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### Marine economy at Tra Vinh Province in the period of 2016-2020

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#### **Abstract**

The study focuses on analyzing and evaluating the current state of marine economic development at Tra Vinh Province in the period of 2016-2020 across key sectors such as marine capture fisheries and aquaculture, coastal tourism and services, coastal industries and energy, as well as seaport and logistics systems. The outcome indicates that Tra Vinh's marine economy has achieved significant progress; contributing to the province's economic restructuring toward industry and services; improving the livelihoods of coastal populations and positively enhancing overall economic growth. Nevertheless, there are several limitations in this improvement including underdeveloped infrastructure, the small scale of processing industry, weak regional linkages and the increasing impacts of climate change.

Based on the SWOT Analysis, the study shows that in spite of owning great advantages on geographical location, marine resources and development policies, Tra Vinh Province should overcome weaknesses on human resources, technology and resource management. The study proposes some strategies towards sustainable marine economic development, especially impressing solutions about completing coastal infrastructure, developing renewable energy, strengthening regional connectivity, enhancing the quality of manpower and promoting the application of science and technology in the management, exploitation, and protection of marine resources.

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#### 1. Introduction

Promoting the effective development of coastal, marine, and island economies in response to the challenges of the 21st century, with the goal of transforming Vietnam into a strong maritime nation, represents an urgent, strategic, and humanistic priority. In the era of deep international integration and transformation of growth pattern towards the sustainability, marine economy has increasingly been recognized as a critical pillar in both local and national development strategies. At present, when the terrestrial resources have become increasingly scarce due to the demand for rapid economic growth, exploiting the marine resources is considering as the effective strategy of different countries. Developing marine economy is not only an underlying trend but also a crucial direction in Vietnam's socio-economic development strategy, aiming to meet essential needs for food, raw materials, employment, environmental protection, national defense, and international cooperation. Vietnam possesses great potential for marine economic development thanks to its favorable geopolitical and geo-economic position along the East Sea. The country benefits from a long coastline, an extensive system of seaports, abundant marine biological and mineral resources, and significant potential for offshore renewable energy. Sustainable marine economic development is shared responsibility for the entire political system, all levels of governments, coastal localities and the whole population. Aiming to the goal in 2030, Vietnam will become a strong and sustainable maritime nation that ensure the maritime security and prosperity. And by 2045, the country will achieve a high level of sustainable marine economic development compared with others in the region.

Vietnam's coastal economy has developed rapidly, serving as a big push for the national growth by key sectors such as maritime transport, tourism, fisheries, and coastal economic zones. Over the past decade, more and more coastal provinces have increasingly contributed a large share to national GDP, an essential engine of socio-economic becoming development. According to the General Statistics Office, from 2011 to 2022, coastal localities made up 47.6% of Vietnam's growth. In recent years, marine economic activities namely aquaculture, oil and gas exploration, renewable energy, maritime services, and marine tourism have expanded significantly, contributing to the national economic growth. With over 3,200 kilometers of coastline, hundreds of beaches, islands and natural bays, suitable for tourism, the provinces such as Khanh Hoa, Binh Thuan (previous name), Quang Ninh, Kien Giang (previous name) and others have actively developed coastal tourism. Although the number of domestic and international tourists rose rapidly (averaging over 10% annually), these localities remain unsustainable development, the shortage of integrated marine spatial planning, as well as suffer from environmental issues namely pollution, coastal erosion and ecosystem degradation persist. Although marine economic activities bring huge contribution to socio-economic development, they place considerable pressures on maritime ecosystem. In regions such as Cat Ba, Ha Long, Quang Nam, seagrass beds have almost lost their natural capacity for recovery due to the impacts of tourism and aquaculture. Coastal urbanization across 28 provinces, with 51 million inhabitants and a population density nearly double the national average, has generated large volumes of waste (about 122-163 million metric wastewater per day, mainly from tourism). Human resources are considered as the "pillar" for marine industries namely shipping, fisheries, marine energy, tourism and others; but they have not yet received adequate attention. To ensure sustainable marine economic development, Vietnam should give the priority of investment to the quality of maritime human resources, thereby enhancing national maritime competitiveness and contributing to long-term security and development. In addition, strategic efforts are needed to develop environmentally friendly seaport models that integrate renewable energy, smart management technologies, low emissions, and high operational efficiency. The marine and coastal area at Tra Vinh Province hold a strategic position relating to economy, security, defense, and ecological environment. With the location bordering the East Sea and being between the two main branches of Mekong rivers system, Tra Vinh possesses the huge potential as well as advantages on natural – geographical conditions to exploit and develop marine economy. The period of 2016-2020 witnesses a significant transformation in Tra Vinh's mindset and policies on marine economic development. The province has gradually concretized the Resolution No. 36-NO/TW (2018) on Vietnam's Strategy for Sustainable Marine Economic Development to 2030, with a vision to 2045. A series of key projects have been implemented, including offshore wind power, the upgrade of Dinh An seaport, development of seafood processing clusters, high-tech marine aquaculture, and coastal climate adaptation programs. However, alongside positive outcomes, Tra Vinh still faces major challenges: fragmented planning, weak logistics and coastal infrastructure, limited human resource capacity, and increasingly complex impacts of climate change.

