Seafarer Book innovation by the Directorate General of Sea Transportation (<https://pelaut.dephub.go.id/>), seafarers applying for a Seafarer Book can enjoy convenience and certainty. The process is more transparent, faster, and can be accessed from anywhere.

Additionally, the Online Seafarer Book program aims to register the number of Indonesian seafarers in the database of the Directorate General of Sea Transportation. This makes it easier for the government to monitor Indonesian seafarers and prevent fraudulent practices related to the issuance of Seafarer Books, such as counterfeiting, inaccurate seafarer data, seafarers having more than one Seafarer Book, and manipulation of sailing experience records.

### ***Policy on Seafarer Identification Documents***

The policy governing seafarer identification documents is regulated by the Minister of Transportation's Decree No. 30 of



2008 on Seafarer Identification Documents. This policy reflects the Indonesian government's commitment through the Ministry of Transportation, the Directorate General of Sea Transportation, and BPSDM Transportation to address the needs of Indonesian seafarers. According to data from the International Labor Organization (ILO), Indonesia is one of the largest producers of seafarers globally.

The skills of Indonesian seafarers have garnered recognition from several countries worldwide. This is evident from the significant number of Indonesian seafarers working on foreign vessels, ranking third after China and the Philippines. To keep up with rapid technological advancements, the Directorate General of Sea Transportation has improved its services and streamlined the process of obtaining Seafarer Books. One of the ongoing programs is the Mobile Seafarer Book Service.

The Mobile Service for online seafarer book registration is designed for seafarers who need to apply for new Seafarer Books or replace expired ones. An Indonesian seafarer undergoing Basic Safety Training (BST) commended the government's positive steps in fostering closer ties between the government and service users. He expressed that such government programs are highly beneficial for Indonesian citizens seeking employment opportunities in the maritime sector. The ability to simultaneously obtain a BST certificate while applying for a new Seafarer Book makes the process more efficient. And previously, the Head of the Tanjung Priok Main Shipping Office issued a decree regarding the Mobile Registration Service Team for Online Seafarer Book Registration.

## *Conclusion*

The weaknesses of the system established by this policy include the fact that not all seafarers understand how to apply for Seafarer Books online, limited internet access in remote areas, and the possibility of system-related fraud. The strengths of the system established by this policy are its innovative use of technology, transparency, ease of access, the recording of seafarer data in the DJPL database, and the prevention of fraudulent practices related to the creation of counterfeit Seafarer Books or inaccurate seafarer data.

## *Policy Related to Marine Tourism*

Based on Regulation of the Director General of Marine Spatial Management Number 7/PER-DJPRL/2017 concerning the Distribution of Government Assistance in the Form of Marine Tourism Infrastructure Development. The aim is to provide stimulus to coastal communities, especially marine tourism operators, to develop the sustainable potential of marine tourism through the provision of goods, as well as the rehabilitation or construction of buildings to increase the income of coastal communities and attract tourists to visit.

### Program

1. Recipients of assistance are coastal communities or stakeholders who submit proposals either directly or through Provincial/District/City Offices.
2. The Directorate General of Marine Spatial Management will identify, select, and verify potential recipients of

assistance from the received proposals, which can be delegated to Provincial/District/City Offices. Several criteria considered in determining recipients of assistance include:

3. Location, the area to be developed is located in coastal areas with the potential for development as a marine tourism development area.
4. Recipients, priority is given to community groups and indigenous community groups that can develop the potential of marine tourism as proposed. The assistance provided includes:
  - a. Tourist boats/ships
  - b. Tourist huts
  - c. Information huts
  - d. Location signboards, information boards, and directional signs

This policy has been very helpful for small/pioneer marine tourism operators with various government assistance provided. The number of areas that have received assistance from the government in this regard is 3 areas in 2017, 3 areas in 2018, and 20 areas in 2020. Due to the limitations of government assistance provided to marine tourism operators, they continue to seek investment from the private sector and support from local governments for the development of their tourist sites.

Marine tourism is an essential contributor to Indonesia's economy. However, it is crucial to pay attention to the marine ecosystem to preserve the marine resources while developing it. Indonesia has unique advantages for marine tourism activities,

such as ideal coastal and marine areas, which are perfect for activities like diving, snorkeling, fishing, and surfing. These activities attract tourists from around the world each year, with Bali, Wakatobi, Raja Ampat, and Komodo Island being some of the world-renowned marine tourism destinations in the country.

Indonesia is the center of the world's coral triangle and has a high biodiversity, including 590 coral species, 2,057 fish species, 12 seagrass species, and 34 mangrove species, making it an ideal destination for scientific diving, conservation, education, and underwater photography. The country's tropical geography with warm weather and year-round sunshine is another advantage for marine tourism activities.

In 2019, tourism contributed 15% to the national GDP, earning foreign exchange of IDR 275 trillion. Marine tourism has only recently contributed USD 1 billion to the tourism sector, which is lower than Malaysia's USD 8 billion. However, Indonesia has 33 marine tourism destinations compared to Malaysia's 11.

Despite the benefits of marine tourism, its management has not been optimal. The government's vision of the Global Maritime Fulcrum makes marine tourism a priority. But, the rapid growth of this industry has led to issues that affect the lives of local communities, especially those living on the coasts or small islands. They are often overlooked and become victims, indicating potential resource and marine space seizure (ocean grabbing) by marine tourism businesses. Thus, the government should pay attention to these issues.

The development of marine tourism should consider the sustainability of resources, ecosystems, and the livelihoods of local communities. Local communities should not become victims of the marine tourism industry. Therefore, a new approach to marine tourism development based on local wisdom and culture is essential. The widespread resource and marine space seizure and coastal areas through the marine tourism industry remain a structural and cultural problem. Additionally, there is an exclusive control of small islands in Indonesia by foreign nationals, which limits the access of local communities. Initially, the government policy offered 31 small islands to foreign parties, and as a result, 19 small islands have been managed by foreigners (KIARA, 2015).

Malaysian investors manage Maratua Island in East Kalimantan, Pulau Dua, and parts of the land on Enggano Island in North Bengkulu. The behavior of tourists who indiscriminately dispose of plastic waste threatens the life of marine mammals, such as whales, mermaids, dolphins, turtles, and coral reef ecosystems. The limited involvement of local communities as stakeholders in the marine tourism industry compared to corporations results in the accumulation of capital dominating over the interests of resource sustainability, ecosystems, and local wisdom.

An alternative approach that does not hinder the marine tourism industry and is anti-foreign is essential. Achieving economic and ecological justice is crucial to reduce corporate hegemony in managing marine tourism. The degrowth in sustainable marine tourism governance model is an effective approach for this. It is

a collective-deliberative process that controls market mechanisms and ensures the fair exchange of goods and services for human life. This model prioritizes the quality of human life over quantity, cooperation over competition, and achieves social justice. It ensures social and ecological sustainability, participatory economic management, the fulfillment of basic needs, and a better quality of life for humans, thus creating distributive justice in terms of space and resources.

The degrowth concept in marine tourism can be compared to the biological life of animals and plants that ensure the sustainability of ecosystems naturally. Policies for marine tourism governance should prioritize ecologically-oriented tourism governance that ensures the natural metabolic processes in the web of life in coastal and marine areas. The human body cannot intake excessive food without control. It needs to consider its ecological balance so that metabolic processes can continue normally. Similarly, human actions that seek high economic growth in marine tourism and disregard its natural metabolism can lead to the destruction of coastal and marine natural resources. The contribution of marine tourism to national and regional economic growth can be realized through this approach when activities have achieved income distribution, economic justice, and ecological justice. Thus, it contributes to economic growth at both the regional and national levels.

The governance model for marine tourism should prioritize labor-intensive activities rather than capital-intensive ones. This orientation creates jobs and reduces unemployment. The ownership of resources should prioritize the involvement of the

local community over corporations that often block their access. This means that collective-deliberative principles and participatory management prioritize the local community. This can encourage innovation and the creation of community-based technology. Here, technology-based social entrepreneurs supporting marine tourism activities can emerge. As a result, a high quality of life, spatial and resource distribution justice, and social justice can be achieved. The scale of marine tourism development should be small and medium-sized enterprises, including cooperative institutions and village-owned enterprises.

The state plays a role in providing capital schemes and affirmative policies (tax incentives, licensing, and professional human resource training) to increase local capacity in its governance. What about infrastructure? The government doesn't need to build large, capital-intensive infrastructure. It is better for the government to revitalize the bio-infrastructure in coastal and marine areas that have been degraded, such as rehabilitating mangrove forests and coral reefs. Accommodation facilities are more ethnically oriented and use local raw materials, such as cottages and lodges for tourists. This does not require high costs because it uses local natural resources such as old coconut trunks. In addition, household craft models (home industry) for souvenirs, local cuisine, and snacks for tourists can be developed.

Fourth, development is not massive but adaptive and in line with local resources, culture, and wisdom, so it does not result in destructive behavior towards the environment and communities

without reducing its economic benefits. This development makes it easy to control and supervise. Especially with regard to the behavior of tourists who indiscriminately dispose of plastic waste, which can damage coral reefs, mangroves, and marine biota if it enters the sea. Fifth, the development of marine tourism depicts a unique way of life and is characterized by a sense of family, brotherhood, and collectivism, creating social interaction between local communities and tourists.

Ecologically aware tourists automatically enjoy natural life and immerse themselves in the lifestyle, cuisine, and culture of the local community without changing the natural landscape and disrupting ecosystems. Sixth, the model is deliberative democracy that prioritizes the participation and culture of the local community in decision-making for its management. This approach can be applied in a context that is not based on custom or culture, as long as there are political-economic policies at the central and regional government levels that do not only focus on corporatism. Instead, they provide space for the participation of local and indigenous communities in their governance.

## *Conclusion*

This approach model is essentially an antithesis to the capitalist-exploitative model that marginalizes local and indigenous communities. This model is well-suited for development in areas that are still authentic, including those within marine conservation areas. We hope that through the implementation of this model, there will no longer be evictions and the plundering of marine space and its resources (ocean grabbing). For example,



the corporate seizure of ownership rights over tourist islands, especially by foreign corporations. This is because this approach will have an impact on the national and archipelagic-based economy, reduce unemployment, and minimize the degradation of natural resources and ecology.

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## **CHAPTER 2**

# **DISTORTIVE PUBLIC POLICY**

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### **DISTORTIVE PUBLIC POLICY**

Glang Perkasa et al.<sup>2</sup>

Public policies created by governments can sometimes have unintended negative consequences and may deviate from their intended goals. In some countries, these policies can be particularly destructive. The maritime sector in Indonesia is not immune to these issues. This study examines several distortive policies in the sector and proposes solutions that can serve as a learning experience for both the government and stakeholders. The aim is not to criticize these policies but to identify areas for improvement. These policies include:

1. Lobster Seed Export Policy in Indonesia
2. Maritime Transportation Empowerment Training (DPM) Policy
3. Government Regulation No. 85 of 2021 Concerning Types and Tariffs for Non-Tax State Revenues Applicable to the Ministry of Marine Affairs and Fisheries
4. Mandatory Biofuel Provision and Usage Policy
5. Concession and Other Forms of Cooperation Policies Between Port Operators and Port Enterprises in the Field of Ports
6. Protection Policy for Indonesian Seafarers on Foreign Vessels

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<sup>2</sup> Gilang Prakasa, Shantika Dita Putri, Anwar Ahmad, Murdhifin Zulmy Widya K., Atika Khoirul Umaroh, Filemon, Mokhamad Aupal Huda, Fitri Andy

### *Lobster Seed Export Policy*

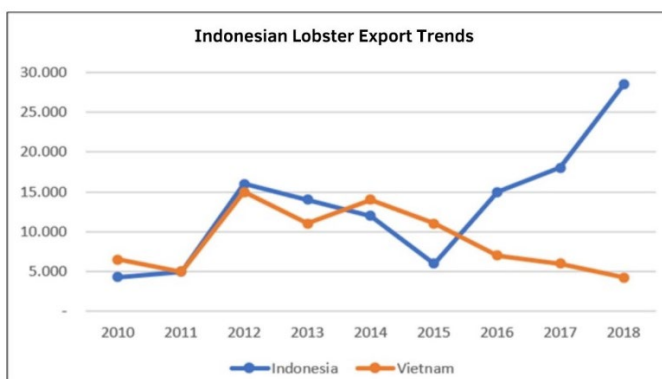
Before 2015, there were no specific regulations in place governing lobster harvesting in Indonesia. From 2011 to 2014, the export of lobster seeds from the country increased steadily and sharply. This was beneficial to Indonesia as it brought in a significant amount of foreign exchange. However, the potential loss of these valuable marine resources from Indonesian waters outweighed this benefit. The lack of export quotas led to massive exploitation of lobster seeds without regard for their population.

Indonesia has abundant resources and has the potential to produce 50 million lobster seeds in a year, making it the largest lobster exporter in the world. However, uncontrolled and massive harvesting, combined with the absence of restrictions on lobster seed exports, has endangered the population of this economically valuable marine species. Continuous and excessive harvesting without allowing for reproduction will inevitably result in the decline of their presence in the wild. Furthermore, Indonesia lacks lobster hatchery technology and depends solely on natural lobster seed collection.

### *Closing the Lobster Seed Export*

In 2015, Minister Susi Pudjiastuti in the Ministry of Maritime Affairs and Fisheries led Indonesia to issue two Ministerial Regulations, No. 1 of 2015 and No. 56 of 2016, aimed at preventing unwanted circumstances and protecting marine life. These regulations govern lobster harvesting in the country and specify the size of lobsters that can be exported. The export of

lobsters laying eggs is prohibited under these regulations. The purpose of these regulations is to allow lobsters to reproduce before they are caught, and to protect their population in Indonesian waters while increasing the value of Indonesian lobster exports.



Source: TradeMap 2019

The regulations proved effective in 2016, leading to a significant increase in lobster exports. Additionally, due to a ban on lobster seed exports, Vietnam experienced a significant decrease in lobster exports. Despite these regulations, however, cases of lobster seed smuggling from Indonesia continue to occur. From 2015 to 2019, there were 272 smuggling cases, which could have caused a potential loss of IDR 1.626.87 billion to the country.

### ***Losses Due to Ministerial Regulation No. 56 of 2016***

According to Rokhmin Dahuri during the National Webinar "Lobster Cultivation Technology: Status and Dissemination

Efforts," there have been several losses due to Ministerial Regulation No. 56 of 2016, including:

1. The destruction of the soft-shell crab farming and trade business, with an average size of 50 - 150 grams per crab, and cultivated egg-laying crabs. This resulted in hundreds of thousands of farmers, processors, and traders becoming unemployed, the loss of trillions of rupiah in economic value to the region, and the disappearance of multiplier effects.
2. The destruction of lobster seed cultivation businesses with a survival rate of 30% (Priyambodo, 2019) and the trade of lobster seeds. This resulted in hundreds of thousands of fishermen, farmers, and traders becoming unemployed, the loss of trillions of rupiah in regional economic value, the loss of around US\$1.1 billion per year in lobster seed foreign exchange, and the waste of multiplier effects.
3. An increase in illegal lobster seed exports, resulting in trillions of rupiah in losses for the country each year (KKP, 2019).
4. The prohibition of lobster seed cultivation negatively impacted the sustainability and profitability of the lobster industry. This is because the survival rate of lobster seeds to become lobster for consumption is only 0.004% compared to the 30% survival rate in cultivation.

### ***Lobster Seed Export Permits***

In 2019, President Jokowi appointed Edhi Prabowo as the

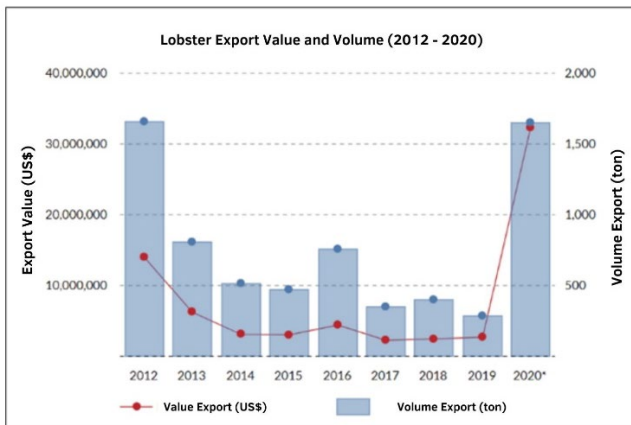


Minister of Maritime Affairs and Fisheries in the "Indonesia Maju" cabinet for the 2019-2024 period, replacing Susi Pudjiastuti. Minister of Maritime Affairs and Fisheries, Edhy Prabowo, reversed the ban on lobster seed exports that was in place during Susi Pudjiastuti's era. The reason for this decision was the large number of fishermen who depended on lobster seed exports and the rampant issue of smuggling. The previous regulation was replaced with Regulation of the Minister of Maritime Affairs and Fisheries of the Republic of Indonesia No. 12 of 2020 concerning the Management of Lobsters (*Panulirus* spp.), Crabs (*Scylla* spp.), and Blue Swimming Crabs (*Portunus* spp.) in the Territory of the Republic of Indonesia. This new regulation allowed the export of lobster seeds from Indonesian waters, which had been prohibited previously. However, this decision was contrary to the protection of lobster seeds as germplasm that needed to be preserved for their unique characteristics, passed down through generations to prevent them from disappearing from Indonesian waters.

Six months after the export permit was granted, the Minister of Maritime Affairs and Fisheries was arrested by the Corruption Eradication Commission (KPK) in connection with alleged corruption related to lobster seed export activities. This policy generated mixed reactions. The Minister of Maritime Affairs and Fisheries believed that exporting lobster seeds could help fishermen, as relying solely on cultivation would take too long, about 8-12 months, while the lobster seed phase is relatively short. Exporting lobster seeds certainly helped to increase cash flow for fishermen. However, academic studies conducted by the Ministry of Maritime Affairs and Fisheries found that, in nature,

only 1% of lobster seeds could survive. In contrast, with cultivation, the survival rate of lobsters could be as high as 70%.

