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Envisaging Micronesia's Maritime Future

Overcoming Challenges and Seizing Opportunities in Support of Socio-Economic Development

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Abstract

This paper critically examines the structural vulnerabilities of maritime connectivity in Micronesia, focusing on five countries: Federated States of Micronesia, Kiribati, Marshall Islands, Nauru and Palau. It analyzes the current status of maritime transport, including trade structures by commodity composition and trading partners, and evaluates shipping networks that encompass international ports and inter-island services. The study further explores the role of three key Pacific regional hubs, Guam, Honolulu and Suva, in supporting Micronesian shipping, highlighting their specific functions and major operators. Key challenges to sustainable shipping are identified, including geographic isolation, limited economies of scale and high operational costs, alongside emerging opportunities such as regional cooperation and technological innovation. Based on these findings, the paper proposes policy recommendations aimed at enhancing maritime connectivity. In particular, it argues that regionally coordinated and frequency-optimized shipping services could substantially reduce structural vulnerabilities and improve resilience, thereby supporting sustainable economic development in Micronesia.

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1. Introduction

Maritime transport is of critical importance to the economies of the five Micronesian countries, Federated States of Micronesia (FSM), Kiribati, Marshall Islands, Nauru and Palau. As geographically isolated small island developing States (SIDS) dispersed across the vast Pacific Ocean, these countries rely heavily on shipping to secure food, fuel and other essential inputs, virtually all manufactured goods, and to export a limited range of products to external markets. Sustainable economic development in Micronesia is inconceivable without adequate attention to maritime transport. However, geographic remoteness, small and scattered populations and large inter-island distances create persistent structural challenges for shipping. These include high transportation costs, limited market access, infrequent and unstable service provision and heavy dependence on external shipping lines (United Nations Multi-Country Resident Coordinator's Office for Micronesia, 2024).

These challenges are not unique to the Micronesian states. As highlighted in the United Nations' most recent *Review of Maritime Transport* (UNCTAD, 2025, p.3), "Persistent rerouting of maritime flows has heightened exposure to delays and rising costs, especially for structurally vulnerable economies such as the least developed countries and small island developing States. … These shifts risk marginalizing smaller economies from emerging trade corridors." Within this broader global context, maritime transport in Micronesia is increasingly affected by additional pressures stemming from relatively new external forces, including evolving geopolitical dynamics and global efforts to reduce carbon emissions. As noted in the same report (UNCTAD, 2025, p.69), "… environmental compliance costs continue to fundamentally reshape maritime transport economics. Emissions pricing, decarbonization targets and related regulations … directly influence transport costs for all segments."

In this context, rising global fuel prices, increasing exposure to extreme weather events and international efforts to promote low-carbon and energy-efficient shipping are cumulatively heightening the risks associated with shipping and the economic dependence of countries on maritime transport (Morris and Lam, 2025). These risks are further compounded by cost dynamics in global shipping markets, as freight rate volatility has remained elevated in recent years due to various disruptions and persistent supply–demand imbalances. Other transport-related costs, including insurance premiums, bunker fuel prices and port handling fees, have also increased across shipping segments. These heightened risks have prompted responses at both global and regional levels. At the global level, the International Maritime Organization (IMO) has been working towards the introduction of the first-ever global tax on shipping emissions, aimed at reducing greenhouse gas emissions from the sector. Although this tax was initially expected to take effect in 2026, its implementation was postponed by at least one year following a decision in October 2025 (Dlouhy, 2025). At the regional level, new partnerships have emerged, such as the Pacific Blue Shipping Partnership, co-chaired by Marshall Islands and Fiji, reflecting growing aspirations for sustainable maritime development in the Pacific (Micronesian Center for Sustainable Transport, n.d.).

For local governments and communities in Micronesia, the most immediate concern remains the affordability and reliability of shipping services, given their substantial dependence on imported goods. At the same time, maritime connectivity is attracting growing attention from external partners, who increasingly regard it as strategically significant (Lowy Institute, 2024). Consequently, efforts to reconcile immediate socio-economic needs with long-term sustainability objectives have become more complex and challenging. These combined global and domestic pressures underscore the need for coordinated approaches within Micronesia and with external partners to facilitate the transition toward sustainable shipping.

This paper critically examines the status, challenges and opportunities for maritime transport in the five Micronesian countries. It begins by presenting the trade structures of these economies, including commodity composition and trading partners. The second section analyses the current state of shipping networks, encompassing the condition of international ports and inter-island shipping services. The third section explores the role of three key regional hubs, Guam, Honolulu and Suva, in supporting Micronesian shipping, with emphasis on their specific functions and principal operators. The fourth section identifies the challenges and opportunities for promoting sustainable shipping in Micronesia. Finally, based on these findings, the paper provides policy recommendations. It argues that regionally coordinated and frequency-optimized shipping services could significantly mitigate the structural vulnerabilities of Micronesia's maritime connectivity.