#### **Objective**

This study aims to analyze and evaluate the current state of marine economic development at Tra Vinh Province in the period of 2016-2020; thereby it indicated clearly the potentials, advantages, achievements, limitations and underlying causes. Based on these findings, this study also proposes strategic orientations and recommendations to foster the province's marine economic development towards the sustainability, effectiveness and green growth.

#### **Object**

The object of study is activity on marine economic development at Tra Vinh Province in the period of 2016-2020, across different key sectors such as fisheries exploitation and aquaculture, marine tourism and coastal services, coastal industries and energy, seaport systems, logistics, and coastal trade.

#### Scope of Research

**Content:** This study analyses the current status, achievements, limitations, and underlying causes of marine economic development; as well as expresses strategic orientations and policy solutions to improve the effectiveness and sustainability of marine economy at Tra Vinh Province in the coming period.

Timeframe: From 2016 to 2020

Geographical Area: Tra Vinh Province.

#### Method

#### **General Research Method**

The article is based on the methodology of dialectical materialism, historical materialism, and the viewpoints of the Communist Party of Vietnam and the Socialist Republic of Vietnam.

#### **Specific Research Methods**

A combination of two main methods: historical method and logical method.

#### **Results and Discussion**

Tra Vinh Province is located at Southeastern coastal area of the Mekong Delta, with 70 kilometers of coastline bordering the East Sea and two big rivers – Co Chien and Hau. It has different coastal terrains consisting of tidal flats, estuarine zones, lagoons, and mangrove forests. The coastal regions of Tra Vinh covers many localities such as Duyen Hai, Tra Cu, Cau Ngang and Duyen Hai Town that hold great potential for the development of fisheries, offshore wind power, coastal logistics services, ecotourism, and internationally connected seaports.

The outcome of this study shows that Tra Vinh is determined precisely as one of key provinces in marine economic development belonged to the Mekong Delta region. It also plays as an important gateway in the regional linkage triangle of Tra Vinh – Ben Tre – Vinh Long. It can be seen that during the period of 2016-2020, the province actively implemented the resolutions, strategies and plans relating to marine economy, especially the Resolution No.36-NQ/TW on developing sustainably Vietnam marine economy in 2030, towards 2045 with many positive achievements.

### 1.1. Achievements in the Development of Marine Economic Sectors

#### 1.1.1. The Fisheries Sector

Fisheries constitute the key pillar of Tra Vinh's marine economy with two included components aquaculture and capture fisheries.