Even though the export permit for lobster seeds was opened, the Minister of Maritime Affairs and Fisheries emphasized that the true focus should remain on cultivation. The regulations also included an obligation for exporters to engage in lobster farming before being allowed to export lobster seeds. However, after the export permit for lobster seeds was opened, the number of exported lobster seeds soared.



Source: lokadata

Vietnam has become one of the biggest purchasers of lobster seeds since the export of these seeds was allowed, particularly from June to September. Prior to the introduction of seed export permits, Vietnam was a significant competitor of Indonesia. However, at the time the policy was implemented, the Ministry of Finance had not yet established the tax rates and non-tax state

revenue (PNBP) for lobster seed export activities. They were still using the old regulations intended for lobster exports, which only required a PNBP fee of Rp. 15,000 to Rp. 60,000 per 1,000 seeds, a Health Certificate fee of Rp. 5,000, and a clinical examination fee of Rp. 250 per 1,000 seeds. The Indonesian Traditional Fishermen's Union highlighted the significant price difference of lobster seeds. Exporters purchased them at prices ranging from Rp. 10,000 to Rp. 16,000 but sold them to importers at prices between Rp. 100,000 and Rp. 170,000. Even after the policy allowing lobster seed exports in Indonesia, cases of lobster seed smuggling continued to occur.

### *Reissuing the Ban on Lobster Seed Export*

The Minister of Maritime Affairs and Fisheries of the Republic of Indonesia, Wahyu Sakti Trenggono, enacted Regulation of the Minister of Maritime Affairs and Fisheries of the Republic of Indonesia Number 17 of 2021 on June 4, 2021. The regulation pertains to the management of lobsters (*Panulirus* spp.), crabs (*Scylla* spp.), and mantis shrimps (*Portunus* spp.) in the territorial waters of the Republic of Indonesia. This regulation includes a ban on the export of lobster seeds (BBL). Minister Wahyu Sakti Trenggono had committed to this ban since the beginning of his tenure, stating that lobster seeds are a national treasure and should only be cultivated until they reach a consumable size.

The Indonesian Lobster Entrepreneurs Association (GPLI) expressed their support and appreciation for Regulation No. 17 of 2021 in response to the ban on BBL exports. They believe that

the regulation will improve the welfare of fishermen and lobster farmers in Indonesia and eventually make Indonesia the world's largest exporter of consumable-sized lobsters. The Central Board of the Indonesian Traditional Fishermen's Association (DPP KNTI) also reviewed the regulation and received input and suggestions from KNTI members across Indonesia, especially in the West Nusa Tenggara (NTB) Province.

Compared to previous regulations, such as Regulation of the Minister of Maritime Affairs and Fisheries Number 12 of 2020 and Regulation of the Minister of Maritime Affairs and Fisheries Number 56 of 2016, Regulation No. 17 of 2021 prohibits lobster seed export and encourages lobster farming within the country. This policy provides an opportunity for small-scale fishermen to engage in lobster seed collection and lobster farming. However, some articles and points of the regulation require critical assessment for technical strengthening, as suggested by Ling. For instance, Article 2 Paragraph (2) should consider estimates of fishery resource potential, the allowed catch quantity, and the level of fishery resource utilization. There is also a need for stricter supervision, as deviations can occur in the collection of lobster seedlings (puerulus) as referred to in Article 2 Paragraph (3). The collection of lobster seedlings (puerulus) as referred to in Article 2 Paragraph (4) should be conducted only by small-scale fishermen who are registered in a fishermen's group at the lobster seedling collection location and have been designated by the Provincial Fisheries Service.

As per the article, it is crucial to ensure that every small-scale fisherman is registered and can join the lobster seedling

fishermen's group. Moreover, Provincial Fisheries Services that obstruct this process should face sanctions. However, the Fisheries Services are located in urban areas, making it challenging for fishermen, especially those in remote and frontline islands, to access permits. Therefore, outreach efforts should be made to ensure that small-scale fishermen are not victimized by lobster seedling collection without permits due to the inaccessibility of licensing, which causes delays.

According to Article 2 Paragraph (5), small-scale fishermen must register with the Online Single Submission (OSS) Agency to carry out lobster seedling collection (puerulus), either directly or facilitated by the Fisheries Service. However, accessing the OSS may be problematic for small-scale fishermen due to the lack of capacity and resources, such as equipment (smartphones/computers) and internet connectivity in remote areas. Therefore, the Fisheries Services and field assistants must play an active role in socializing and building the capacity of small-scale fishermen to access the OSS.

Regulation No. 17/2021 provides equal treatment for micro to large-scale cultivators in all categories of nursery and cultivation. However, without strict regulation and oversight, large investors may monopolize or form an oligopoly in lobster farming, leaving no affirmative action for micro and small-scale cultivators. To prevent this, the government should facilitate support and empowerment for micro and small-scale cultivators in terms of space, capital, technology, and marketing certainty. Additionally, the government should encourage the economic organization of small-scale fishermen and cultivators through

cooperatives to participate in these activities.

### ***Impact of Lobster Seed and the Potential of Indonesia's Lobster***

Lobster is a significant export commodity in Indonesia's fisheries sub-sector, and it is an essential component of the country's shrimp fishery. Its trade value and potential are higher compared to other fisheries products. Indonesia is home to three lobster species in the Palinuridae family: *Palinustus*, *Panulirus*, and *Puerulus*. However, the genus *Panulirus* has the most potential for development and economic value due to its high demand and export market. Despite being lucrative, intensive lobster harvesting poses a significant threat to the sustainability of resources and can lead to habitat and ecosystem damage due to practices like using explosives and potassium.

While increased exports can boost foreign exchange earnings, the lucrative lobster seed market has led to overfishing in Indonesia. Overfishing comes in two forms: growth overfishing, which involves catching excessive numbers of small-sized lobsters before they can grow to a catchable size, and recruitment overfishing, which involves catching too many mature lobsters, reducing the number of breeders significantly and resulting in a limited number of new recruits. Unfortunately, both types of overfishing occur simultaneously in the case of lobsters in Indonesia, affecting population balance and stock availability in the wild.

The prices of both lobster seeds and mature lobsters have increased over the years, with a growing number of destination

countries for exports. However, lobster farming relies on collecting seeds from the wild, which are continuously exported, including lobsters that are in the midst of reproduction. As a result, lobsters of all sizes have been exported without restrictions. It is necessary to implement sustainable lobster harvesting practices to maintain the ecological balance and ensure the continuity of the lobster industry in Indonesia.

### *Conclusion*

Reflecting on the polemic of lobster seed exports and the export of Group II lobsters provides some policy notes and recommendations to strengthen lobster resource management in Indonesia in the future. Some considerations include biological resource factors and the socio-economic aspects of lobster fisheries, allowing for comprehensive resource management. The conclusions and lessons to be drawn are:

1. The establishment of a size limit for catch has been appropriately based on the size of first gonad maturation, typically 4-5 cm or 100-150 g, and excluding those in breeding conditions.
2. Technical mechanisms and spatial planning for lobster farming need to be developed to avoid spatial conflicts.
3. There should still be policies and regulations for technical and management assistance to traditional fishermen and micro and small-scale lobster cultivators.
4. It is necessary to develop a strategy and a roadmap for lobster farming (spatial planning, capital, infrastructure, feed, disease prevention, seed prices, and post-harvest

- prices).
5. Rules on monitoring the possibility of lobster seed smuggling (either between regions or abroad) are needed.
  6. Strengthening the empowerment and protection of fishermen by providing the necessary support.

### ***Community Empowerment Training (DPM) in Marine Transportation***

Indonesia, as a large maritime nation, aspires to become a global maritime hub, and the government has been implementing various strategies to achieve this goal. One of the key strategies is to dominate the field of transportation, especially marine transportation. This includes the development of ports across the country as part of the government's "Maritime Highway" program, which began in 2015. There have also been recent reforms in the management and business processes of port operators, including Pelindo, through mergers and restructuring.

One sector deeply influenced by these government programs is Human Resources (HR) in the marine transportation sector. It has been observed that Indonesia lacks sufficient human resources in the maritime sector, as highlighted by the Minister of Transportation, Budi Karya Sumadi:

"The number of sailors is limitless, ranging from those working on international vessels to domestic waters. Therefore, we have a heavy task ahead to not only engage in formal activities but also provide maritime education to the



public. We are preparing maritime education for 100,000 people. The President himself has pointed out that the competence of our sailors is not yet optimal." - Minister Budi Karya Sumadi during the graduation of STIP students, CNBC, May 9, 2018.

In response to this need, the Indonesian Ministry of Transportation introduced the Community Empowerment Training (Diklat Pemberdayaan Masyarakat or DPM) program in marine transportation. This initiative was a response to President Joko Widodo's concerns and was outlined in Regulation of the Minister of Transportation Number 63 of 2018, which amended Regulation of the Minister of Transportation Number 84 of 2009 concerning Procedures for Providing Education and Training Assistance and Scholarships in the Field of Transportation. It was further detailed in the Regulation of the Head of the Human Resources Development Agency for Transportation Number PK.03/BPSDM of 2018, which provides guidance on the implementation of education and training for community empowerment.



Activity of DPM

### ***Marine Transportation DPM***

DPM in Marine Transportation is a program aimed at the maritime community and is provided free of charge through the government's budget from the Ministry of Transportation. The program offers various types of maritime training to the community, with a particular focus on those with limited financial means. The DPM program has positive intentions and aims to benefit the community, especially individuals aspiring to be sailors or those without prior maritime skills or certifications. It is implemented through collaborations between the Technical Implementation Units (Unit Pelaksana Teknis or UPT) under the Human Resources Development Agency for Transportation (BPSDM Perhubungan) and local government agencies, especially the Maritime and Fisheries Agencies.

According to data from the Ministry of Transportation's website, in 2018, over 100,000 individuals received certificates through

the DPM program. The following year, this number increased to over 160,000 certificates. However, due to the COVID-19 pandemic and government budget reallocations, the numbers for 2020 and 2021 are expected to be lower.

While these efforts are addressing the need for maritime professionals, it's important to note that before the implementation of the Community Empowerment Training (DPM) for sailors, each Technical Implementation Unit (UPT) under the Human Resources Development Agency for Transportation for Maritime Transportation (BPSDMPL) conducted similar paid training programs. These programs were in line with the standards set by the Human Resources Development Agency for Transportation. In Indonesia, there are 12 UPTs offering maritime training. This figure includes UPTs from the Ministry of Transportation but does not cover private institutions that provide similar training. It's also essential to recognize that the number of sailors in Indonesia, based on data from the Directorate of Shipping and Seafarers of the Ministry of Transportation, stands at 1,248,922, with a total of 5,220,256 maritime certificates as of 2021.

### ***Do Indonesia Really Lack Seafarers?***

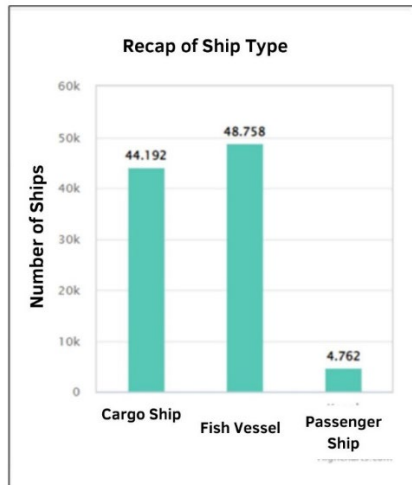
It should be noted that before the implementation of the Community Empowerment Training Program (DPM) for seafarers, all Technical Implementation Units (UPT) under the Marine Human Resources Development Agency of the Ministry of Transportation also conducted paid training programs similar to those carried out in the DPM. This is outlined in the Ministry

of Transportation's strategic plan (RenStra), which sets a target number of participants for Marine Transportation Training Programs. The annual target is around 20,000 certificates for each Technical Implementation Unit (UPT). In Indonesia, there are 12 UPTs that provide maritime training. This number only covers UPTs under the Ministry of Transportation and does not include private institutions that offer similar training. According to data cited from the Directorate of Shipping and Seafaring (Ditkapel) of the Ministry of Transportation in 2021, the number of seafarers in Indonesia amounted to 1,248,922 individuals, with a total of 5,220,256 seafarer certificates.

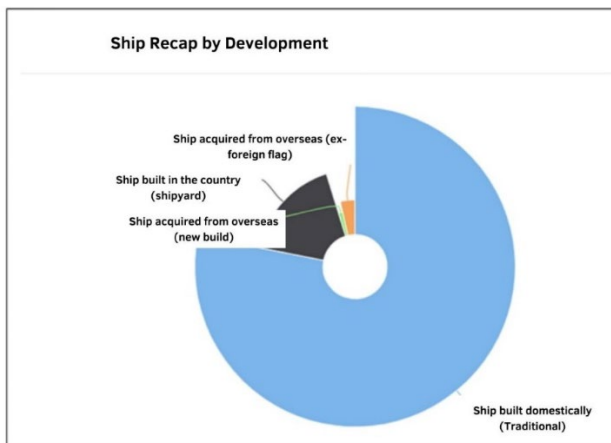
Number of Seafarers by Gender as of December 18, 2021		
Men	1,221,789	Sailors
Woman	27,133	Sailors
Total	1,248,922	Sailors

Number of certificates issued as of December 18, 2021		
Fish Vessel - FV	19,261	Certificate
Certificate of Competency - COC/CC	524,335	Certificate
Certificate of Endorsment - COE/CE	188,081	Certificate
Certificate of Proficiency - COP/CP	4,488,579	Certificate
TOTAL	5,220,256	Certificate

Source: <https://pelaut.dephub.go.id/#dtMasa>



Source: <https://kapal.dephub.go.id/index.php/monitoring>



Source: <https://kapal.dephub.go.id/index.php/monitoring>

There is a significant disparity between the number of seafarers and the number of vessels present in Indonesian waters.

According to reports, there are approximately 97,712 vessels in Indonesian waters as of 2021. Some maritime practitioners and observers in Indonesia are concerned about the mismatch between the supply and demand of seafarers and vessels. One possible factor contributing to the oversupply of seafarers is the existence of the Maritime Community Empowerment Training (DPM) in the maritime transportation sector. The number of seafarers has increased too quickly compared to the growth in the number of vessels they work on. This has led to arguments that:

“Indonesian seafarer products are currently in need of control. The opening of maritime study programs should be regulated, taking into account their capacity and market demand. If left unchecked, the oversupply of seafarers in Indonesia will worsen. The significant unemployment among seafarers must be addressed promptly. The DPM program, especially in the maritime sector, should be redesigned to match the needs of seafarers in the job market. DPM uses government funds through Technical Implementation Units (UPT) under the Human Resources Development Agency of the Ministry of Transportation in various regions in Indonesia. It should be ensured that DPM is genuinely beneficial and prepares individuals for employment, rather than contributing to the unemployment of seafarers who are already abundant.”

It has become more challenging for even seasoned seafarers to secure employment in today's market. Increased global competition, particularly from countries such as China, Vietnam, Thailand, and Malaysia, has made the industry even more

competitive. As a result, Indonesia, which was once seen as a potential supplier of seafarers, has been affected.

### *Effectiveness of DPM*

Many believe that the Maritime Community Empowerment Training (DPM) program for the maritime transportation sector is somewhat misdirected. While the program undoubtedly benefits communities, especially those who had not previously received formal maritime education, the hope was that this program would improve the quality of human resources, especially for fishermen. The knowledge gained was expected to be used for work on fishing vessels or small Gross Tonnage (GT) vessels. However, the reality on the ground is that many individuals in the maritime transportation sector, after obtaining a certificate from the DPM program, try to obtain other types of certificates that allow them to work on commercial vessels.

This is not inherently wrong, but it increases the competition among commercial seafarers, who were already numerous. The hope that the DPM program would provide new job opportunities for previously unskilled individuals has turned into a boomerang. Instead of increasing employment prospects, it has reduced the chances for pre-existing workers. This is why the DPM program for the marine transportation sector is considered somewhat misguided.

### *Conclusion*

Indonesia's ambition to become a global maritime fulcrum requires improvement in several sectors. With an oversupply of

seafarers, policymakers can evaluate this situation to make informed decisions. The Maritime Highway program urgently needs more vessels, particularly pioneering ships. Reallocating the budget for the Community Empowerment Training (DPM) program to more targeted areas can help achieve this goal. For instance, investing in additional pioneering ship fleets can reach remote areas and reduce price discrepancies. It is also crucial to evaluate the absorption of graduates from maritime schools into the job market. Decisions about the number of trainee candidates for maritime competence training should also be carefully considered.

***Government Regulation No. 85 of 2021 on Types and Rates of Non-Tax State Revenues Applicable to the Ministry of Maritime Affairs and Fisheries***

President Joko Widodo of the Republic of Indonesia signed Government Regulation (PP) No. 85 of 2021 on August 19, 2021, which sets out the types and rates of non-tax state revenue applicable to the Ministry of Maritime Affairs and Fisheries. This new regulation supersedes the previous PP No. 75 of 2015 and serves as a reference for the Ministry in managing non-tax state revenue in the fisheries and maritime sector. Article 22 of the new regulation states that PP No. 75 of 2015 is null and void upon the effective date of PP No. 85 of 2021. The regulation comprises 23 articles and an appendix detailing the different types and rates of non-tax state revenue. This regulation governs 18 types of non-tax state revenue in the maritime and fisheries sector, including:

1. Exploitation of fisheries natural resources



2. Fishery ports
3. Fish catching development
4. Use of facilities and infrastructure in line with duties and functions
5. Laboratory inspection/testing
6. Maritime and fisheries education
7. Maritime and fisheries training
8. Maritime and fisheries data analysis
9. Certification
10. By-product from duties and functions
11. Conservation area entry tickets
12. Approval of marine spatial utilization activities
13. Approval of non-commercial fishing for pleasure and tourism purposes
14. Sea-use-related business permits
15. Exploitation of protected and/or restricted fish species
16. Administrative fines
17. Compensation
18. Transfer of intellectual property technology

According to the Ministry of Maritime Affairs and Fisheries website ([kkp.go.id](http://kkp.go.id)), PP No. 85 of 2021 is based on Law No. 11 of 2020 concerning Job Creation. This new regulation implements changes in the way non-tax state revenue is collected, specifically in pre-production collection, post-production collection, and contract systems. This regulation is important because it allows the Ministry of Maritime Affairs and Fisheries to implement three breakthrough programs from 2021 to 2024, one of which aims to increase non-tax state revenue from Capture Fisheries Natural Resources to improve the welfare of fishermen. The new

regulation provides more specific details regarding the types of non-tax state revenue as compared to the previous regulation. The goal of implementing this PP is to ensure that non-tax state revenue is effectively managed and utilized to improve public services and support national development.