2. Trade patterns and partnerships

The importance of shipping for Micronesia is deeply rooted in its modern history and has been shaped by multiple external actors over time. Japan, which administered FSM, Marshall Islands and Palau under the South Seas Mandate (1920–1945), established key shipping routes and port facilities. Today, Japan continues to play a significant role through development assistance and cooperation projects, including recent support for Pohnpei port expansion in FSM (Ministry of Foreign Affairs of Japan, 2024). Following World War II, the United States assumed administrative control, during which its strategic and economic interests drove the development of regional maritime infrastructure. With the termination of the trusteeship, the Compacts of Free Association (CoFA) with FSM, Marshall Islands and Palau created a lasting institutional framework, which was recently renewed through the 2024 Amendments Act to extend financial provisions and federal programme support for an additional twenty years (U.S. Department of the Interior, 2024).

In recent years, multilateral institutions such as the Asian Development Bank (ADB) and regional organizations, including the Pacific Islands Forum (PIF) and the Pacific Community (SPC), have supported a range of marine transport-related development programmes. These initiatives have focused on port rehabilitation, improving the safety of navigation and strengthening climate and disaster resilience (Green Climate Fund, n.d.; PIF, n.d.; SPC, 2023). Over the past decade, China has also expanded its engagement in the region through initiatives such as the Belt and Road Initiative (BRI) and the Pacific Aid Programme (The State Council of China, 2024).

Imports and exports profile

All five Micronesian countries continue to record persistent merchandise trade deficits, underscoring their limited export bases and narrow domestic production structures. Kiribati, in particular, has exhibited a consistently large deficit. In 2024, the country imported goods valued at AUD 300 million while exporting only AUD 12 million, resulting in a trade deficit of AUD 288 million (IMF, 2025a). Kiribati's export basket remains closely tied to locally available resources, with vegetable fats and oils (50 per cent), fish (30 per cent) and oil-seeds and oleaginous fruits (18 per cent) constituting its principal export products in 2021 (IMF, 2025a). By contrast, its imports are dominated by essential goods required for basic consumption and economic activity, including food, beverages and tobacco and mineral fuels (Kiribati National Statistics Office, 2019).

FSM also recorded a substantial trade deficit, amounting to USD 162 million in 2022, with total imports valued at USD 213 million and exports reaching only USD 51 million (IMF, 2024). The country's import structure, based on available data for 2018, was relatively diversified. Major import categories included food and drink (28 per cent), fuels (15 per cent) and machinery and equipment (10 per cent). In contrast, FSM's export profile remained highly concentrated, with offshore fish accounting for 83 per cent of total exports in 2018 (IMF, 2024).

Palau likewise recorded a substantial trade deficit, amounting to USD 157 million in 2021, with total imports reaching USD 159 million while exports amounted to only USD 2 million (IMF, 2023). The country's import basket is dominated by food, fuel, machinery and vehicles, and the rise in international fuel prices has further contributed to the widening of its trade deficit (IMF, 2023). Although fisheries continue to play a central role in Palau's economy, recent export data indicate a shift towards non-traditional items, such as machinery and equipment, which primarily reflects re-export activities rather than domestic production (Government of Palau, 2020; 2021).

Nauru recorded a comparatively smaller trade deficit of AUD 65 million in 2022, with total imports amounting to AUD 120 million and exports reaching AUD 55 million (Nauru Bureau of Statistics, n.d.). According to the Department of Finance of Nauru (2022), the majority of high-value imported goods consist of mineral products and heavy equipment and machinery, while phosphate is the most important export product. According to the Department of Finance of Nauru (2022), high-value imports are dominated by mineral products as well as heavy equipment and machinery, reflecting the country's reliance on externally sourced inputs for infrastructure and industrial operations. Phosphate remains Nauru's principal export commodity, underpinning the country's export earnings and continuing to shape its overall trade structure.

Marshall Islands recorded a trade deficit of similar magnitude to that of Nauru, amounting to USD 60 million in 2024, with total imports reaching USD 144 million and exports valued at USD 84 million (IMF, 2025b). Fish remains the country's principal export commodity, reflecting its strategic location within one of the world's most productive tuna fishing zones (Republic of the Marshall Islands, 2012). At the same time, Marshall Islands appears in trade statistics as a major importer of crude oil. This is largely attributable to the recording of ship-to-ship fuel transfers conducted by Marshallese-flagged vessels, despite the absence of any domestic refining capacity (Reuters, 2016).

Overall, the trade profiles of the Micronesian countries are marked by a high degree of dependence on imported goods, coupled with limited export volumes and narrowly concentrated export structures. Across all five countries, imports are dominated by fuel, machinery and food while exports typically consist of fish products and a small range of agricultural commodities. These structural characteristics give rise to large and persistent trade deficits, which are reflected in high inbound container volumes and predominantly empty outbound shipments. Such imbalances diminish the commercial incentives for regular maritime services and undermine the viability of shipping routes. In the absence of sufficient return cargo, operators often increase inbound freight rates or depend on subsidies, further affecting service affordability and reliability. These dynamics highlight the need for enhanced regional coordination, such as shared cargo arrangements and pooled logistics, to support more reliable, cost-effective and sustainable shipping services across Micronesia.