**Table 1:** Aquaculture Area in Tra Vinh Province, 2016-2020. Unit: thousand hectares

Year	2016	2017	2018	2019	2020
Area	30.4	32.4	32.5	36.0	41.5

Source: Tra Vinh Statistic Yearbook, 2021

From Table 1, it is clearly that Tra Vinh's aquaculture area increased steadily during the period of 5 years, from 30.4 thousand hectares in 2016 to 41.5 thousand hectares in 2020, equivalent to about 36.5%. It means that Tra Vinh was attracted heavy investment and taken major priority for developing aquaculture in the context of agricultural restructuring, climate change adaptation, and the exploitation of coastal advantages. In particular, the model of high-technology shrimp farming has increasingly expanded at Tra Cu and Duyen Hai ward.

The capture fisheries at Tra Vinh from 2016 to 2020 achieved many positive outcomes.

**Table 2:** Capture Fisheries Output in Trà Vinh Province, 2016–2020. Unit: tons

Year	2016	2017	2018	2019	2020
Output	68,838	73,773	78,227	80,468	75,676

Source: Tra Vinh Statistic Yearbook, 2021

Obviously, there was the considerable growth in capture fisheries output during 4 years, rising from 68,838 tons in 2016 to 80,468 tons in 2019 (Table 2). This is the demonstration for the effectiveness of provincial support policies for fishermen, investments in fishing vessels, and exploitation of marine fishing areas. The province has a fleet of approximately 950 fishing vessels, primarily small and medium capacity boats. However, the capture fisheries output witnessed a decrease of around 5,000 tons in 2020. The seafood processing and export were strongly promoted and supported by a system of 30 processing enterprises of different scales, making a considerable contribution to Tra Vinh's export turnover. In 2020, the value of seafood export reached at 250 million USD, covering above 60% of total export turnover. Nevertheless, the fisheries sector had suffered from many burdens such as dependence on weather conditions, the shortage of capital for upgrading fishing fleets and farming ponds, disease outbreaks in shrimp and fish farming, increasing input costs, and limited competitiveness of seafood products.

#### 1.1.2. The Coastal Industries and Energy

During the period of 2016-2020, the industrial output value of Tra Vinh's coastal regions increased gradually, especially focusing on localities namely Duyen Hai town, Duyen Hai district and coastal industrial areas. The province's industrial output value rose from about 20,500 billion Dong in 2016 to over 39,800 billion Dong in 2020, with the coastal areas (including the Dinh An Economic Zone and the Duyen Hai Power Center) contributing more than 60% of the provincial value (according to Tra Vinh Statistic Yearbook, 2020).

One of the best illustrations was the development of the Dinh

An Economic Zone, located near the seaport and the Duyen Hai Power Center which became a key hub for thermal power, logistics, and supporting industries in order to attracted the investment for seafood processing, marine engineering, cold storage, and building materials. At the end of 2020, 68% of total area in the Dinh An Economic Zone was used by over 15 major enterprises operating primarily in the fields of electromechanics, seafood processing and constructing materials. In addition, Long Duc Industrial Zone (about 15 km inland from the coast) also attracted clean and processing industries contributing to increase the scale of industrial development towards the sea. Although this industrial area was not located accurately the main coastal road, it served as a logistical and labor link between inland and downstream coastal industrial zones such as Duyen Hai. During the period of 2016-2020, with the rapid development of the coastal wind power sector, Tra Vinh Province has become the largest wind power capacity at the Mekong Delta. By 2020, the province had 09 operational wind power projects with total capacity exceeding 600 MW that concentrated in Duyen Hai district and Duyen Hai town. Several offshore wind power projects were under survey and preparation for investment. The project "Tra Vinh Wind Power Plant No.1", developed by Tra Vinh Wind Power Co., Ltd, with a capacity of 48MW and the total investment of over 2,400 billion Dong, is one of typical examples which was operated at the end of 2020. Besides, rooftop solar projects were also operated at coastal aquaculture areas such as Cau Ngang and Tra Cu, contributing to the diversification of the province's energy structure. The Duyen Hai Power Center which is one of the three biggest power centers in Vietnam has the total designed capacity of nearly 4,300 MW (including Duyen Hai 1, 3 and 3 Extension). Its average annual electricity output exceeds 22 billion kWh, accounting for about 10% of national total. According to Power Generation Corporation 1 (EVNGENCO1), the Duyen Hai 1 and 3 thermal power plant have operated stably between 2016 and 2020, playing a vital role in ensuring national energy security. It shows that the wind power development served as major contribution in increasing provincial budget revenues, generating employment, supporting livelihood transformation, as well as enhancing the Tra Vinh's position on the national renewable energy map (Table 3).