### ***PNBP (Non-Tax State Revenue)***

State revenue is fundamentally divided into two categories: tax revenue and non-tax revenue. Non-Tax State Revenue (PNBP) encompasses all central government revenue that does not originate from taxation. In comprehensive terms, PNBP is the collection paid by individuals or entities in exchange for direct or indirect benefits from services or the use of state resources and rights, based on legal regulations, which become the revenue of the Central Government (in this case, the President of the Republic of Indonesia), excluding tax revenue and grants, and managed within the state budget revenue and expenditure mechanism. PNBP encompasses various objects, including:

1. The utilization of natural resources.
2. Services.
3. The management of separated state assets.
4. The management of state-owned goods.
5. Fund management.
6. Other state rights.

PNBP is regulated by Law 9/2018 regarding Non-Tax State Revenue, which repeals the previous law, Law No. 20 of 1997. The law explains the definition of PNBP, the objects and subjects

of PNBP, tariff rates, PNBP management, PNBP collection, and the use of PNBP funds. The objectives of PNBP management include:

1. Achieving national self-reliance by optimizing state revenue sources to strengthen fiscal resilience and support sustainable and equitable national development.
2. Supporting government policies aimed at improving the welfare of the people, enhancing quality economic growth, income distribution, and environmental preservation for intergenerational continuity, while considering fairness.
3. Realizing clean, professional, transparent, and accountable government services to support good governance and improved public services.

To ensure transparent and accountable PNBP management, the principles of PNBP management include:

1. All PNBP must be deposited into the State Treasury.
2. Revenues must be deposited in full into the State Treasury on time.
3. Ministry/Agency revenues cannot be used directly to finance expenditures.
4. All PNBP is managed within the State Budget system.
5. All revenues that belong to the state in the respective budget year must be included in the State Budget.

### *Controversy*

In the current situation where the pandemic is eroding the economy in various sectors, the implementation of several new regulations by the government is seen as a bold and risky step, especially when these regulations are drafted without involving the users/parties who will be affected by them. One of these regulations is PP Number 85 of 2021. Initially, the establishment of this regulation was seen as a good way to regulate and increase the state's revenue, especially from non-tax sectors. However, in practice, there are several aspects of the regulation that have become points of contention and debate, including:

1. **Increased Tariffs:** There is an increase in tariffs in several types of taxes, which is perceived to be burdensome for businesses in the maritime and fisheries sector, especially considering the ongoing pandemic.
2. **Lack of Classification for Fishermen:** The regulation does not classify fishermen into small, medium, or large categories. This is a concern as it may lead to unfairness, with all fishermen being subject to the same tax burden regardless of their differing income levels, potentially burdening small-scale fishermen.
3. **Multiple Tariffs:** Many tariffs apply to fishermen, which could create a significant burden that does not correspond to their income. For instance, a single vessel could be subject to three tariffs – one for the vessel, one for the fishing gear it carries, and another for port entry permits.
4. **Safety Concerns:** Most users of vessels ranging from 5-10 GT are small-scale fishermen. The various tariffs applied may force them to travel farther at sea simply to pay the

taxes, regardless of their safety.

5. Risk of Manipulation and Monopoly: The pre- and post-production levies could lead to manipulation and monopolistic practices, potentially resulting in a loss of potential state revenue and threatening fishermen.
6. The obligation of pre-production fees also has the potential to hinder fishermen who are about to set sail but must pay in advance. Non-compliance with these fees may result in the withholding of maritime documentation by field officers.
7. Inequitable Tariff Structure: The tariff structure setting a 5% rate for vessels of 5-60 GT, 10% for 61-1000 GT, and 25% for >1000 GT is considered unsuitable for local human resources (SDM) and more beneficial to large companies. This could open the door for more foreign vessels to operate in Indonesian waters.
8. Inadequate Basis for HPI: The determination of Fish Reference Price (HPI) for calculating fisheries levies and fish catch productivity is seen as lacking a comprehensive basis because it does not involve relevant community organizations, such as fisher associations.
9. HPI Neglects Season, Quality, and Location: The HPI value does not consider seasonal variations, fish quality, or catch locations. This means that if the caught fish's price is significantly lower than the set benchmark, fishermen would incur losses.
10. Lack of Consideration for Existing Levies: The regulation imposes a 30% levy on the benchmark price multiplied by volume for sea sand. This is perceived as an additional burden on top of other taxes, such as Value Added Tax

(PPN), Land and Building Tax (PBB), and Income Tax (PPh), which are not negligible and do not commensurate with the revenue generated.

## *Conclusion*

In the formulation of regulations or laws, the government should consider and consult with the users of those regulations. The government can revise existing regulations or create new ones through open consultations with industry players to incorporate their feedback and concerns. Regarding PP Number 85 of 2021, the Ministry of Maritime Affairs and Fisheries (KKP) should consider the following:

1. **Reevaluate Applicable Sectors:** Assess whether each sector subject to PNNP is suitable for the current situation.
2. **Review Tariff Increases:** Consider whether the tariff hikes for various types of PNNP are necessary.
3. **Consult Stakeholders:** Involve and listen to the aspirations of stakeholders in the maritime and fisheries sector when establishing regulations.
4. **Introduce Tax Relief:** Implement additional regulations or changes to regulations that provide relief and ease of payment for PNNP, especially for small-scale fishermen.
5. **Comprehensive Public Awareness:** Conduct thorough and comprehensive public awareness campaigns for all stakeholders and individuals involved in the maritime and fisheries sector.
6. **Monitoring and Evaluation:** Continuously monitor and evaluate the implementation of these regulations to

ensure they are applied effectively on the ground.

### ***Policy on Mandatory Provision and Use of Biodiesel (biofuel)***

The government is committed to meeting energy needs by prioritizing renewable energy sources. To achieve this, they have developed strategies such as accelerating renewable energy development, increasing biodiesel supply, improving energy conservation and efficiency, enhancing energy supply for industry, and supporting industries for renewable energy. The production of biodiesel and green fuel is carried out through a phased approach, with smallholder oil palm plantations being empowered for palm oil-based biodiesel production.

As part of their renewable energy development program, the government has made the utilization of biodiesel a priority. To this end, the mandatory B20 program has been implemented, and a target of 9.4 million kiloliters of biofuel development by 2020 has been set. Furthermore, the National Development Planning Agency has finalized the RPJMN 2020-2024, targeting biofuel development up to 10.2 million kiloliters in 2025 with the implementation of B100 policy.

To ensure the mandatory use of biodiesel as a blend in diesel fuel, the Ministry of Energy and Mineral Resources Regulation No. 12 of 2015 concerning the Third Amendment to the Ministry of Energy and Mineral Resources Regulation No. 32 of 2008 on the Provision, Utilization, and Trade of Biodiesel as an Alternative Fuel has been enforced. The phased schedule for the

mandatory use of biodiesel (B100) can be seen in the table below:

<b>Type Of Sector</b>	<b>April 2015</b>	<b>January 2016</b>	<b>January 2020</b>	<b>January 2025</b>	<b>Description</b>
Household	-	-	-	-	Currently not specified
Micro Enterprises Fishery Enterprises, Agriculture Enterprises, Transportation Enterprises	15%	20%	30%	30%	Against total demand
Non PSO Transportation	15%	20%	30%	30%	Against total demand
Industry and Commercial	15%	20%	30%	30%	Against total demand
Power Generation	25%	30%	30%	30%	Against total demand

Source: Ministry of Energy and Mineral Resources Regulation  
No. 12 of 2015

The objectives of implementing the Mandatory Biodiesel program are as follows:

1. To fulfill the government's commitment to reduce greenhouse gas emissions by 29% from the Business as



- Usual (BAU) scenario by 2030.
2. To enhance energy security and independence.
  3. To stabilize Crude Palm Oil (CPO) prices.
  4. To add value through palm oil industry downstream activities.
  5. To achieve the target of a 23% contribution from renewable energy in the total energy mix by 2025.
  6. To reduce petroleum consumption and imports.
  7. To improve the trade balance.

Table 1: Principles of Biofuel Policy Development Framework

Dimensions	Issue	Requirements
Production	Biophysically Sustainable Production	Efficiency
		Best use of available resources is biophysically sustainable
		No negative impacts on ecosystem integrity (e.g. air, water, soil, and biodiversity, climate)
		Effectiveness and Equity
		Helps meet community needs, prioritizes poverty alleviation, and does not exploit the power and vulnerability of a population
	Justice	Responsive
		Responds to the needs and interests of all, giving priority to the most needy populations
		Participation and Inclusiveness
		Involvement of all stakeholders especially those who will be most affected by the decision to be taken

<b>Dimensions</b>	<b>Issue</b>	<b>Requirements</b>
<b>Governance</b>	Legitimacy and Legality	Accountability
		Accountability and compensation mechanisms to hold people accountable for their harmful decisions and actions.
		Cooperation and consensus orientation
		Multiple views, balanced interests, and decision-making through cooperation and consensus.
		Transparency
		Information is accessible and understandable to actors decision-making processes that are open to observation and oversight.
		Rules based on the law
		There is a clear and structured legal framework that is internally consistent and enforceable.

Source: Mairon G. Bastos Lima, Biofuel Governance and International Legal Principles: Is it Equitable and Sustainable? (Melbourne Journal of International Law, 2009)

The mandatory use of biodiesel, the abundance of domestic CPO production and the prohibition of Indonesian CPO products from entering the European Union will lead to the absorption of surplus CPO for domestic consumption. Biofuel is an industry that has cross-sectoral impacts and touches various aspects such

as climate change, deforestation, food security, land use and labor standards. Effective and strong biofuel governance is necessary to avoid negative outcomes in all these areas. Developing biofuel policies that adhere to the principles derived from the Rio Declaration on Environment and Development and principles of good governance are crucial. The diagram (Table 1) depicts these principles.

Biodiesel procurement and development involve business activities in two sectors: upstream and downstream. The production and use of biodiesel rely on the coordinated efforts of multiple stakeholders. The upstream sector focuses on cultivating and harvesting oil palm trees to yield palm oil, a primary raw material for biodiesel production. Actors within this sector exhibit diversity in terms of land ownership, scale, and management approaches. The downstream sector involves activities related to the distribution and marketing of biodiesel, including transportation, storage, and promotional efforts to reach end-users. Biodiesel is utilized as an alternative or blended fuel in various sectors such as transportation, industry, and agriculture, contributing to reduced greenhouse gas emissions.

### ***Biofuel Obligation***

Biofuel Obligation is an implementation of Presidential Regulation (PM) No. 12 of 2015, Article 4. Business entities holding oil fuel trading business permits and direct users of oil fuel must utilize and prioritize biofuel as an alternative fuel produced domestically. This reduces dependency on fossil fuel and crude oil imports from world oil-producing countries. Since

2015, the obligation to provide and use biofuel started with the product known as B15 and progressed to B30 in 2020. B30 is a fuel blend resulting from the mixing of 30% biodiesel with 70% diesel oil. Indonesia is the first country in the world to implement B30.

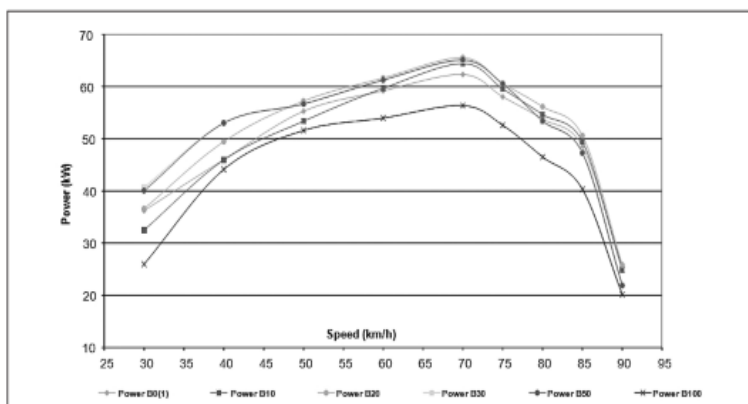
The government has issued several policy instruments to support the program's implementation and ensure the smooth development of biodiesel in both upstream and downstream sectors. In the upstream sector, these policies include Law No. 39 of 2014 on Plantations and Presidential Regulation No. 66 of 2018 concerning Changes to Oil Palm, which provides incentives and funding support from the Plantation Management Agency to gather, develop, and use oil palm plantation funds for the benefit of the palm oil industry.

### *Conclusion*

one of the industries with high usage of Solar/Biodiesel (Biodiesel) fuel is the maritime sector, involving shipping and port business. The majority of primary engines on ships and port equipment are diesel engines, commonly manufactured in Europe, America, or Japan and are generally old. Research conducted by the Agency for Assessment and Application of Technology (BPPT) in 2010 revealed that increasing the plant-based content in biodiesel results in lower engine output. Diesel fuel with 0% plant content (B0) yields the highest power (KW), while using 100% plant content (B100) yields the lowest power.

Another issue faced by maritime entrepreneurs due to

government policies in the maritime sector is the increasing operational and maintenance costs, as biodiesel requires special treatment. Biodiesel contains plant-based compounds known as Fatty Acid Methyl Esters (FAME), which result in an increased frequency of fuel filter usage by up to 50% compared to before switching to biodiesel. Another disadvantage of using biodiesel is a decrease in fuel efficiency, meaning the distance traveled or work produced per gallon of fuel is reduced. The power produced by 1 gallon of biodiesel is about 11% lower than that of diesel fuel (B0).



Source: Martin Djamin & Soni S. Wirawan, BPPT research, 2010

In addition to the increased frequency of fuel filter usage, B30-type fuel contains Fatty Acid Methyl Esters (FAME) as a plant-based element used to increase high cetane numbers and reduce sulfur content. As Biodiesel contains plant-based substances originating from living organisms, biodiesel contains molecular water. In due course, biodiesel stored in tanks will condense as

it reacts with the air inside the tank, resulting in a new layer of water in biodiesel. This phenomenon occurs if the fuel tank is often empty or not filled for an extended period, leading to a chemical reaction between air and water.

Based on research on the use of biosolar (B20) in the fuel system of the Orca 02 Guard Vessel, recommendations for maritime industry players regarding biofuel implementation to avoid negative impacts on the fuel system include:

1. Biodiesel usage requires special handling different from (HSD/B0/Diesel), so it is essential to perform specific handling when using biofuel. Understand the properties and characteristics of biofuel and follow the fuel usage guidelines recommended by the Original Equipment Manufacturer (OEM).
2. Maintain the condition and temperature of the fuel tank in a full state because biofuel is easily oxidized by oxygen and does not keep the fuel more than three months. Conduct tank painting with reflector paint on the outside of the tank.
3. Routinely drain the fuel tank to remove water and sediment from the fuel tank and perform fuel tank cleaning at least every three months.
4. Minimize factors that cause contamination in the main fuel tank and replace metal and elastomer materials that are incompatible with biofuel usage.

*Concessions and Other Forms of Cooperation Between Port*

### *Operators and Port Business Entities in the Port Sector*

As an archipelagic nation with approximately 70% of its territory consisting of water, Indonesia is often referred to as a maritime country. Given its strategic location, situated between two continents and two oceans, the government has been striving to position Indonesia as a Global Maritime Fulcrum. One of the pillars of this agenda is the commitment to promote the development of maritime infrastructure and connectivity, encompassing programs like the Maritime highway, logistics development, shipbuilding industry, maritime tourism, and the construction and expansion of seaports in Indonesia.

The enactment of Law Number 17 of 2008 concerning Shipping created opportunities for private Port Business Entities (BUP) to participate in the open port sector. This was reinforced by Government Regulation Number 61 of 2009, later revised to Government Regulation Number 64 of 2015, pertaining to Port Affairs. Additionally, Ministerial Regulation Number 15 of 2015 on Concessions and Other Forms of Cooperation Between the Government and Port Business Entities in the Port Sector, subsequently amended to Ministerial Regulation Number 166 of 2015, provided a framework for private sector involvement. In 2021, Ministerial Regulation Number 15 of 2015 was revised to Ministerial Regulation Number 48 of 2021.

The existence of these regulations has provided business entities in the port sector, both state-owned enterprises like PT Pelabuhan Indonesia (Persero) and private businesses, with the opportunity to engage in port development and operation in

alignment with the government's goals for expanding maritime ports in Indonesia.

### ***Concessions and Government Collaboration with BUP***

Concession is the granting of rights by Port Administrators to Port Business Entities to conduct specific port service provisioning and/or services for a specified duration and compensation. Port Administrators referred to in this context include Port Authorities or Port Operating Units. Other forms of cooperation encompass collaborations between Port Administrators and Port Business Entities in various port operation activities apart from concessions, such as Cooperation in Utilization, Leasing, Management Contracts, and Operational Collaborations. Collaborative activities between Port Administrators and Port Business Entities in the port sector can include activities related to shipping services, passengers, and cargo, such as:

1. Management of port facilities that have been constructed, developed, and/or operated.
2. Construction of new ports.
3. Development of new terminals.
4. Conversion of Special Terminal Facilities (TUKS) into general terminals.
5. Conversion of special terminals into ports.
6. Waterway service provision.
7. Specific areas in waters serving as ports.
8. Specific areas on land serving as ports.



Based on the prevailing regulations, there are numerous business activities that can be collaboratively pursued by private entities. Considering the regulations in place, private entities can engage in various business activities through collaboration with Port Administrators. The opportunities are vast and include both expanding existing port infrastructure and creating new facilities to accommodate the growing demands of maritime trade, passenger transport, and cargo handling. The collaboration between the public and private sectors is instrumental in advancing Indonesia's maritime ambitions and improving the efficiency and competitiveness of its ports.

### *Implementation of Concession Agreement Licensing*

Private sector involvement in the port sector is supported by the Indonesian government, in line with the Global Maritime Fulcrum agenda and President Joko Widodo's focus on investment as a means of global economic recovery. This involvement may take the form of port construction or other areas of investment. However, the process of obtaining licenses for concession agreements with Port Business Entities has proven to be a major challenge for private entities. On average, it takes a minimum of two years for Port Business Entities to secure concession agreement licenses. This slow and challenging licensing process has been a major obstacle for private entities seeking to invest and participate in the port sector.

According to Aulia Febrial Fatwa, the Chairman of the Indonesian Port Business Entity Association (ABUPI), approximately 300 companies have obtained Port Business

Entity licenses since the enactment of Law No. 17 of 2008 concerning Shipping and the issuance of Ministerial Regulation 15 of 2015. However, only 25 of them have signed concession agreements to date. This indicates that while many business entities are interested in investing and participating in the port sector, the licensing process for port concessions remains slow and challenging. Several obstacles have been encountered by private entities in securing concession agreement licenses, and regulatory support for some business ideas has not yet been found.

### *Navigation Channel Management*

In accordance with Regulation of the Ministry Number 48 of 2021, Article 7, it is stated that one of the types of activities that can be collaboratively pursued by Port Administrators and Port Business Entities is Navigation Channel Management. Article 16 mentions that navigation channel management carried out through concession agreements includes:

1. Alternative routes or roads.
2. Or the expansion of capacity through deepening and/or widening of existing routes.

Paragraph 7 regarding Cooperation in the Operation of Navigation Channels and Port Basins defines:

1. The forms of cooperation between Port Administrators and Port Business Entities or Business Entities with dredging and reclamation business permits and/or joint

ventures between Business Entities and Business Entities with dredging and reclamation business permits in the operation of navigation channels, as referred to in Article 16 paragraph (2) letter a, are carried out through an auction mechanism in accordance with the provisions of the prevailing laws and regulations.

2. Cooperation between Port Administrators and Port Business Entities or Business Entities with dredging and reclamation business permits and/or joint ventures between Business Entities and Business Entities with dredging and reclamation business permits in the operation of navigation channels, as referred to in Article 16 paragraph (2) letter b, can be conducted through the addition of existing concessions by way of an addendum.
3. The Concession Agreement shall regulate, among other things, the obligation of users of navigation channels and port basins to pay the services they receive, taking into consideration the users' financial capability.
4. Upon the expiration of the concession period, the navigation channel facilities, port basins, and all assets resulting from the Concession shall be transferred or handed over to the Port Administrator.

Concession Agreement Contracts play a crucial role in the operations of Port Business Entities (BUP) and Port Administrators. These agreements are typically executed between BUP and either the Port Authority (OP/KSOP) or Port Administrator Unit (KUPP). The Directorate of Port Affairs is responsible for overseeing the development of Port Authority (OP/KSOP) and Port Administrator Unit (KUPP), ensuring that they operate efficiently and in compliance with all relevant

regulations. These contracts establish the terms and conditions for the use of port facilities, including the duration of the concession, payments, and other legal requirements. They serve as a binding agreement between the parties involved and are essential for ensuring the smooth and effective functioning of the port.

The concession cooperation process is carried out through the Directorate of Port Affairs at the Ministry of Transportation, while the determination of navigation channels requires approval from the Directorate of Navigation. In Regulation of the Ministry of Transportation Number 40 of 2021 concerning Amendments to Regulation of the Ministry of Transportation Number PM 129 of 2016 concerning Navigation Channels in the Sea and Buildings and/or Installations in Water, Article 3 states:

1. For the management of Navigation Channels in the sea as referred to in Article 2, the Minister shall determine: Sea Navigation Channels; route systems; traffic procedures; and ship anchorage areas in accordance with their interests.
2. The determination of Navigation Channels in the sea as referred to in paragraph (1) letter a is carried out for: Navigation Channels entering Public Ports and Crossings; and Navigation Channels commonly used by ships in their voyages (the routes normally used for navigation).
3. The determination of Navigation Channels leading to special terminals or terminals for personal interests will be established through a permit for Navigation Channel

management for Business Entities.

As per Article 18, two key provisions govern the involvement of Business Entities in the development, operation, and maintenance of Navigation Channels in the sea leading to special terminals or terminals for personal interests managed by Business Entities in Indonesia. First, Business Entities are allowed to take part in the operation of Navigation Channels in the sea, subject to obtaining the Minister's approval. Second, the operation of Navigation Channels by Business Entities can only be carried out after receiving the necessary approval from the competent authority.

PT Alur Pelayaran Barat Surabaya manages the navigation channels in Surabaya and has created an alternative channel that requires payment for usage. However, the old navigation channel can still be used if the ship's draft is sufficient. Meanwhile, in Kalimantan, an agreement has been reached between the government and the navigation channel management to maintain the depth of the existing channel, and users are required to pay a fee when using the channel.

However, in certain cases, businesses may wish to propose new navigation channels because the existing channels have shallow drafts, which force ships to take more costly detours. Nevertheless, the Directorate of Port Affairs and the Directorate of Navigation have different interpretations of the term "navigation channels." While the former requires the navigation channel to be an alternative route or the existing channel to be deepened, the latter only recognizes the term "navigation

channels." This difference in interpretation creates a challenge for businesses to comply with the regulations of both Directorates. It's worth noting that the Directorate of Port Affairs has a dredging department, while the Directorate of Navigation has authority over navigation channels. As a result, businesses have to approach two different authorities for navigation channel permits, which complicates the process for them.

### *Conclusion*

Considering the conditions, it is recommended that the government accommodate proposals for concession agreements and cooperation in establishing new navigation channels (not alternative or existing) in government regulations with clear and strict provisions. Since many areas in Indonesia do not have navigation channels, especially in areas with relatively new ports, the government cannot use the state budget to build all the necessary navigation channels. It would be beneficial if private companies invest through concessions.

The government must still establish appropriate rules and regulations, for example, for small-sized ships that do not exceed the natural draft of the navigation channel before dredging, these ships would not be subject to charges. However, if the ship exceeds the natural draft, the ship will use the dredging service provided by the company and would have to pay the channel fee. Furthermore, it is crucial to align the perceptions in the Ministry's regulations between the Directorate of Port Affairs and Navigation for the determination of navigation channel nomenclature. This alignment will prevent confusion when

businesses approach both directorates.

In the licensing process of concession agreements and other requirements, it would be more efficient if the Ministry of Transportation forms technical teams from the relevant directorates according to the type of activity, to facilitate businesses in the licensing process and streamline communication between the Directorates. Another obstacle that occurs when building new ports/TUKS/Tersus is when businesses have already determined a location and received approval from the local Port Authority (KSOP), but it turns out that the area falls under the fishing zone or conservation zone according to the RZWP3K of the Ministry of Maritime Affairs and Fisheries. In this case, the businesses must obtain an RZWP3K review, which takes additional time. This can be detrimental to businesses. Therefore, it would be more effective if the government coordinates when the Ministry of Maritime Affairs and Fisheries creates RZWP3K with the Ministry of Transportation to avoid misinformation or overlapping work areas. This coordination will simplify the process and save time for businesses.

### ***Policy for the Protection of Indonesian Fishermen (ABK) on Foreign Ships***

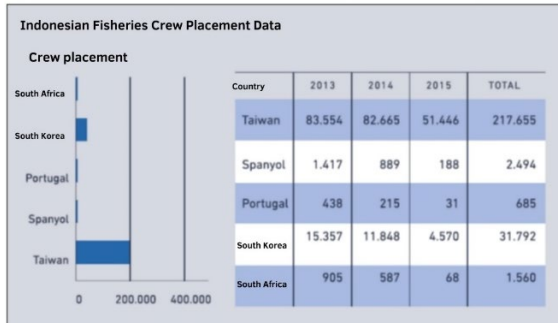
The Indonesian Act No. 39 of 2004 on the placement and protection of Indonesian workers abroad does not currently provide a comprehensive package of protection for seafarers (ABK or crews) in line with international standards.

Consequently, in their quest for rights, Indonesian ABKs must rely primarily on agreements made with the shipowners before they begin working (Riza et al., Faculty of Law, Lampung).

According to data from the Directorate for the Protection of Indonesian Citizens and Legal Entities, Ministry of Foreign Affairs, there were more than 200,000 Indonesian ABKs working on foreign fishing vessels during 2013-2015, with the highest placements in Taiwan (217,655 people) and South Korea (31,792 people). On the other hand, the Indonesian Migrant Workers Protection Agency (BP2MI) recorded that the number of Indonesian migrants working as ABKs abroad from 2011 to 2019 was 30,864 individuals. The majority of these ABKs came from Central Java (4,359 people) and West Java (3,145 people), amounting to 90% of all crews' placements from 2017 to 2019.

The variation in these figures is due to the fact that ABK placements are not exclusively made by the government but also by companies that (i) have SIUPPAK (recruitment and placement permits) from the Ministry of Transportation, (ii) have SIUP (business permits) from the Ministry of Trade or local governments, (iii) possess permits from the Ministry of Manpower and BP2MI, and (iv) operate without any permits (illegal) (Indonesia Ocean Justice Initiative).

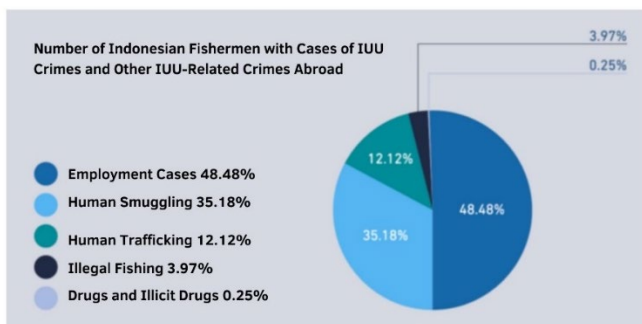




Source: Ministry of Foreign Affairs, 2016 and IOJI on the Improvement of Governance in Protecting Indonesian ABK on Foreign Fishing Vessels, 2020

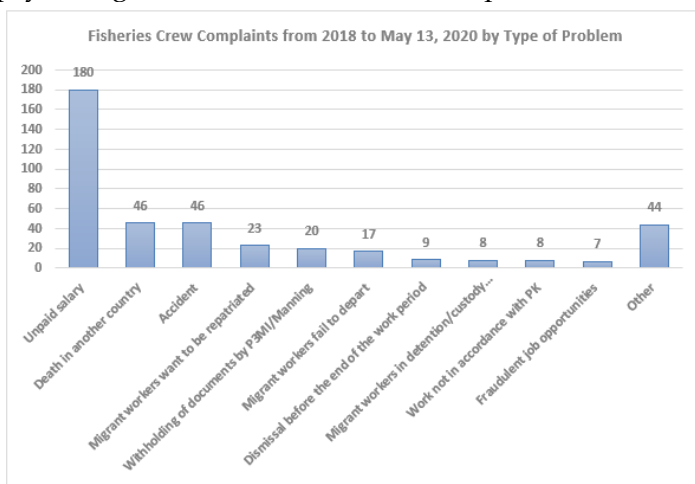
### *Conditions of Indonesian ABK*

Between 2012 and 2015, the Ministry of Foreign Affairs facilitated 2,368 Indonesian ABKs who found themselves entangled in legal issues abroad. The majority of the cases that Indonesian ABKs encountered were labor-related issues (48.4% or 1,148 cases), human trafficking (35.1% or 833 cases), and human smuggling (12.1% or 287 cases).



Source: IOM, Ministry of Marine Affairs and Fisheries, and  
Coventry University, 2016

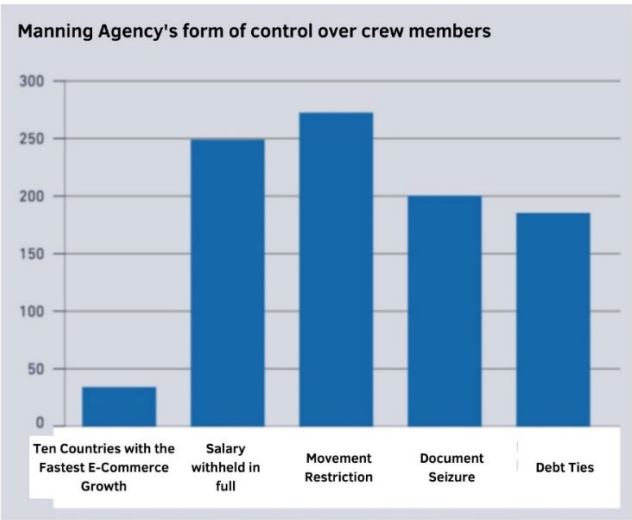
From 2018 to May 13, 2020, BP2MI received 411 complaints from Indonesian ABKs working on foreign fishing vessels, with the most common complaint being unpaid wages (44% or 183 cases). BP2MI noted that this type of complaint occurred primarily because some complainants were ABKs who took the non-procedural route, making them more vulnerable to contract violations and exploitation. Other issues included working hours, accommodation, inhumane working conditions, physical and psychological abuse, and excessive exploitation.



Source: Indonesian Migrant Workers Protection Agency

In addition to ship operators, the recruitment and placement agencies (manning agencies) for Indonesian ABKs working abroad also contributed to labor law violations, particularly during the recruitment process and when employment contracts

ended. During the recruitment process, manning agencies often provided inaccurate information to potential Indonesian ABKs regarding the job offers.



Source: IOM, Ministry of Marine Affairs and Fisheries, and Coventry University, 2016

In various cases where Indonesian ABKs were victims of Human Trafficking in Persons Offenses (TPPO), the International Organization for Migration (IOM) noted that 71% or 202 out of 283 Indonesian ABKs were required to pay recruitment fees. Out of these 202 individuals, 176 were compelled to sign debt contracts before departure, while the remaining 29 victims had to pay recruitment fees ranging from \$2,000 to \$4,000 to the manning agency. Perpetrators of TPPO also took various measures to prevent victims from leaving their place of

exploitation. This was done by withholding some or all of the wages, confiscating ABK's seafarer's book, and through debt bondage.

## *Conclusion*

The absence of legal protection for Indonesian ABKs working on foreign fishing vessels and the weak supervision of manning agencies by the government contribute to numerous labor violations, forced labor practices, and human trafficking. Implementation regulations, in the form of ministerial regulations on the placement and protection of Indonesian ABKs on foreign fishing vessels, were actually mandated as far back as 2004. However, until the Act No. 18 of 2017 on the Protection of Indonesian Migrant Workers (UUPMI) was enacted, these ministerial regulations were never issued.

Another issue is the overlapping authority in granting licenses to manning agencies for the recruitment and placement of crew members on fishing vessels (manning agency). At present, there are three types of licenses for the placement of Indonesian ABKs on foreign fishing vessels: first, manning agencies with a Permit for Recruitment and Placement of Ship Crew (SIUPPAK) from the Ministry of Transportation; second, manning agencies with a Permit for the Placement of Indonesian Migrant Workers (SIP3MI) from the Ministry of Manpower and a Permit for the Recruitment of Indonesian Migrant Workers (SIP2MI) from BP2MI; third, manning agencies with a Business Permit (SIUP) from the Ministry of Trade or the Trade Office at the local government level. Strangely, non-procedural placements were

also found among manning agencies. In practice, non-procedural placements of ABKs are often referred to as "letters of guarantee" (LG). ABKs with LGs are not registered as workers by the Indonesian government or the host country. ABKs with LGs do not have work visas, seafarer's books, or maritime skills, and are dispatched by manning agencies that do not have permits, relying solely on LGs from recruitment agents in Taiwan. Quoted from IOJI on the Improvement of Governance in Protecting Indonesian ABK on Foreign Fishing Vessels, 2020.

Furthermore, there is a lack of a single database containing information about manning agencies in Indonesia and abroad, the number of Indonesian ABKs on foreign fishing vessels, and the owners of foreign fishing vessels. This makes it difficult to ascertain the exact number of Indonesian ABKs abroad and hampers their protection efforts. Based on the information provided, there are at least three root issues contributing to the weak protection of Indonesian ABKs working on foreign fishing vessels. First, the absence of legal protection for ABKs from the recruitment process and the weak supervision of manning agencies. Second, overlapping authority in the issuance of manning agency business permits, resulting in recruitment and placement permits for ABKs not being processed through a single channel. Third, the lack of an integrated database on Indonesian ABKs on foreign fishing vessels, making it difficult to provide them with adequate protection.

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# **CHAPTER 3**

## **ACCELERATED PUBLIC POLICY**

## **CHAPTER 3.**

### **ACCELERATED PUBLIC POLICY**

I Made Wahyu Sandika Putra et al.<sup>3</sup>

Indonesia, the world's largest archipelagic nation, is made up of 17,504 islands and covers a total land and sea area of 5,180,083 square kilometers, making it the largest country in Southeast Asia. The country's land area spans 1,922,570 square kilometers, stretching over 3,977 miles, while its sea territory covers 3,257,483 square kilometers. Indonesia's extensive maritime area significantly empowers the country in the fisheries sector, leading to its recognition as a maritime nation.

Indonesia's economy has experienced steady growth, averaging 5.3% annually from 2000 to 2011. Domestic container volume surpassed the national growth rate, increasing by approximately 11.4% annually. The domestic market share of total container volume in Indonesia rose from 38% in 2001 to 47% in 2011. However, one significant issue that Indonesia faces is the high logistics costs compared to other developed countries and ASEAN nations.