**Table 3:** Development of wind power between 2019 and 2020 at Tra Vinh

	2019	2020	
Supplied electricity	1,200 million kWh	1,450 million kWh	
output	per year	per year	
Revenue	1,300 billion Dong	1,700 billion Dong	
Employment opportunities	400 jobs	450 jobs	

Source: Tra Vinh Statistic Yearbook, 2021

#### 1.1.3. Seaport and Logistics System

Tra Vinh, a coastal province of the Mekong Delta, with 70 kilometers of coastline bordering the East Sea, possesses the huge advantages for developing seaports and services of coastal logistics. According to the Master Plan on Vietnam's Seaport System for the 2021-2030 Period, with a vision to 2050 (Ministry of Transport, 2021), Tra Vinh is classified as a Type-I seaport, belonging to Port Cluster No.6, which includes Tra Vinh, Ben Tre, Vinh Long.

Major seaport and terminals in Tra Vinh include the Dinh An

General Port, located near the Hau's estuary, capable of accommodating vessels of 20,000 - 30,000 DWT, serving seafood export-import activities and supplying materials for the Dinh An Industrial Zone and neighboring provinces. My Long Port (Cau Ngang ward) provides the service on cargo transportation in the Southern coastal area of the province. In addition, there are other specialized terminals for oil, gas, and power production, such as the coal-handling terminal serving the Duyen Hai Thermal Power Plant.

#### 1.1.4. Marine, Ecological, and Cultural Tourism

Tra Vinh Province is especially popular with over 140 Khmer pagodas, including some notable ones such as Ang Pagoda and Hang Pagoda, which serve as a foundation for the development of spiritual tourism. Traditional festivals namely Ok Om Bok, the My Long Sea Worship Festival and others are held annually containing profound cultural significance and attracting thousands of visitors each year. Major tourist destinations, including Ba Dong Beach Resort,

Tan Quy Islet, Chim Islet, Ba Om Pond, and coastal mangrove forests have been developed toward eco-tourism, community-based tourism, and marine leisure tourism. For example, Chim Islet (Chau Thanh district) is evaluated an effective model of community-based eco-tourism. Tra Vinh has effectively integrated Khmer cultural—spiritual values with natural coastal resources to create distinctive marine—cultural tourism products.

By 2019, the province welcomed over 1,024,900 visitors, representing an increase of 30.06% compared with 2018; including 29,900 international visitors (up 41.04%). The number of guests using the accommodation service reached more than 683,000 whereas total revenue of the provincial tourism was 358.8 billion Dong in 2019, increasing 83.7 billion Dong compared with 2018 (equivalent to 30.43%). At Tra Vinh, there are 137 accommodation establishments (up 1.48%), including 7 two-star hotels, 18 one-star hotels and a homestay facility.