Logistics costs in Indonesia remain notably high, accounting for 24% of the country's GDP, according to a previous BCG study on the merger of Indonesian port operators (Pelindo). This figure is

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<sup>3</sup> Nofan Wijaya Gunawan, Hilda Emeraldo Ahmad Ardiarsa, Imam Taufik, Rufiajidi Navy Abritia, Mochammad Imron, Lucky Rasyad, dan Arzena Norega



significantly higher than other countries, such as Malaysia at 13%, India at 13%, and Singapore at 8%. The World Bank ranked Indonesia at 46 with a score of 3.15 in the Logistic Performance Index (LPI) in 2018, which is notably lower than Singapore, Malaysia, Thailand, and Vietnam. The high logistics costs in Indonesia can be attributed to suboptimal transportation, high inventory carrying costs, and low warehouse utilization. The centralization of goods production in Indonesia, low backhaul utilization, and the need to cover additional costs for shipping lead to high transportation expenses, amounting to Rp 1.347 trillion in 2017. The transportation cost components are mainly contributed by trucks at 61%, followed by shipping costs at 11%, parcels at 4%, and other transportation at 23%.

Inventory carrying costs, valued at Rp 830 trillion in 2017, are high due to the low reliability of logistics services in Indonesia, causing cargo owners to hold higher inventories than optimal. The high logistics costs in Indonesia have a significant impact on the country's economy, hindering its competitiveness and growth potential. Therefore, addressing this issue is crucial to ensure sustainable economic growth and development in Indonesia. In a broader end-to-end logistics context, the high transportation costs are attributed to several factors, including:

1. Demand-Supply Imbalance
  - a. Population and economic activities centralization (e.g., industrial areas)
  - b. Containerization of key commodities in underdeveloped regions
2. Suboptimal Port Performance

- c. Limited port infrastructure (draft, capacity)
- d. Inefficient port operations
- e. Suboptimal capital allocation with significant overinvestment
- 3. Low Maritime Value Chain Efficiency
  - f. Fragmented and uncoordinated shipping market
  - g. Frequent use of small-sized vessels causing inefficiencies
- 4. Low Land Value Chain Efficiency
  - h. Excessive reliance on trucks, with traffic congestion and poor road quality
  - i. Low professionalism and coordination in transportation and warehousing
- 5. Unconducive Government Regulations
  - j. Bureaucracy inefficiencies leading to logistic inefficiencies
  - k. Ineffective implementation of existing regulations
  - l. Lack of incentives to promote collaboration, competition, or ecosystem improvement

As mentioned earlier, one of the most critical factors influencing logistics cost reduction is the presence of necessary policies or regulations that support industry stakeholders in performing their tasks. There are several policies that have been introduced by the government and are seen as beneficial for logistics maritime stakeholders. However, there are still some policies that, if enacted by the government, would further benefit logistics maritime stakeholders. Therefore, in this assignment, Group 3 will discuss several policies that have already been

issued by the government and those expected to be issued to support the performance of maritime logistics stakeholders.

This section identifies several policies required by maritime industry players that should be continued or developed by the government, including:

1. PPKM (Lockdown) Policy
2. Digital Transformation of the Logistics Sector Policy
3. RPJPJMN 2020 - 2024 Policy
4. State-Owned Enterprises Collaboration Policy
5. Revitalization of Maritime Training Programs Policy
6. Emission Reduction Policy in the Maritime Sector
7. Strengthening Business Judgment Rule in State-Owned Enterprises Policy
8. Vessel Traffic Restrictions: Ampera Bridge Case
9. Yacht Operation Policy
10. Standardization of Planning and Technical Design of Ports in Indonesia Policy
11. Maritime Highway Policy

### ***PPKM (Lockdown) Policy***

The year 2019 marked the discovery of a new and highly infectious coronavirus variant named the SARS-CoV-2 virus, commonly known as Covid-19, in the city of Wuhan, China. The virus primarily affects the human respiratory system and rapidly spread across the globe. However, in certain countries, including Indonesia, it seemed that the government was less proactive in anticipating the virus's spread, leading to questions about their

response to the pandemic.

According to Yose Rizal Damuri's paper, "Measuring the Impact of COVID-19 on Indonesia's Economic Growth and Trade in 2020," the ongoing global economic turmoil significantly affected Indonesia's economy, which could be one of the reasons why the government appeared less transparent in its response to Covid-19. Unlike some other countries where the virus was brought under control, Indonesia saw a significant increase in the number of cases. As of March 20, 2020, the death rate in Indonesia was relatively high at 8.67%, compared to the global death rate of 4.10%. The number of confirmed Covid-19 cases in Indonesia has continued to rise, reaching 4.2 million patients to date.

New variants of the virus, such as Delta and Omicron, have emerged, with Omicron showing specific symptoms such as scratchy throat, persistent dry cough, extreme fatigue, muscle pain, and night sweats. The Indonesian government introduced various policies in response to the Covid-19 pandemic, such as Large-Scale Social Restrictions (PSBB), New Normal, Emergency Community Activity Restrictions (*PPKM Darurat*), and PPKM scaled according to the Covid-19 spread map in Indonesia. These policies were based on three strategies: limiting the spread of the virus through policies, strengthening healthcare facilities and services, and mitigating the economic impact by providing social safety nets and fiscal support to businesses and micro, small, and medium-sized enterprises (UMKM) affected by the pandemic.

The Covid-19 pandemic has significantly impacted economic activities from local until global levels. Logistics disruptions

have occurred in various countries, supply chains have been disrupted, production and consumption activities have stagnated, and energy demand has plummeted. The result has been dwindling job opportunities, increased unemployment, and higher poverty rates.

The pandemic presents significant challenges for the government in achieving national development goals, including fostering high-quality economic growth, promoting economic equality, reducing poverty, and building equitable infrastructure across Indonesia. During these challenging times, the logistics sector plays a crucial role, providing essential services that ensure the distribution of goods and commodities across regions. The industry has also focused on implementing IT solutions, which facilitate operations and offer long-term operational cost savings.

Technology plays a vital role in supporting logistics during the pandemic, particularly for players enjoying the benefits of the Covid-19 situation due to their advanced IT systems. This allows for better integration with the e-commerce sector. The impact of Covid-19 affects various sectors, including the transportation and logistics of goods. While some logistics activities have suffered, others have thrived. For instance, according to research conducted by the Research and Development Agency of the Ministry of Transportation, certain logistics activities that have continued to thrive include e-commerce logistics, courier services, warehousing of essential goods and retail products, and logistics services related to Business-to-Consumer (B to C) and Consumer-to-Consumer (C to C) transactions.

On the other hand, sectors heavily impacted include air cargo transportation, sea cargo transportation, container truck transportation, export/import truck transportation, industrial raw material transportation, stevedoring activities, customs and port clearance activities, container depot activities, warehousing of imported and bonded raw materials, and other logistics activities related to Business to Business (B to B) transactions.

### *Policy Response*

As a tangible government response, on November 1, 2021, the Ministry of Home Affairs issued IMENDAGRI No. 57 of 2021, and this policy has been continuously updated based on existing conditions in Indonesia. The latest policy related to COVID is IMENDAGRI No. 66 of 2021 concerning the prevention and handling of Covid-19 during Christmas and New Year. These regulations have sparked various reactions from the Indonesian public. From a health perspective, these policies are beneficial for preventing massive COVID spread and promoting health and safety during gatherings with family and friends. However, from a business standpoint, many business owners and employees have concerns. Businesses must adapt their strategies to align with these policies. Recreational and entertainment venues, with limited visitor numbers, will experience decreased revenue. Street vendors in city centers will also be regulated and restricted.

In contrast, the logistics sector benefits from these policies. The demand for shipping goods and essential commodities between cities and regions increases, with sea transportation being a

critical element. The Ministry of Transportation, along with relevant stakeholders, continuously strives to improve maritime transportation to support the smooth flow of logistics and reduce logistics costs. The SWOT Analysis of IMENDAGRI No. 66 of 2021 are as follows:

1. STRENGTH:

- a. Utilizing digital technology for transportation activities.
- b. Enhanced service quality during the COVID-19 pandemic.
- c. Increased convenience in transportation facilities.
- d. Reduced COVID-19 spread, particularly within office clusters.
- e. Boosting the logistics business in Indonesia, especially the Maritime highway program.

2. WEAKNESS:

- a. Additional costs for traveling out of the city.
- b. Reduced interest in travel, affecting the tourism business.
- c. Loss of some transportation routes.

3. OPPORTUNITIES:

- a. Opportunities to promote a healthy lifestyle.
- b. Government support for affected UMKM entrepreneurs.
- c. Growth in sectors such as food retail and pharmaceuticals.
- d. Positive feedback and satisfaction in transportation services.

4. THREAT:

- a. Decreased income for transportation service providers due to government restrictions on the number of passengers in public transportation.
- b. High operational maintenance costs.
- c. Inadequate medical facilities and healthcare personnel in 3T (Frontier, Outermost, and Least Developed) areas.
- d. Price competition among transportation service providers, leading to lower service standards.

The followings are some strategies that businesses can employ to balance their operations with government policies:

1. Maximizing remote work implementation (WFH)  
This policy significantly aids digital development where physical presence is no longer necessary for office sectors, except for businesses that require physical activities. Even in large companies like Google in developing countries, employees don't need to come to the office. Coordination among staff is solely through applications, making time no longer the primary concern in work. Leaders and their staff can work anytime and anywhere.
2. Engaging in retail through online shop methods  
Retail businesses can collaborate with online platforms such as Tokopedia, Shopee, Lazada, or even work with app development companies to create their own apps and partner with transportation services for product delivery.
3. Collaboration with the government  
In the maritime sector, businesses can coordinate with the



government to maximize existing program and application systems. Businesses can request services from other sectors to be conducted online, enabling smoother business operations without being hindered by policies that restrict physical presence at government offices.

4. Innovating according to market needs

Businesses can innovate their operations in line with related policies. For instance, a company primarily focusing on ship operations can expand by adding ship agency or PBM businesses to streamline the logistics process.

5. Additionally, transportation companies can develop their transport methods to better suit user comfort while benefiting the business.

## *Conclusion*

In order to thrive in the ever-changing digital landscape, it is crucial for businesses to have supportive policies from the government. Despite some opposition, these policies act as a catalyst for business owners to adapt and align their strategies accordingly. For Indonesia's maritime business to grow, the government must create policies and strategies that support it. Our analysis aims to understand the benefits of the Ministry of Home Affairs' Covid-19 policies, evaluate their advantages for business owners, and formulate relevant strategies for alignment. After conducting a SWOT analysis, we found that Indonesia's strategic maritime locations and vast territory provide opportunities for logistics businesses. The Ministry's policy supports the maritime highway program, which enhances

logistics and transportation, increasing demand for businesses in this sector.

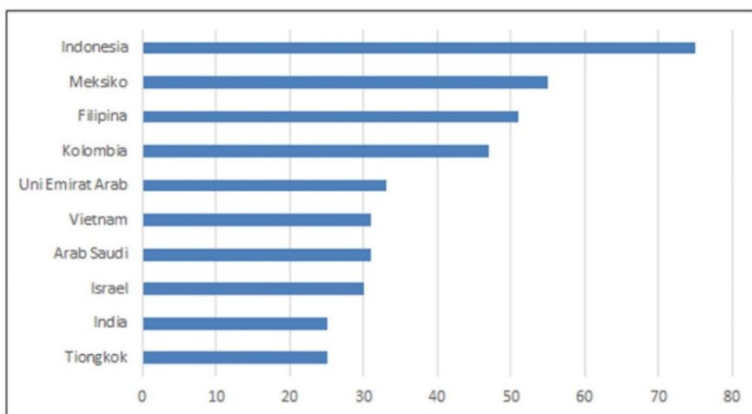
However, there are potential threats, both internal and external. Internally, there's a decrease in national income from tourism, increased maintenance costs, and limited medical resources. Externally, businesses outside the logistics sector may suffer. Therefore, our recommended strategy suggests that the government prioritize health-oriented developments, provide targeted assistance, and intensify programs such as the Maritime highway program to stimulate Indonesia's economy. By doing so, businesses in the maritime industry can thrive, leading to overall economic growth for Indonesia.

### ***Policy: Digital Transformation in the Logistics Sector***

The era of the 4.0 industrial revolution has transformed various sectors into more practical and complex environments using automated and digital technology. The significant growth of online commerce is closely tied to critical components, one of which is logistics. Logistics in e-commerce expands beyond just delivering goods to consumers. It encompasses broader aspects like warehousing, inventory management, billing, packaging, labeling, delivery, cash on delivery, payments, and more.

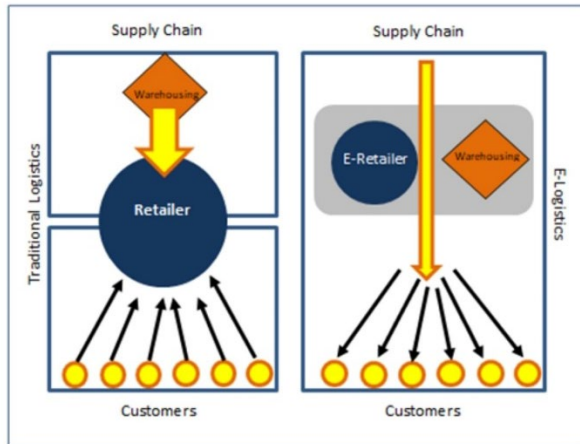
According to research by the UK-based institution Merchant Machine, Indonesia leads other countries in the world as the fastest-growing e-commerce market. In 2018, it experienced a growth rate of 78%. Mexico followed as the second-fastest-

growing e-commerce market, with a 59% growth rate in 2018, while the Philippines ranked third with a 51% e-commerce growth rate. The performance of e-commerce businesses is directly related to logistics systems and supply chain management. In Indonesia, the logistics shift in e-commerce businesses primarily still involves manual methods. E-commerce trading models have simpler workflows than offline retail, which requires warehousing. In e-commerce trading platforms, providers mainly serve as marketing channels, recording incoming and outgoing goods and collaborating with logistics companies for shipping.



**Ten Countries with the Fastest E-Commerce Growth**

(Sumber: <https://databoks.katadata.co.id>)



**Traditional Logistics and E-Logistics Models**

Auramo J., as cited by Sahroni (2015), states that e-logistics is the necessary process to transfer goods sold through the internet to customers. A more advanced aspect is that e-logistics integrates the supply chain, eliminating intermediaries (such as wholesalers or retailers), fostering the emergence of new players in logistics, adapting traditional chain logistics to meet e-business requirements.

According to Safitri, Tiara (2019), E-commerce Logistics is the activity that ensures customers receive what they need at the right time, in the right place, and at a minimum cost. Several elements exist in e-logistics: consumers, manufacturers, intermediaries, and service providers. A significant differentiator is the use of computer networks, namely the internet, in its operational processes. E-commerce transactions

possess specific characteristics distinct from regular trade transactions:

1. No limitations in transactions

Before internet development, geographical limitations were a barrier for individuals or companies to expand their businesses on a large scale. This limitation meant that only those with significant capital could market their products far and even internationally. Nowadays, with internet access, small and medium-sized entrepreneurs can market their products and reach distant regions using websites, creating accounts on e-commerce applications, or advertising on internet sites with flexible times accessible 24/7 for customers worldwide to conduct transactions online.

2. Anonymous transactions

E-logistics in e-commerce enables sellers and buyers to transact anonymously via the internet without physically meeting. This ease correlates with payments authorized by predetermined payment systems.

3. Intangible product goods

Many e-logistics companies offer intangible goods like data, software, and ideas sold through the internet.

## *Conclusion*

Digitization is the process of transitioning media from print, video, audio to a digital format with the aim of creating document archives in digital form. The growth of digitalization users occurs rapidly, seemingly never ceasing. Logistics

Digitalization is a series of logistics activities involving the planning, execution, and control of efficient and effective flow of goods or services and related information from the point of origin to the point of use, transformed into a digital format.

The logistics industry is one of the sectors experiencing growth above the national economic average, reaching 1-10% annually. However, the logistics sector was heavily impacted during the pandemic, leading to significant declines. Nevertheless, some logistics companies managed to survive and even grow during the pandemic due to their implementation of digital technology.

In the current era of digitalization, rapid business growth has created numerous opportunities for the logistics sector to develop and provide convenient services to consumers using digital technology. Leveraging digital technology, a company can handle various consumer requests within seconds and serve from one location to another in various cities and even internationally swiftly.

This Covid-19 pandemic also serves as an opportunity for the logistics sector due to the large-scale social restrictions (PSBB) and the community activity restrictions (PPKM), resulting in increased demand for shipping and logistic services. Hence, the logistics sector needs to develop digital technology. The benefits of e-logistics include enhancing customer service, minimizing costs, and meeting product delivery deadlines. It helps in developing web-based inventory control and establishing relationships with major logistics companies (Leung et al., 2000).

Challenges for e-logistics in developing countries include an unstable economic system, uneven infrastructure, consumer trust and privacy, delivery process obstacles, security issues, and geographical barriers. Infrastructure inadequacies in developing countries, such as suboptimal telecommunications infrastructure and limited computer access, create barriers to electronic logistics. Internet access costs also hinder electronic logistics. Digitization will continue to impact the logistics sector. Its content and direction demand serious attention from stakeholders in the logistics sector if they wish to stay competitive. Hence, there is a need for policies governing digital transformation.

### ***RPJPMN 2020 – 2024 Policy***

Indonesia has 70 ports functioning as commercial ports. However, restricted depth of the fairway and inadequate port service facilities limit the capability of most Indonesian ports to handle container ships with a capacity ranging from 300 TEU to 500 TEU, served by ships making a single round. Additionally, several challenges are currently faced by ports in Indonesia, including:

1. Different processes and procedures in terms of business and operational aspects (customer experience) and support among State-Owned Enterprise (SOE) Ports.
2. IT systems with varying standards and qualities between ports.
3. No common standards for determining branch classes in

each SOE Port.

In terms of the domestic shipping industry, it is currently controlled by a few large shipping companies, each serving their own market. Due to the concentration of shipping companies on a few main routes, underserved regions in Indonesia lack effective service, and limitations in port infrastructure restrict the size of ships that can dock. This causes inefficiency in cargo flow and contributes to uneven economic development in Indonesia.

Moreover, from the perspective of industrial areas, the heavily concentrated population and GDP in Sumatra and Java create a centralized economic activity in the western part of the country. Dominant industrial development in Sumatra and Java generates low industrial outputs from other regions both quantitatively and qualitatively. There is minimal production share outside Sumatra and Java, resulting in a lack of significant throughput from Indonesia's central and eastern parts, leading to imbalanced cargo affecting high logistics costs.