#### 2. SWOT Analysis on Marine Economy at Tra Vinh in the Period of 2016-2020

Table 4: SWOT analysis on marine economy at Tra Vinh in the period of 2016-2020

	Strengths	Weaknesses
_	Favorable geographical location with a long coastline and	<ul> <li>Marine economic infrastructure remains weak and</li> </ul>
	two major estuaries (Cung Hau, Dinh An)	inconsistent, especially in transport and fishing port
_	Diverse marine resources with the great potentials for	system.
	fisheries and tourism.	<ul> <li>The seafood processing industry remains small-scale,</li> </ul>
_	Dinh An Port holds a strategic position, advantageous for	outdated technology and low increasing value.
	logistics and maritime trade development.	<ul> <li>Lack of high-quality human resources in marine</li> </ul>
_	Local policies on promoting investment and development	management, engineering, and services.
	of coastal renewable power	<ul> <li>Regional linkages and marine economic value chains</li> </ul>
_	Coastal communities possess traditional experience in	remain limited.
	marine exploitation and aquaculture.	<ul> <li>Inadequate management of marine resources,</li> </ul>
		environment, and monitoring of marine activities
	Opportunities	Threats
_	Implementing the Resolution No. 36-NQ/TW (2018) on	<ul> <li>Climate change, sea-level rise and salinity intrusion</li> </ul>
	Sustainable Marine Economic Development in Vietnam	threaten coastal infrastructure and livelihoods.
_	Regional cooperation among coastal provinces (Ben Tre -	<ul> <li>Increasing competition in attracting to investment and</li> </ul>
	Tra Vinh - Soc Trang) creates momentum for marine	tourism among coastal provinces at the Mekong Delta
	economic development.	<ul> <li>Environmental pollution and depletion of marine</li> </ul>
_	Great potentials for developing wind, solar, and other clean	resources
	coastal energy sources.	<ul> <li>Limited access to large-scale investment capital for</li> </ul>
-	Applying digital technology for monitoring and developing	marine infrastructure
	marine economy	<ul> <li>Volatility from internation market, green trade barriers</li> </ul>
-	Growing trends towards green consumption, eco-tourism	and rising input material costs
1	and organic aquaculture	<u> </u>

#### 2.1. Strengths

Tra Vinh Province is located near two major estuaries (Cung Hau and Dinh An), with nearly 70 kilometers of coastline creating favorable conditions for developing different coastal economic sectors such as fisheries, tourism and coastal energy. The province possesses diverse marine resources with high-value species namely black tiger shrimp, clams, oysters, and sea crabs; as well as brackish-water areas suitable for intensive and semi-intensive aquaculture. Dinh An Port has been planned as national general port, laying the foundation for the formation of a regional logistics and maritime trade hub. Tra Vinh has introduced many major programs and projects such as offshore wind power development, the Dinh An Economic Zone and coastal industrial clusters contributing to attract both domestic and foreign investment. Coastal communities possess traditional experience in marine exploitation and aquaculture allowing

them to adapt easily to new marine economic models.

#### 2.2. Weaknesses

Coastal transport infrastructure, fishing ports, anchorage areas, and fishery logistics services remain underdeveloped and lack synchronization; a regional-scale logistics center has yet to be established. The rate of deep processing remains low, and preservation technology for seafood products is still limited, leading to low added value. Most workers in marine sectors are unskilled and lack professional training in management, technology, and integrated marine economics. Marine economic value chains among Tra Vinh, Ben Tre, Vinh Long and other coastal provinces in the Mekong Delta remain limited. Localized pollution in intensive shrimp farming areas, coastal erosion, and depletion of natural fishery resources continue to occur.

#### 2.3. Opportunities

Implementing the Resolution No. 36-NQ/TW (2018) on Vietnam's Strategy for Sustainable Marine Economic Development to 2030, with a vision to 2045 provides a favorable legal framework for the development in Tra Vinh. The programs on the cooperation of coastal regions among Ben Tre - Tra Vinh - Soc Trang promote chances for developing interprovincial infrastructure, logistics, and coastal tourism. Tra Vinh has great potentials for wind and solar energy attracting many FDI projects in the renewable energy sector. Digital technology can be applied for monitoring fisheries, managing resources and developing smart tourism. Growing domestic and international demands for organic seafood and eco—cultural tourism presents opportunities for Tra Vinh to shift toward a green and sustainable development model.

#### 2.4. Threats

Climate change and sea-level rise have caused coastal erosion, salinity intrusion and narrowing down the aquacultural areas; as well as made negative impacts on infrastructure and livelihoods of coastal communities. Other coastal regions such as Ben Tre, Soc Trang and Ca Mau also promote marine economic development; that increases competition in attracting to investment and tourism. Overexploitation, pollution from aquaculture and coastal industries, and declining marine biodiversity remain serious concerns. Although many projects on infrastructure and coastal energy require huge investment capital, the province's capacity for mobilization remains limited. Fluctuations in seafood prices, rising energy costs, and green trade barriers may also affect marine product exports.

#### 3. Overall evaluation

During the period of 2016-2020, Tra Vinh Province established a foundational framework for multi-sectoral marine economic development, especially in fisheries and renewable energy. Nevertheless, weak infrastructure, human resource and regional linkages remain major obstacles that need to be overcome. In the context of climate change and increasing global economic integration, transitioning toward a sustainable, technology driven, and regionally integrated marine economy is an appropriate and strategic direction for Tra Vinh in the coming period.

Based on the analysis on not only natural advantages and existing potentials, but also limitation and challenges of Tra Vinh's marine economy in the period of 2016-2020, proposed development solutions should be aligned with the principles of sustainability, climate adaptation, and environmental protection, while ensuring harmony between economic growth, social progress, and coastal security defense.

#### 3.1. Solutions on Marine Spatial Planning and Management

Tra Vinh should continue to improve the integrated master plan for exploiting and using marine resources and spaces; aligning with the Mekong Delta regional development plan and the National Strategy for Sustainable Marine Economic Development of Vietnam to 2030, with a vision to 2045. In addition, it is necessary to strengthen state capacity in marine governance, establish a comprehensive marine and island database to support forecasting, monitoring, and decision-

making processes.

### **3.2.** Solutions for Sectoral and Marine Economic Infrastructure Development

The province should focus on investing and developing key sectors with comparative advantages such as aquaculture and seafood processing, renewable energy (offshore wind power and floating solar energy), logistics, and maritime transport. It is essential to upgrade the Dinh An - Tra Vinh seaport system, Duyen Hai port cluster and coastal industrial zones to ensure efficient connectivity with national transportation routes. Moreover, public private partnerships (PPP) should be encouraged for major marine economic infrastructure projects.

### 3.3. Solutions for Human Resources and Marine Science - Technology

The province should concentrate on developing high-quality human resources for the marine economy, particularly in resource management, high-tech aquaculture, and marine logistics services. Creating linkages between the province and research institutes, university within and beyond the region to establish a network among marine research, trainings and technology transfer should be implemented. In addition, digital technology, Geographic Information System (GIS) and Artificial Intelligence (AI) should be applied for environmental monitoring, forecasting, and sustainable marine economic development.

### **3.4.** Solutions for Environmental Protection and Climate Change Adaptation

Programs for monitoring and assessing the environmental carrying capacity of coastal zones should be implemented. Along to enhancing the control of seawater and sediment quality and preserve marine biodiversity, Tra Vinh Province should promote green, circular and climate-change adaptive economic models in aquaculture, tourism, and coastal industries. Additionally, strengthening mangrove afforestation and protecting estuarine coastal ecosystems are crucial to mitigate coastal erosion and sea-level rise.

## **3.5.** Solutions for Mechanisms, Policies and Interprovincial Cooperation

The province should refine its policy framework to support enterprises for investing in particular marine economic sectors such as renewable energy, deep processing and marine eco-tourism. It is essential to strengthen the cooperation with Ben Tre and Vinh Long in developing coastal infrastructure, tourism linkages and human resource training. Establishing a coordination mechanism among the coastal provinces of Tra Vinh - Ben Tre - Vinh Long would help optimize resource use and reduce intra-regional competition.

#### 4. Conclusion

In summary, the development of the marine economy in Tra Vinh Province is an inevitable trend, consistent with its natural potential, the need for economic restructuring, and the national strategic orientation. In general, during the period of 2016-2020, in spite of many challenges, Tra Vinh made steady and significant progress in marine exploitation

towards sustainability. With proposed solutions and strong political determination, the province has perfect opportunity to become a dynamic and prosperous coastal province, serving as a marine economic hub in the lower Mekong subregion and contributing to Vietnam's overarching goal of building a strong, modern, and sustainable marine economy.