To address the logistics issues in Indonesia, regulations that provide solutions to connectivity problems and high logistics costs are needed, combining the concept of maritime highways and connecting ports and industrial areas. This policy is a solution for connectivity, connecting seven main ports (seaside) and integrating port and industrial areas to reduce logistics costs (landside).

This policy is reflected at least in Presidential Regulation of the Republic of Indonesia Number 18 of 2020 Concerning the



National Medium-Term Development Plan 2020-2024. The policy explains one of the government's priority programs titled "Integrated Main Port Network" with the following goals:

1. Improved port performance by standardizing main ports.
2. Increased efficiency of domestic shipping routes by forming regular loops by 27%.
3. Enhanced integration of ports with hinterlands.

The policy also specifies standards for development in several ports, including:

1. Development of Belawan/Kuala Tanjung Port.
2. Development of Kijing Port.
3. Development of Tanjung Priok Port.
4. Development of Tanjung Perak Port.
5. Development of Makassar Port.
6. Development of Bitung Port.
7. Development of Sorong Port.

Citing the book "Public Policy: Contemporary Policy Analysis" by Dr. Riant Nugroho, this policy is believed to fulfill aspects of good governance. This concept refers to the process of decision-making and its implementation being jointly accountable. It represents a consensus reached by the government, citizens, and private sectors in the governance of a country. This policy also fulfills various good governance concepts such as effectiveness and efficiency. With this policy, the parameters have been considered to reach the widest possible interests of various social

groups and are aligned with the real needs of the people, developed rationally and measurably.

The standardized ports outlined in Presidential Regulation of the Republic of Indonesia Number 18 of 2020 Concerning the National Medium-Term Development Plan 2020-2024 are also aligned with the guidance of the Ministry of SOEs. SOE Port Services also propose to realize synergy between port clusters and shipping clusters to create an end-to-end and standardized maritime logistics service. Integrating SOE port services and their synergy with the maritime transport cluster will drive standardized port services and more efficient ship operations. Indonesia can establish an integrated port and shipping network, expecting an optimal supply chain to reduce national logistics costs.

### *Agenda*

Building on this policy, several strategies can be adopted by stakeholders or maritime logistics players, such as:

1. Port Operators

As parties contracting with port authorities and shipping lines/cargo owners to move cargo through ports at a contracted minimum productivity level, port operators are expected to implement standard service at the hub or main ports as stated in the presidential regulation's annex.

2. Shipping Lines

Providers of sea transportation services (Sea Vessels) are

expected to implement the feeder and hub port concept according to the annexed presidential regulation.

### 3. Cargo Owners

As owners of every item and every seizure, consignees, cargo senders, guarantors, or related agents, are encouraged to consider expanding their business in the central and eastern regions of Indonesia to balance cargo shipments. With the implementation of this policy, cargo owners will benefit from cost savings because of standardized services.

## *Conclusion*

To reduce logistics costs in Indonesia, standardizing port performance is a crucial aspect in the port industry. Policies that govern the standards to be met by port operators in providing port services in Indonesia are required to ensure that port standardization, especially at the main ports in Indonesia, is achieved. Such necessary policies are already stated in Presidential Regulation of the Republic of Indonesia Number 18 of 2020 Concerning the National Medium-Term Development Plan 2020-2024, specifically the concept of an integrated port network. With the implementation of this policy, there are several measures that can be taken by various business stakeholders such as port operators, shipping lines, and cargo owners.

## *State-Owned Enterprises (SOEs) Collaboration*

The government, as the state organizer, plays a vital and strategic role in economic development aimed at improving the quality of life and welfare of all citizens. The state's participation in protecting all Indonesians in the economic sector is demonstrated through the formation of Laws No. 40 of 2007 concerning Limited Liability Companies (Company Law) and No. 25 of 2007 concerning Investment (Investment Law). These laws were established to realize the national economy as mandated in Article 33 of the 1945 Indonesian Constitution.

Facing changes in the global economy and Indonesia's involvement in various international collaborations, creating a conducive, promotional, legally certain, fair, and efficient investment climate is necessary. This aims to accelerate national economic development, and one crucial step is increasing investment to convert economic potential into real economic strength, involving micro, small, medium enterprises, and cooperatives development. During the 10-year period of the Company Law's enforcement, several provisions requiring immediate responses to enhance the Ease of Doing Business (EoDB) have been identified. They include starting a business, protecting minority investors, and resolving insolvency. Indonesia's ranking in the EoDB indicator is shown as follows:

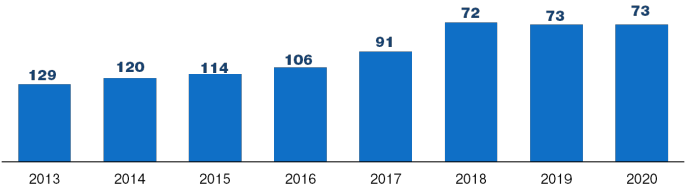


Figure 1. Indonesia’s EoDB

Indonesia's welfare enhancement is a fundamental goal, explicitly outlined in the opening section of the 1945 Constitution, emphasizing social justice for all citizens. The translation of economic democracy principles in Indonesia is embodied in Article 33, paragraph (1) of the 1945 Constitution, stating "the economy shall be organized as a joint endeavor based on kinship." The indication of starting a business reflects a considerable number of procedures and high costs in Indonesia.

According to data released by the World Bank at the beginning of 2016, Indonesia ranked 173, involving 13 procedures, a 46-day process, and significant costs, while Malaysia ranked 14, requiring only 3 procedures and a 4-day process. Singapore ranked 10, with procedures similar to Malaysia but shortened to 2 days. Among the ASEAN countries, Indonesia has the most procedures and relatively long completion times. As of June 2017, Indonesia was at position 144, while Singapore was at 6, Thailand at 36, Brunei Darussalam at 58, Malaysia at 111, and Bangladesh at 131. This has led to Indonesia's reduced competitiveness in the ASEAN Economic Community (AEC) regarding the legal aspect of doing business. Hence, policies are needed to streamline the investment process in Indonesia.

One such policy is Minister of State-Owned Enterprises Regulation Number PER-07-MBU/04/2021 dated April 27, 2021, concerning the Second Amendment to Minister of State-Owned Enterprises Regulation Number PER-03-MBU/08/2017 dated August 21, 2017, regarding State-Owned Enterprises

Cooperation Guidelines, particularly in Article 4A paragraphs (1), (2), and (3). It includes:

1. SOEs can collaborate with Investment Management Institutions formed according to Law Number 11 of 2020 concerning Job Creation.
2. Collaboration, as mentioned in point (1), can also be carried out with joint ventures, mostly owned by Investment Management Institutions or companies controlled by them.
3. Collaboration, as stated in points (1) and (2), is done through direct appointments.

### *Agenda*

Building upon the Minister of State-Owned Enterprises Regulation Number PER-07-MBU/04/2021 dated April 27, 2021, concerning the Second Amendment to Minister of State-Owned Enterprises Regulation Number PER-03/MBU/08/2017 dated August 21, 2017, regarding State-Owned Enterprises Cooperation Guidelines, particularly in Article 4A paragraphs (1), (2), and (3), several steps can be taken by SOE companies in their business, including:

1. By forming a long-term strategic plan of the Republic of Indonesia to attract reliable and credible investment partners for both international and domestic investors through the establishment of INA (Indonesia Investment Authority), the Ministry of SOEs forms an Accelerated Asset Recycling Team and Strategic Collaboration of

SOEs, where one of the priority sectors is the Port Infrastructure.

2. Optimization of assets held by SOE companies.
3. Development or expansion of business by SOE companies.
4. Enhancement of cooperation with strategic partners.

### ***Conclusion***

Ease of Doing Business (EoDB) is a survey conducted by the World Bank to rank countries based on their business-friendly environment, and Indonesia's EoDB score hasn't shown much improvement in the last three years. There are obstacles preventing the country's ranking from increasing. The government, as the state organizer, plays a crucial role in policy formation to enhance Indonesia's investment processes. One of the facilitative policies is managed by the Ministry of State-Owned Enterprises in Minister of State-Owned Enterprises Regulation Number PER-07-MBU/04/2021 dated April 27, 2021, amending Minister of State-Owned Enterprises Regulation Number PER-03-MBU/08/2017 dated August 21, 2017, concerning State-Owned Enterprises Cooperation Guidelines, specifically in Article 4A paragraphs (1), (2), and (3). Several stakeholders can optimize this policy.

### ***Revitalization Policy for Maritime Training Programs***

According to data from the Coordinating Ministry for Maritime Affairs and Investment (Maritime Coordinating Ministry),

Indonesia has the second-highest number of active seafarers in Southeast Asia, with salaries averaging around US\$750 per month, contributing around Rp151 trillion per year in foreign exchange. Indonesian seafarers working on foreign ships have valid education and training certificates recognized internationally for maritime safety and adhering to the regulations of the International Maritime Organization. The government's continuous monitoring and development, particularly by the Directorate General of Marine Transportation, ensures ships and crew have the necessary certification. This mandate is following the Presidential Regulation Number 8 of 2012, stated that work competence certification is the process of systematically and objectively granting competency certificates through competency tests in accordance with the Indonesian National Job Competency Standards, International Standards, and/or Special Standards.

#### Indonesian Seafarers

1. Male	1,222,042
2. Female	27,141
Total	1,249,183

Source: <https://pelaut.dephub.go.id/> (December 21, 2021)

#### Certificate Handed to Seafarers

Certificate of Competency - COC/CC	524,532
Certificate of Endorsement - COE/CE	188,081
Certificate of Proficiency - COP/CP	4,489,289



Source: <https://pelaut.dephub.go.id/> (December 21, 2021)

Certification benefits seafarers in gaining trust, securing better-paying jobs, and improving career prospects. It also benefits the shipping industry, improving recruitment, client trust, worker career development, and fair competition among employees. The advantages of holding official certification for seafarers are manifold. Being certified enhances credibility, fostering trust among companies and crewing firms. The benefits of certification for the workforce include:

1. In several professional fields, certification is often a requirement for employment.
2. Opportunities for higher wages due to added value.
3. Ensuring career advancement in the future.
4. Aiding in the completion of work in a professional and proficient manner, potentially leading to satisfaction from employers.

Maritime Industry and Shipping Companies also gain the rewards of recruiting certified employees such as:

1. Assisting in competency-based recruitment, making the screening process more efficient.
2. Enhancing client confidence by having competent staff in their field.
3. Supporting the industry in career development systems and remuneration based on competency.
4. Creating healthy competition among employees.

Broadly, certifications have a positive impact on the government like in:

1. Assisting in ensuring the achievement of Human Resources Development programs in their respective sectors.
2. Assisting in ensuring the suitability of human resources development and control systems within their sectors.

Seafaring certification can be obtained by attending maritime training at educational institutions that have been selected and audited by the Directorate General of Marine Transportation of the Ministry of Transportation, followed by receiving approval according to the international Standard Training, Certification, and Watchkeeping 1978. Seafarers can work on ships if they have been equipped with skills certificates and other documents in accordance with national and international regulations, including:

1. Basic Safety Training
2. Survival Craft and Rescue Boat
3. Medical First Aid
4. Advance Fire Fighting
5. Medical Care
6. RADAR Simulator
7. ARPA Simulator
8. GMDSS
9. Ship Security Officer
10. Bridge Resource Management
11. ECDIS Simulator
12. Engine Room Simulator

13. Security Awareness Training
14. Security Awareness Training for Seafarers with Designated Security Duties
15. Crowd Management Training
16. Basic Oil Chemical Tanker
17. Advance Training for Oil Tanker Cargo Operation
18. Advance Liquefied Gas Tanker Cargo Operation
19. Advance Training for Chemical Tanker Cargo Operation
20. ISM Code

With the skills imparted through maritime training, it is hoped that the risk of accidents during maritime activities will be reduced. The Ministry of Transportation, through the Maritime Human Resources Development Agency (BPSDMP) in collaboration with the Directorate General of Sea Transportation, also has basic safety education and training programs with various certificates stipulated by the IMO. These certifications demonstrate that ship workers' conditions are compliant with requirements, thus ensuring safe and comfortable ship operation.

Seafarers wishing to manage certifications can do so in accordance with the criteria set by the Ministry of Transportation and are subject to Non-Tax State Revenue (PNBP) charges. This is regulated in Government Regulation Number 15 of 2016 regarding the Types and Rates of Non-Tax State Revenue Applicable at the Ministry of Transportation.

### *Agenda*

Building upon the Circular Letter of the Director of Shipbuilding and Seafarers of the Directorate General of Sea Transportation (DJPL) No. UM 003/2412/DK-18 regarding the implementation of the Revalidation of Seafaring Training Programs for Indonesian Seafarers, in accordance with Table B-I/2 List of certificates or documentary evidence Required Under The STCW Convention contained in STCW 2010, the interpretation and application of these regulations enable the author to propose recommendations that can strengthen the certification process for Indonesian seafarers to maintain the quality of Indonesia's human resources so that they continue to be included in the International Maritime Organization's White List. This would enable Indonesian seafarers to continue working for various shipping companies worldwide and have their expertise and competence recognized. Recommendations include:

1. Having a uniform curriculum among training providers, creating a common understanding for seafarers, and updating material according to national and international needs.
2. The approval process for training institutions should meet minimum facility, simulator, and training equipment requirements and be accompanied by designated experts recommended by the Ministry of Transportation.
3. The registration and revalidation system can be accessed through websites or online platforms, making it accessible to seafarers across the Indonesian archipelago,

saving time off work and reducing accommodation costs for training.

## *Conclusion*

The development of human resource competencies in Indonesia's maritime transport sector is significantly influenced by the government's involvement in creating policies and strategies that support human resource development. The government needs to maintain the quality of Indonesia's human resources to ensure continuous inclusion in the International Maritime Organization's White List, allowing Indonesian seafarers to work across global shipping companies and have their expertise and competence recognized by certifications. However, the government must also be sensitive to the needs of seafarers to facilitate the revalidation of their skill certifications without burdening them with lengthy and complicated processes.

The objectives of this analysis are:

1. To understand the benefits of the policy outlined in the Circular Letter of the Director of Shipbuilding and Seafarers of the Directorate General of Sea Transportation (DJPL) No. UM 003/2412/DK-18 regarding the implementation of the Revalidation of Seafaring Training Programs for Indonesian Seafarers.
2. To identify the benefits of the policy for maritime stakeholders.

3. To devise strategies necessary for maritime stakeholders to align with the existing policy.

SWOT analysis was employed for this purpose. The findings of the study reveal that this policy is highly advantageous and supportive for seafarers as it reduces their financial burdens and efforts. This is because the Circular Letter DJPL No. UM 003/2412/DK-18 aligns with the Table B-I/2 List of certificates or documentary evidence Required Under The STCW Convention contained in STCW 2010. It highlights several certificates that do not require revalidation and renewal process such as:

1. Crisis Management and Human Behavior Training
2. Crowd Management Training
3. Medical First Aid
4. Medical Care
5. Security Awareness Training
6. Ship Security Officer
7. Seafarers with Designated Security Duties
8. ARPA Simulator
9. RADAR Simulator
10. ECDIS Simulator

### ***Policy for Reducing Maritime Sector Exhaust Gas Emissions***

More than 80% of global trade volume is carried by ships, where 70% of this volume is transported using vessels. Shipping costs constitute an essential part of overall trade expenses, which also cover costs associated with policy impediments, information,

contract enforcement, exchange rate fluctuations, local distribution, legal costs, and regulations. Transportation is a driver of international trade, explaining why transportation costs are a crucial factor in determining a country's ability to participate in the global economy.

In April 2018, the International Maritime Organization (IMO) adopted the Initial IMO Strategy for Reducing Greenhouse Gas (GHG) Emissions from Ships. The primary target of the Initial IMO GHG Strategy is to reduce total annual GHG emissions by at least 50% by 2050 compared to 2008, as an urgent measure to eliminate greenhouse gas emissions this century. Under the 'business-as-usual' scenario, CO<sub>2</sub> emissions from cargo shipping are estimated to increase between 90% and 130% by 2050 compared to the emissions in 2008, depending on future energy developments and economic growth prospects.

Considering that additional policy measures to reduce greenhouse gas emissions from shipping need to be adopted and implemented if the IMO's climate target is to be achieved. The Initial IMO Greenhouse Gas Reduction Strategy includes a list of short-, medium-, and long-term candidate measures, which are not comprehensive, and states that the impact on countries of climate mitigation policy measures is assessed and considered before adoption, with special attention given to the needs of developing countries, especially small island developing states and least-developed countries. These requirements are a response to concerns by these countries that additional climate mitigation policy measures in shipping could negatively impact their economies.

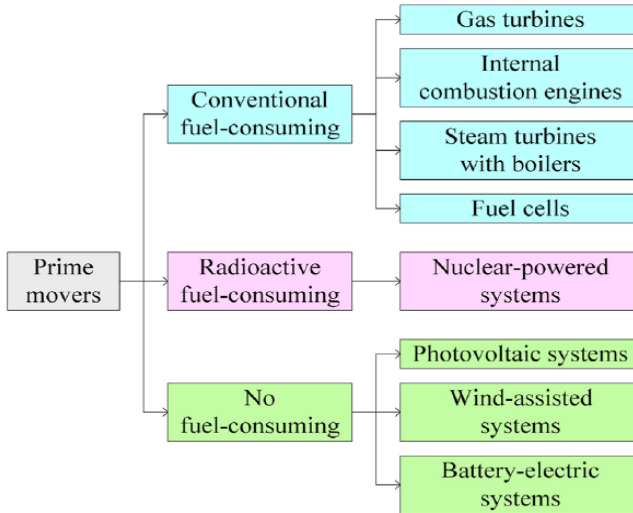


Figure 2. Fuel Consuming

The global maritime fleet has relied on fossil energy for more than a century. Presently, alternative energy sources for maritime transportation include wind assistance, photovoltaic systems, and nuclear energy. According to Xing Hui, the currently available sources of ship propulsion energy are as follows:

“Most fuel types used in the maritime industry currently rely on conventional fossil fuels (fossil energy) such as Solar, Marine Diesel Oil (MDO), Marine Fuel Oil (MFO), Liquefied Natural Gas (LNG), and other types of Marine



Gas Oil. These energies produce high emissions such as CO<sub>2</sub>, SO<sub>x</sub>, and NO<sub>x</sub>. Nuclear-powered systems are types used on warships and are limited to a few countries globally (non-commercialized). Then in the 21st century, technologies for propulsion systems without using conventional energy, such as Photovoltaic Systems, Battery Electric Systems, and Wind Assisted Systems, have begun to be developed but have not been widely adopted by fleet providers due to the need for ship technology adaptation. Consequently, it can be said that most fleets currently still use conventional fuel consuming, making the maritime industry one of the highest-emission-producing sectors in the world.”

Greenhouse gas emissions impact maritime operational costs. Attention needs to be given to carbon emissions, which cause increased fuel costs, sailing costs, maintenance costs, and higher capital expenses if ship specifications are adjusted, as outlined by Rojon et al. as follows:

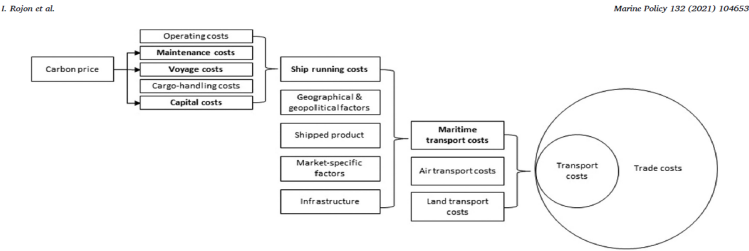


Figure 3. Capital Expenses

Figure 3 explains that carbon emissions affect several aspects of the maritime industry and the prices of goods/logistics. Gas emissions not only occur in the maritime industry but also in land and air transportation. Ultimately, the effects of emissions will affect transportation costs and trade costs. The data stated that carbon emissions contribute variably to each commodity, causing an increase in the price of imported goods. For example, in Container Shipping, assuming an initial fuel price of US\$ 550/ton, a carbon emission contribution of US\$45/ton or US\$14/ton CO<sub>2</sub> results in a 1-5% increase in transportation costs, thereby causing an increase in the price of imported goods by 0.15% - 1.86%. This also happens for other commodities as indicated in the Table 1.

Table 1. Transportation and trade costs

Inputs/assumptions			Findings	
Specific focus, if any	Fuel price assumption	Carbon price or bunker contribution	Increase in Maritime transport costs	Increase in import prices of goods
Carbon price		US\$2.4-14.2/tCO <sub>2</sub> (2020); US\$6.6-39.8 (2050)	Not specified	0.00% (food & drink, agricultural products)
ETS		US\$56/tCO <sub>2</sub> (2020); US\$1022/tCO <sub>2</sub> (2050)	Not specified	0.00-0.09% (food & drink) 0.00% agricultural products
	US\$700/tonne	US\$30/tCO <sub>2</sub>	4-9%	< 1%
Container shipping: select commodities	US\$450/tonne	US\$45/tonne fuel (US\$14/tCO <sub>2</sub> )	6-12%	0.15-1.86%
Handy- and Capesize bulker, VLCC, container and ro-ro	US\$550/tonne	US\$30/tCO <sub>2</sub>	1-5%	
	US\$360.5/tonne	US\$15/tCO <sub>2</sub>	7-16%	0.4-3%
			4-9%	0.2-1.4%
Iron ore		10% increase of bunker fuel price	Not specified	< 0.2% (similar for exports)
Crude oil			5-14%	
Grains			1.2-6%	0.2-0.4%
Furniture & clothing			2.9%	0.2-0.7%
Coking and steam coal			10-11%	< 0.2%
all, but impacts only determined for US	US\$2.40/gallon (-US\$741/tonne)	10% increase in spot bunker price US\$15-30/tCO <sub>2</sub>	Not specified	0.1-0.29%
Agriculture (only US)				0.14-0.29%
Raw material (only US)				0.10-0.36%
Crude oil (only US)				0.06-0.13%
Manufacturing (only US)				0.1-0.2%
all	US\$739/tonne	US\$10-50/tCO <sub>2</sub>	0.4-3.4%	
all	US\$25/barrel (-US\$184/tonne)	Fuel price increase to US\$75/barrel (-US\$551/tonne)	1.49%	
		US\$18/tCO <sub>2</sub>	Not specified	0.2%
Danish maritime cargo sector		US\$387-443/tCO <sub>2e</sub>	100%	6-8%

## *Agenda*

Table 2. SWOT Matrix

<b>Strength (S)</b>	<b>Weakness (W)</b>
<ol style="list-style-type: none"><li>1. Can assist the Indonesian Government in achieving a 29% emissions reduction target by 2030.</li><li>2. Creation of an eco-friendly industry in response to climate change.</li></ol>	<ol style="list-style-type: none"><li>1. High investment value for developing technology in the maritime fleet.</li><li>2. Reduced state revenue.</li><li>3. Increased commodity prices due to carbon tax.</li></ol>
<b>Opportunity (O)</b>	<b>Threats (T)</b>
<ol style="list-style-type: none"><li>1. Transition from conventional technology to Low Carbon Emission technology.</li><li>2. Alternative use of new energy for ship fuel.</li><li>3. Creation of new business opportunities in utilizing natural resources as eco-friendly fuel</li></ol>	<ol style="list-style-type: none"><li>1. Bankruptcy of the shipping industry.</li><li>2. Future penalties for not supporting carbon emissions reduction plans.</li><li>3. Developed countries' indication of technology business to developing nations</li></ol>

There are currently no regulations in Indonesia that govern the obligation of fleet ships in restricting carbon emissions. However, according to international regulations, these restrictions are stipulated in MARPOL, the International Convention for the Prevention of Pollution from Ships Annex VI,

which sets emission limits for nitrogen oxides (NO<sub>x</sub>) and mandates the use of lower sulfur content fuels, protecting public health and the environment by reducing ozone-producing pollution that can cause smog and worsen lung diseases. By implementing reductions or tax reliefs for shipping companies that apply low carbon emission technology, there will be several advantages and disadvantages. In this regard, it will be analyzed through the Strengths, Weaknesses, Opportunities, and Threats (SWOT) matrix as depicted in Table 2 above.

From the various SWOT analysis results above, a deeper exploration will be articulated as follows:

1. Strength (S)

- a. Can assist the Indonesian Government in achieving a 29% reduction in emissions by 2030.

The maritime sector is perpetually essential in both national and global trade. With reduced taxes, shipping companies are anticipated to invest in low carbon emission technology for their fleets, contributing to lowering carbon emissions in the coming years.

- b. Creation of an environmentally friendly industry in addressing climate change.

Climate change and global warming significantly impact human life quality. The maritime sector is experiencing a rise in sea levels annually. Establishing an environmentally friendly industry is crucial in preventing more severe global warming.

2. Weakness (W)

- m. High investment value in developing shipping technology.

Investment, particularly in maritime technology, is expensive. This is unlike land transport investments, which are more cost-effective. The substantial investment required in new technology poses a financial burden, especially for national shipping companies, hindering business progress.

- n. Decreased national revenue.

Implementing reduced taxes for companies will consequently reduce national income, which is essential for advancing other sectors like health, education, public transportation, and trade.

- o. Increased costs in goods and logistics.

Future carbon tax implementation will significantly impact national goods and logistics prices. As companies are required to pay this tax, it burdens businesses and society, potentially resulting in reduced logistics activities and public complaints about the imposition of emission taxes.

### 3. Opportunity (O)

- a. Transition from conventional technology to low carbon emission technology.

Reduced taxes will encourage shipping companies to allocate funds for investment and technology development in their fleets. This gradual shift aims to replace energy-consuming conventional technology (high emission) with low carbon emission technology.

- b. Potential for new energy sources for ship fuel.

Transitioning to low carbon emission technology could open opportunities for new fuel sources that can be used in national and global maritime operations.

- c. Creation of new business opportunities in utilizing natural resources as environmentally friendly fuel. Indonesia possesses abundant natural resources. Discovering alternative ship fuel sources presents an opportunity for Indonesia to establish a position in this market due to its vast natural resources. Research and development of fuel types in energy product form for global marketing as environmentally friendly fuel is feasible.

#### 4. Threats (T)

- a. Bankruptcy of the shipping industry.  
Weak financial foundations for national business players may render these policies burdensome for operations. High investment in technology might lead to several companies shutting down in the shipping industry.
- b. Potential penalties if not supporting the carbon emission reduction plan.  
If the global Carbon Emission Reduction Agenda is enforced, Indonesia faces challenges in ensuring its implementation in the maritime industry. Failure to meet these requirements might lead to penalties or sanctions from the International Maritime Organization. This could impede global ship operations.

- c. Indications of technology business by developed nations to developing nations.

The global implementation of carbon emission reduction agendas poses threats in the form of business interests. Technology is currently a highly sought-after product, primarily developed and innovated by developed nations. The primary market for this technology is developing nations, which are perceived as needing the latest technology to survive in the present era.

Based on the explanations above, it can be conveyed that the policy to ratify the carbon emission reduction agenda in the maritime industry presents both positive and negative impacts. The positive impact includes a healthier environmental condition and the potential for alternative fuel sources to replace conventional fuel. On the other hand, the Indonesian government needs to consider potential negative consequences. The government needs to scrutinize the application of these policies on national logistics prices and assess the readiness of national maritime business players to face potential technology business interests.

The implementation of tax reductions for companies employing low carbon technology in their fleets can be used to encourage companies to transition into environmentally friendly technology and as a reward for their achievements. However, the extent of these tax reductions needs thorough evaluation to achieve the readiness of business players in facing global policies

related to the 2050 zero-emission agenda. This policy presents opportunities for stakeholders to:

1. Begin investing in environmentally friendly technology development on ships.
2. Expand maritime business towards low carbon technology.
3. Establish partnerships or collaborations with companies in broader sectors.

### *Conclusion*

The debate and discussion about climate change in the world, known as Climate Change, is one of the hotly debated issues. Major countries in the world are discussing ways to address this, such as reducing greenhouse gas emissions or reducing carbon emissions in the maritime sector. Indonesia is one of the members of the International Maritime Organization (IMO). It's possible that Indonesia will ratify or support what IMO has planned for 2050 regarding zero carbon emissions. Currently in Indonesia, carbon emissions have been taxed by the government through a Luxury Goods Delivery Tax based on emissions produced. The government, through the Ministry of Finance, is restructuring the provisions of the Sales Tax on Luxury Goods (PPnBM) for new cars. This policy might trigger an impact on the maritime sector, which will affect national maritime operational and logistical costs.

If Indonesia truly ratifies the IMO agenda for 2030 and 2050 about reducing gas emissions, the most likely action is to provide



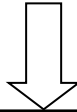
relaxation in the form of tax reductions to shipping companies using Low Carbon Emission technology in their fleets. With the tax reduction, the hope is to facilitate the adoption of the latest technology to support low carbon emission in the maritime sector and explore alternative fuel energy sources for maritime fleets.

### ***Restriction on Ship Traffic: Ampera Bridge***

The Ampera Bridge is a bridge located in the city of Palembang in the South Sumatra Province, connecting the downstream and upstream areas of Palembang. This bridge spans the Musi River, measuring 1,177 meters in length, 22 meters in width, and 63 meters in height, with a distance of 75 meters between the towers. Initially, the central part of this bridge could be lifted to allow the passage of ships. However, since the 1970s, this activity of raising and lowering the central part of the bridge has ceased. The time taken to lift the bridge was considered to disrupt the traffic flow on the road above it. In 1990, the counterweight was dismantled due to safety concerns. As a result, ships passing under the Ampera Bridge are now restricted to a maximum height of 8.5 meters above the water surface.

Presently, the South Sumatra Province is at the peak of its coal production. Coal transportation is primarily conducted via river and lake transport using barges that carry coal from upstream areas through specialized terminals along the Musi River. The distribution map of Coal Mining Work Permits (IUP) in South Sumatra shows a coal resource of 43.8 million tons and reserves

of 9.5 million tons. This substantial coal production potential has led to consistently busy ship traffic due to the large amount of coal being produced.



Deriving from the coal production activities from these IUPs, the

mode of water transportation used is barges, with an estimated 500 to 750 barge movements passing under the Ampera Bridge every month. This necessitates a considerable amount of time for the smooth flow of ship traffic. According to the City Regulation of Palembang Number 14 of 2011 concerning Transport Services, Article 106 point d stipulates a limitation on time: activities can only be conducted during daylight hours.

Indeed, this regulation was created to protect the bridge from collisions, such as the incident on May 17, 2017, when the Ampera Bridge was hit by TK. ARK03. However, this should not be a benchmark that ship activities can only occur during daylight, especially if conducted at night. In essence, time is not a hindrance in the navigation process. Every mariner has a strong foundation in handling ship maneuvers and long-distance navigation in accordance with Ship Collision Prevention Regulations at Sea. Additionally, every ship entering the Musi River is guided by traffic procedures. Moreover, ship movements are influenced by the tides in the Musi River, making the limited time during tides even more restricted, especially when combined with the time restrictions that allow passage only during daylight.

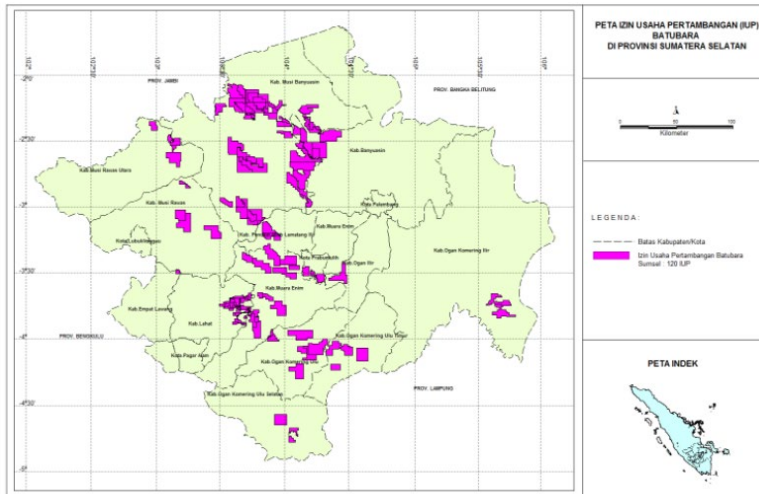


Figure 4. Coal Mining Work Permits (IUP) map in South Sumatra

Regarding the surveillance and regulation of ship traffic activities on the Musi River, where the Ampera Bridge is situated, supervision is carried out by the Harbor Master's Office, specifically the Class II Palembang Harbor Master's Office. This waterway is also a mandatory pilotage area, where ships with a Gross Tonnage (GT) above 500 are required to be piloted to minimize the risk of accidents. In summary, ship traffic activities passing under the Ampera Bridge can be conducted throughout the day while adhering to existing regulations and under the strict supervision of the relevant authorities.

### *Agenda*

With respect to the City Regulation of Palembang Number 14 of

2011 concerning Transport Services, it is hoped that revisions can support the export and domestic transportation of one of South Sumatra's flagship commodities, coal. Additionally, this might trigger the development of other commodities given the policy's flexibility. In terms of revising, the following recommendations might be considered for improvement:

1. Removal of point d: "sail during the daytime" because in the maritime world, time is not a limitation as long as there is good navigation assistance along the shipping route.
2. To directly protect the bridge, the local government can install and maintain fenders on the bridge's pillars. Fenders are used to cushion impacts due to poor ship maneuvers or wave-induced movements to prevent ship collisions with the bridge. Additionally, the local government can collaborate with the Navigation District to install navigational aids or signs at the Ampera Bridge to guide passing ships.

Concerning the oversight of shipping activities and ship traffic management, it is hoped that the Harbor Master's Office can conduct intensive oversight by checking the ships that will pass. For a more organized operation, the Harbor Master's Office can create its own Standard Operational Procedure (SOP) that regulates shipping traffic under the Ampera Bridge to ensure smooth operations. Additionally, for pilotage activities, service can be improved by increasing personnel and infrastructure in line with applicable regulations.

## *Conclusion*

The Palembang City Government issued City Regulation Number 14 of 2011 concerning Transport Services, which stipulates: "Every ship/barge passing under the Ampera Bridge must comply with the following provisions: d. sail only during the day". This regulation results in time limitations for ships passing under the Ampera Bridge, leading to ship queues along the river at mooring positions before and after the Ampera Bridge. Given the development of coal production downstream, an open waterway is necessary around the clock to prevent congestion at various locations.

### *Yacht Operation Policy*

As the world's largest archipelagic country, Indonesia is endowed with numerous advantages, including the Coral Triangle, a geographical term representing a triangular area of tropical waters in Indonesia, Malaysia, Papua New Guinea, the Philippines, the Solomon Islands, and Timor-Leste. This area is home to 500 coral reef-building species in each ecoregion. For yacht enthusiasts worldwide, the diversity found within the Coral Triangle is a dream paradise. Undoubtedly, this area has immense tourism potential. Most yacht-using tourists are avid divers and enthusiasts of maritime activities. For Indonesia, this situation presents an opportunity to generate profits in the form of foreign exchange and various other multiplier effects, given proper management. In essence, Indonesia's possession of the Coral Triangle could transform it into a world-class yacht base.

Yachts and boats are types of maritime transport smaller in dimension than regular ships or vessels. Their smaller size allows for more flexible designs based on the designer's creativity and can be produced in relatively straightforward shipyards using various materials—ranging from wood to composites (fiberglass and ferro-cement) to metals. They can be powered by wind or engines. Yacht and boat businesses are quite profitable. For example, in 2010, the European yacht and boat industry generated 6 billion euros, sustaining about 46,000 workers in approximately 3,000 shipyards. The multiplier effect of this industry on the Blue Economy is fascinating. Related sectors, such as hotels and restaurants, employed 234,000 workers across 37,200 companies, 97% of which were small and medium-sized enterprises (SMEs). The supporting sector's revenue reached 20 billion euros (pre-economic crisis 2008–2009, its income reached 23.4 billion euros).