#### 5. Reference

- Nguyen TA. Marine economy the new development trend of mankind in the 21st century. Vietnam J Mar Sci Technol. 2021;21(4):419-35. doi:10.15625/1859-3097/16858
- Central Committee of the Communist Party of Vietnam. Resolution No. 36-NQ/TW dated October 22, 2018, of the 8th Plenum of the 12th Central Committee on the strategy for sustainable development of Vietnam's marine economy to 2030, with a vision to 2045 [Internet]. Hanoi: Central Committee of the Communist Party of Vietnam; 2018 [cited 2025 Sep 24]. Available from: https://tulieuvankien.dangcongsan.vn/van-kientu-lieu-ve-dang/hoi-nghi-bch-trung-uong/khoa-xii/nghiquyet-so-36-nqtw-ngay-22102018-hoi-nghi-lan-thutam-ban-chap-hanh-trung-uong-dang-khoa-xii-vechien-luoc-phat-trien-ben-3453
- 3. Phan TCL. The role of marine economy in Vietnam's socio-economic development. J State Manag. 2024;(338):22-36. doi:10.59394/qlnn.338.2024.789
- 4. Nguyen TT. Current status and solutions for state management of marine economy. Finance Magazine [Internet]. 2023 [cited 2025 Sep 24]. Available from: https://tapchikinhtetaichinh.vn/thuc-trang-va-giai-phap-quan-ly-nha-nuoc-ve-kinh-te-bien.html
- Nguyen CH. Vietnam's marine economy: Perspectives on environment and resources. J Polit Theory. 2013;(5). Available from: https://vjol.info.vn/index.php/LLCT/article/view/10013
- Nguyen THM. Vietnam's marine economic development

   current situation and solutions. J State Manag
   [Internet]. 2025 [cited 2025 Sep 12]. Available from: https://www.quanlynhanuoc.vn/2025/06/10/phat-trien-kinh-te-ven-bien-viet-nam-thuc-trang-va-giai-phap/
- 7. Nguyen DL, et al. Some issues in the development of Vietnam's blue economy. Vietnam Soc Sci. 2024;(5):57-68. doi:10.56794/KHXHVN.5(197).57-68
- 8. Nguyen XD, et al. Sustainable development of Vietnam's marine tourism. Environ Manag Sustain Dev. 2019;8(4). doi:10.5296/emsd.v8i4.15461
- 9. Pham QG, Khanal R. What next for marine ecosystem management in Vietnam: Assessment of coastal economy, climate change, and policy implication. Environ Res Commun. 2024;6(2):025002. doi:10.1088/2515-7620/ad19a5
- 10. Nguyen Ba Dien BD, Nguyen TP. The role of marine manpower resources and the problems posed to Vietnam in the process of exploiting and utilizing the sea sustainably. Int J Multidiscip. 2023;8(3):210-8. doi:10.31305/rrijm.2023.v08.n03.025
- 11. Hoang HP, et al. Green port strategies in developed coastal countries lessons for Vietnam. Int J Renew Energy Dev. 2022;11(4):950-62. doi:10.14710/ijred.2022.46539
- Tra Vinh Provincial People's Committee. Decision No. 924/QD-UBND on approving the irrigation planning for aquaculture in Tra Vinh province until 2020 and vision

- to 2030 [Internet]. Tra Vinh (Vietnam): Tra Vinh Provincial People's Committee; 2016 [cited 2025 Nov 5]. Available from: https://thuvienphapluat.vn/van-ban/Xay-dung-Do-thi/Quyet-dinh-924-QD-UBND-quy-hoach-thuy-loi-phuc-vu-nuoi-trong-thuy-san-Tra-Vinh-2016-319451.aspx
- 13. Ministry of Industry and Trade. Decision on approving the "wind power development plan of Tra Vinh province until 2020, with a vision to 2030" [Internet]. Hanoi: Ministry of Industry and Trade; 2015 [cited 2025 Nov 5]. Available from: https://thuvienphapluat.vn/van-ban/Tai-nguyen-Moi-truong/Quyet-dinh-13309-QD-BCT-2015-phe-duyet-Quy-hoach-phat-trien-dien-gio-Tra-Vinh-den-2020-352458.aspx

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