The European yacht business thrives due to approximately 48 million maritime leisure enthusiasts, with about 36 million of them using boats. This is unsurprising, given their boat ownership ratio stands at 1:164. Europe is also home to 6.3 million boats globally, mostly smaller in size. These boats are parked in around 4,500 marinas providing 1.75 million berths. Marinas are scattered along riverbanks and coastlines throughout Europe (2,000 in Northern Europe, 800 on the Atlantic coast, and 1,200 in the Mediterranean Sea).

Indonesia's potential in the global yacht business presents two aspects: as a destination and a yacht supplier. As a destination, Indonesia is part of the Coral Triangle with its 500 coral reef

species. However, in terms of marinas, Malaysia boasts 22, mostly located in Langkawi. In Indonesia, only two marinas are established: Marina Batavia in Jakarta and Nongsa Point in Batam, Riau Islands. Indonesia can establish more marinas in various areas, such as Labuan Bajo and Rinca Islands in West Manggarai, West Nusa Tenggara, and other regions from Sabang to Merauke.

The utilization of the potential within the Coral Triangle as a global yacht destination was solidified with the issuance of Presidential Regulation No. 79 of 2011 concerning Visits of Tourist Ships (Yachts) to Indonesia. The second potential, as a yacht supplier, is feasible in Indonesia given the available support. One of these is the existence of the Non-Convention Vessel Standard (NCVS) for Indonesian-flagged non-conventional vessels. The presence of this standard is crucial as yachts have different standards from conventional vessels (SOLAS). With the NCVS in place, boatyards in Indonesia can be aligned with the same facilities as those overseas.

Unfortunately, this potential has not been well explored. Consequently, yachts visiting the Coral Triangle are more often parked in Singapore (e.g., Keppel Bay and Changi). At present, several policies (tariffs, KPI, etc.) have been arranged in Ministerial Regulations (PERMEN) for both container and non-container terminals. However, there are no regulations specifically related to the operation of yachts or marinas in Indonesia.

## *Conclusion*



Clarity from the government regarding the operation of marinas or yacht terminals in Indonesia is necessary so that investors can feel more secure in investing in marinas in Indonesia, ensuring standardized marina services in the country. Currently, due to the lack of specific regulations from the Ministry of Transportation regarding yachts or marinas, PT Pelindo is using the operating permit for Terminal for Own Interest (TUKS) as the basis for the development and operation of the marina in Banyuwangi. With this policy, stakeholders can take several actions, such as:

1. Marketing the potential of marinas or yachts in Indonesia while awaiting specific regulations governing the operation and development of marinas in Indonesia.
2. Building marina ports or yacht facilities in Indonesia.
3. Collaborating with strategic partners in the operation and development of terminals.

### ***Port Standardization Policy***

As a maritime country, the presence of port infrastructure in the homeland plays a significant role as an entry point for people and logistics. Ports also play a crucial role in trade and industry activities. According to the Ministry of Transportation's report (MoT), the number of ports in Indonesia was 2,439 in 2020. This figure increased by 38.6% compared to the previous year, which had 1,760 ports. The construction of wharves in 2020 spanned 688 meters, a 41.3% increase from the previous year's 1,172

meters. Thus, the cumulative length of wharves in Indonesia was 43,144 meters in 2020.

However, among the numerous ports in Indonesia, it's certain that there is no official standardization regarding the planning and design of port infrastructure. It's true that based on Minister of Transportation Regulation No. PM 57 of 2020 concerning the Implementation of Seaports, prior to constructing port infrastructure in the field, the Port Business Entity (BUP) needs to obtain permission from the Port Authority or the Ministry of Transportation, with one mandatory requirement being the submission of Technical Design Documents, consisting at least of survey results, construction layouts, soil conditions (bore log/stratigraphy), seismic conditions, technical RKS, and Construction Design Images. However, from the Writer's experience in applying for Construction Permits, these Technical Design Documents are merely for documentation or at most, certain recommendations are provided depending on the reviewing expertise, not based on specific standards that form the basis of planning and design of port technicalities in Indonesia.

When compared to developed countries with numerous ports, each has specific technical standards for port infrastructure planning and design. For example, Japan has the "Technical Standards and Commentaries for Port and Harbour Facilities in Japan" published by The Overseas Coastal Area Development Institute of Japan (OCDI). Meanwhile, the United Kingdom has the British Standard BS 6349 on Maritime Structures. European Union countries often adopt regulations published by PIANC,

and the United States uses the "Port of Long Beach Wharf Design Criteria" for Wharf Design and ASCE 61-14 "Seismic Design of Piers and Wharves" for earthquake planning in port infrastructure.

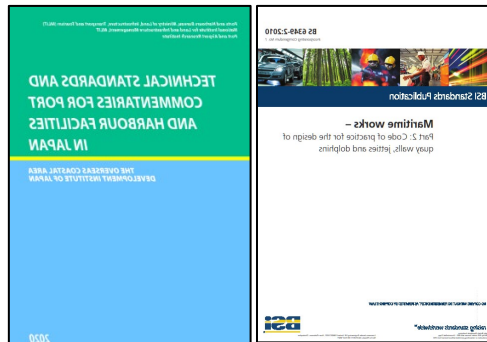


Figure 5. Several Examples of Standardized Rules for Port Infrastructure Planning in Some Countries.

## *Agenda*

It's appropriate for Indonesia, being the world's largest maritime country, to have and implement policies related to examining the design of port infrastructure that will be built. This is due to several considerations, including:

1. The absence of technical standards for national-level port infrastructure planning and design causes the construction of wharves and port infrastructure in Indonesia to be non-uniform in terms of structural strength and serviceability in serving ships and cargo

handling.

2. Going further into technical aspects, the Writer can estimate that specifically, seismic resilience design for all port infrastructure in Indonesia will certainly differ, not based on earthquake-prone regions regulated in the Indonesian earthquake map, but in the application of earthquake-resistant building standards that are inevitably diverse. Why does this happen? Because in Indonesia, there are only two technical/code standards governing earthquake-resistant building design. The first is for bridges through SNI 2833:2016 and the second is for Buildings and Non-Buildings through SNI 1726:2019, neither of which is specific to port infrastructure. Moreover, in SNI 1726:2019, sub-section 1.1 explicitly states that this earthquake planning technical standard cannot be applied to port pier structures and wave-resistant structures.
3. Considering ports as economic and logistical gateways in an area and Indonesia's highly seismic geographical conditions, especially in the western coast of Sumatra, southern Java, Bali, NTT, and NTB, and almost all areas in Sulawesi, the Maluku Islands, and Papua. If infrastructure planning for earthquake resilience is not standardized properly, it could harm the economy and logistic chains in the event of a major earthquake. For example, during the strong 7.7 SR earthquake in Palu, Central Sulawesi in 2018, reported by the Directorate General of Hubla, Kemenhub, Agus Purnomo, the Panlautoan Port in Palu suffered the most severe damage compared to other ports, signified by the collapse of the

quay crane (loading/unloading equipment from/to the dock to/from the ship). Other ports that suffered significant damage included the Wani and Ogoamas ports. Fortunately, Central Sulawesi was still connected to other land areas in Sulawesi, so it wasn't isolated. Imagine if this occurred in island areas; it would undoubtedly impact the logistics supply chain post-earthquake.

Based on the considerations mentioned above, the Writer's proposal regarding policies or regulations is as follows:

1. Expedite the drafting of National-level Technical Design Standards, which could potentially ratify Foreign Technical Regulations that are suitable for Indonesia's geographical conditions.
2. At the Ministry of Transportation level, establish a special team with sufficient expertise and even collaborate with professional engineers or universities as a team handling the review of port infrastructure technical designs before the issuance of Construction Permits according to PM 57 of 2020.
3. Gather data related to port construction technicalities and conduct technical evaluations on the structural strength and serviceability of already-built ports, issuing technical recommendations if reinforcement or repair is necessary. This is aimed at ensuring ports can serve the national maritime logistics and transportation chain more optimally in various possible conditions.

Furthermore, at the Port Business Entity (BUP) level, for instance, PT Pelindo as a port operator in Indonesia, can actively contribute to standardizing its managed port infrastructure. It's essential that new port infrastructure development complies with a design that has passed through a review by experts and has been mutually agreed upon with the Ministry of Transportation, and the work oversight must be comprehensive and effective.

### *Conclusion*

Indonesia, as the largest maritime country with perhaps the most port infrastructure sites globally, is witnessing a rapid increase in the construction of new wharves and port infrastructure, both by the Ministry of Transportation and Port Business Entities. However, this accelerated infrastructure development is not paralleled by good technical planning and design standardization for ports. The authors believes that standardization is urgently needed in Indonesia, with several considerations:

1. Technical standardization is required to ensure structural strength and serviceability in various conditions.
2. Indonesia is earthquake-prone, but there are no technical standards/codes governing earthquake-resistant dock design.
3. Ports are economic and logistical gateways, and the suboptimal state of port infrastructure in handling cargo could disrupt the logistics supply chain, especially in emergency situations like earthquakes.

## *Maritime Highway Policy*

The Maritime Highway Program, which has been rolling out for seven years and touted as one of Indonesia's logistics solutions, is still deemed ineffective. President Joko Widodo also expressed concern about this in a meeting with Ministers, stating that the Maritime Highway Program has not had an effective impact on reducing prices of goods in regions. Moreover, the implementation of the maritime highway policy has not yet resolved the high costs of inter-island logistics in the country. As a result, the price disparity between the western, central, and eastern regions still remains high. For instance, the shipping rates from Jakarta to other cities such as Medan, Banjarmasin, and Makassar are much higher than shipments to foreign destinations like Singapore, Bangkok, Hong Kong, and Shanghai.

Maritime Highway are indeed expected to play a role in connecting remote regions with production zones and transportation modes for marketing local commodities. Nevertheless, several operational obstacles exist for maritime highways, including limited cargo handling facilities, inappropriate choices of equipment, inadequate dock facilities, and double handling due to inappropriate types of docks. Village-Owned Enterprises (BUMDes) play a crucial role in supporting the preparedness of the public to utilize maritime highways.

The readiness map of the community includes internal preparedness in the form of skills, communication forums,

organizational management, training, monitoring, financial management, equity participation, network development, and secretariat location management. Additionally, external preparedness includes community readiness analysis, legal regulations (village regulations, regency/municipality regulations, and others), conflict potential mitigation, social resources availability, and legal protection. Admittedly, the BUMDes business scheme in supporting regional programs has not been maximally implemented, causing various risks such as BUMDes losses, horizontal conflicts, vertical conflicts, and environmental damage. To improve maritime highway implementation in reducing logistics costs and price disparities in the western, central, and eastern regions of Indonesia, comprehensive maritime highway implementation policies are required.

### *Agenda*

Presidential Regulation No. 18 of 2020 explained the concept of Integrated Port Networks. However, it's considered insufficient in the effort to reduce logistics costs, as the policy only pertains to port infrastructure standardization and does not include customer service standards, shipping line schedules that need to be met, standard ship sizes to be used in a comprehensive maritime highway implementation, and industrial area standards in the western, central, and eastern parts of Indonesia to reduce cargo imbalances.



It is hoped that this policy will also include the task force that will be involved in the implementation and monitoring of the policy. Several strategies can be carried out by each stakeholder, such as:

1. Port Operators: Implement their main service standardization at primary ports and express them in Key Performance Indicators (KPIs).
2. Shipping Lines: Implement the feeder and hub port concept, ship sizes, and schedules used in maritime highway implementation.
3. Industrial Areas: Standardize industrial areas in the western, central, and eastern regions of Indonesia to reduce cargo imbalances.

## *Conclusion*

Maritime Highway is expected to play a role in connecting remote regions with production zones and transportation modes for marketing local commodities. However, the program is still deemed ineffective. President Joko Widodo expressed concern about this, stating that the Maritime Highway Program has not had an effective impact on reducing prices of goods in regions. To improve the maritime highway implementation to reduce logistics costs and price disparities in the western, central, and eastern regions of Indonesia, comprehensive maritime highway implementation policies are required. These policies should encompass regulations that must be implemented by all logistics stakeholders in Indonesia, such as port operators, shipping lines, industrial areas, and forwarding companies. This policy is an

extension of the policy contained in Presidential Regulation of the Republic of Indonesia Number 18 of 2020.

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## **Conclusion**

### **Indonesia's Current and Future Maritime Public Policy**

Tri Achmadi & Riant Nugroho

Indonesia's progress in the maritime sector is the subject of an insightful book that delves into the nation's public policies. The authors aim to uncover the policies that facilitate or impede progress in the sector. Constructive policies that drive growth, distortive policies that create inconsistencies and inefficiencies, and accelerated policies that require proactive measures to be effective are the three types of policies explored in this book. Each chapter provides a detailed analysis of these policies, highlighting their impact on the sector and raising critical questions. The authors provide several case studies and theoretical frameworks to demonstrate the potential of constructive policies in promoting growth and prosperity. They also emphasize the need to address inconsistencies and inefficiencies within existing policies.

#### *Constructive Policies: Fostering Growth and Empowering the People's Economy*

Indonesia's government is committed to fostering development and growth through constructive policies that support small economic actors, known as the "people's economy," and empower national businesses. The authors examine ten key policies, including maritime highway optimization and the people's shipping policy, that quantify and strengthen these enterprises. The maritime highway policy reduces operational

costs for businesses engaged in maritime activities, while the people's shipping policy opens participation in the maritime sector to a broader demographic. Each policy contributes to a holistic strategy to uplift national businesses and cement their position in the maritime domain.

### *Distortive Policies: A Critical Examination and Proposed Solutions*

Constructive policies are undoubtedly crucial for progress, but it is important to acknowledge that not all policies positively impact the maritime sector. However, this comprehensive study has identified several policies that have been distorted and used as learning experiences. Specifically, the Lobster Seed Export Policy and Maritime Transportation Empowerment Training have been scrutinized to propose effective solutions. While the Lobster Seed Export Policy was well-intentioned, it has unfortunately resulted in unintended negative consequences. This book recommends recalibrating the policy to align with the maritime sector's overarching goal of sustainable development. Similarly, the Marine Transportation Empowerment Training policy can be refined better to enhance the skills and capabilities of the workforce, ultimately contributing to the sector's growth. By taking a nuanced approach towards distortive policies, we have reframed them not as roadblocks but as opportunities for improvement, setting our book apart from others in the field. This approach sets the stage for collaborative efforts between the government and stakeholders to continuously refine and enhance policies, paving the way for a brighter future for the maritime sector.

### *Logistics Challenges: A Barrier to Economic Competitiveness*

Indonesia's logistics costs significantly challenge its economic growth and competitiveness. To achieve sustainable economic development, it is crucial to tackle this issue head-on. This book comprehensively analyses the factors contributing to these high costs within the context of end-to-end logistics. The challenge is heightened by demand-supply imbalances, where population and economic activities are centralized in industrial areas, leading to the containerization of critical commodities in underdeveloped regions. Suboptimal port performance due to limited infrastructure and inefficient operations only adds to the logistical hurdles. Furthermore, low maritime and land value chain efficiency and unfavorable government regulations further complicate the challenges. A synchronized effort is necessary across multiple domains, from infrastructure development to regulatory reforms, to overcome these issues. The book underscores the importance of a holistic approach in addressing these challenges to unlock Indonesia's full economic potential.

### *In-Depth Policy Analysis and Critical Questions: A Call for Continuous Learning*

The book presents a meticulous analysis of various policies with accompanying case studies and theoretical frameworks, which makes it easy to understand. The authors put forward thought-provoking questions about the policies' effects on the sector, leading to productive discussions among policymakers and stakeholders. Rather than offering definitive solutions, the questions inspire continuous learning and the development of

more effective policies. This unique approach sets the book apart as both a critique and a platform for ongoing conversation and improvement. It promotes a shift in mindset from rigid policies to adaptable and evolving strategies that can thrive in the constantly changing maritime sector.

*Accelerated Policies and Proactive Measures: Seizing Opportunities and Tackling Challenges*

Strategic planning, timely action, and a forward-looking approach are paramount in accelerating public policies, and the book firmly emphasizes this fact. The maritime industry presents many opportunities and challenges, and the authors recommend a combination of foresight, adaptability, and agility to maximize opportunities and overcome challenges proactively. Being ahead of the curve is crucial, given the industry's dynamic nature. By implementing accelerated policies, Indonesia can establish itself as a proactive player capable of confidently and efficiently navigating the maritime domain's continuously evolving challenges and opportunities.

*A Call to Action for a Harmonized Future*

As we conclude this comprehensive exploration of Indonesia's maritime policies, this book is more than just an academic exercise, it is a compelling call to action. Rather than condemning distortive policies, the book invites stakeholders to improve and evolve them, making them more effective and efficient.

The maritime sector is a vital part of Indonesia's economy and

requires a responsive and dynamic approach. By identifying distortive policies, stakeholders can refine and improve existing policies to create a more prosperous future for everyone. By taking this nuanced perspective, the book encourages policymakers, scholars, and industry professionals to engage in continuous dialogue to create a living document that can adapt to an ever-evolving maritime landscape.

The book's call to action is clear: stakeholders must work together to address policy inconsistencies and inefficiencies. These corrections are not just about refining regulations but sculpting an environment where the maritime sector can thrive, unburdened by unintended consequences. Whether in government, business, or academia, everyone involved in Indonesia's maritime sector must collaborate to improve and evolve policies, creating a harmonized future where everyone can prosper.

In conclusion, this book is a vital resource for understanding Indonesia's maritime policies and as a catalyst for change. It emphasizes the importance of proactive measures in a rapidly evolving maritime landscape and encourages foresight, adaptability, and agility to maximize opportunities and mitigate challenges effectively. As Indonesia sets sail into the future, the book's insights serve as a compass for policymakers and every individual invested in the nation's maritime future. It is a clarion call to weave policies that propel growth and ensure the journey is smooth, efficient, and beneficial. The responsibility lies with every stakeholder to navigate the course with wisdom, collaboration, and an unwavering commitment to the prosperity



of Indonesia and its maritime stakeholders.