Trade partnership patterns

On the import side, Micronesian countries are highly dependent on a small number of external suppliers. FSM, for example, relies extensively on the United States, which accounted for approximately 20 per cent of its total imports in 2022, reflecting long-standing economic, institutional and aid-related ties under the Compacts of Free Association (IMF, 2024). Nauru's import profile indicates a similar concentration, with Australia serving as its principal supplier. This dependence underscores Nauru's integration into Australian logistical networks and its reliance on Australian development assistance (Department of Finance of Nauru, 2022; Department of Foreign Affairs and Trade of Australia, 2023).

Import partnerships for Marshall Islands are relatively diversified but remain concentrated among a small group of major suppliers. Key import partners include Republic of Korea, Singapore, China and Japan, reflecting the country's reliance on established regional trading centres and transport corridors (UNESCAP, 2022). Kiribati's principal import partners similarly comprise Australia, Fiji, China and Singapore, underscoring its dependence on neighbouring Pacific economies and larger Asian markets for essential goods and industrial inputs (Kiribati National Statistics Office, 2019). Palau sources the majority of its imports from the United States, Singapore, China, Japan and Republic of Korea, indicating strong economic linkages with larger regional economies and established global supply chains (Government of Palau, 2024).

Export markets tend to be even more concentrated than import partnerships across the Micronesian countries. For FSM, Thailand serves as the primary export destination, reflecting the dominant role of tuna and other seafood products in FSM's export basket and Thailand's position as the world's largest hub for tuna processing, canning and re-export (IMF, 2024; Precedence Research, 2025). Marshall Islands exhibits a similarly concentrated export structure, with Thailand, China, Japan and the United States constituting its main markets, again underscoring the centrality of fish products in its external trade (UNESCAP, 2022). Comparable patterns are evident in Palau and Kiribati. Palau's exports are overwhelmingly directed to the United States, accounting for as much as 73.9 per cent of export earnings in 2023 (Government of Palau, 2024) while Kiribati's exports are primarily destined for Japan and Taiwan Province of China (Kiribati National Statistics Office, 2019).

Nauru's export pattern is comparatively distinct as it is predominantly shaped by phosphate production, which has historically served as the country's principal export commodity. As of 2015, major destination markets for Nauruan phosphate included Australia, India, Iran, Japan, Republic of Korea, New Zealand, Pakistan, the Philippines, Taiwan Province of China, China and Thailand (Department of Finance of Nauru, 2022). For non-phosphate exports, shipments are generally routed to or through Australia, Fiji and New Zealand before reaching their final destinations, underscoring the central role of these countries as key logistical transit hubs for Nauru's external trade (Department of Finance of Nauru, 2022).

Overall, the five Micronesian countries rely heavily on a relatively small number of geographically distant external trade partners across the Pacific Rim and beyond while their export structures remain narrow and highly concentrated. In particular, the strong dependence on fish exports heightens their vulnerability to fluctuations in global seafood demand and to logistical disruptions along international supply chains, thereby exacerbating economic fragility and constraining opportunities for diversification and stronger subregional integration. Moreover, intra-Micronesian trade remains minimal, largely due to the high degree of similarity in their export baskets, dominated by fish and a limited range of agricultural products, which restricts the potential for complementary trade flows within the subregion.

3. Port infrastructure and capacity

Ports in Micronesia typically serve multiple critical functions, supporting not only international trade but also domestic inter-island logistics, fishing activities and, in some cases, maritime surveillance operations. These diverse roles underscore the importance of port infrastructure not only for international connectivity but also for sustaining domestic transport systems and local livelihoods. Despite each Micronesian state maintaining at least one international port, most facilities continue to face significant limitations in terms of equipment availability and operational efficiency for modern cargo handling. Such infrastructure constraints restrict the volume and efficiency of maritime trade, contribute to prolonged vessel turnaround times and heighten safety risks, ultimately resulting in elevated logistics costs across the subregion.

FSM: Pohnpei, Chuuk, Yap and Kosrae

FSM operates four international ports, one in each of its states, Pohnpei, Chuuk, Yap and Kosrae. All four are general-purpose ports, and virtually all inbound and outbound cargo is containerized. However, none of these ports is equipped with dedicated shore-based container handling infrastructure, with the sole exception of a 50-metric-ton mobile crane available at the Port of Pohnpei (Logistics Cluster, 2025b). As a result, cargo operations across FSM rely almost entirely on vessel-mounted gantry cranes for loading and unloading. This reliance on shipboard equipment frequently contributes to extended vessel turnaround times, limiting operational efficiency and constraining the ports' ability to accommodate higher cargo volumes.

The Port of Pohnpei functions as the largest and relatively best-equipped port in FSM. It receives approximately four to five cargo vessels per month while bulk fuel vessels call roughly once every three months (Pohnpei Port Authority, n.d.). Although the port has a design capacity of 10,000 twenty-foot equivalent units (TEUs) per year, actual throughput remains considerably lower, with annual volumes of around 3,200 import containers, 400 export containers and approximately 2,800 returned empty containers (PRIF, 2018). The port also handles an estimated 500 transhipment containers per year (PRIF, 2018). In the absence of shore-based container cranes, all cargo handling depends on vessel-mounted gantry cranes, resulting in relatively low discharge rates of about four to six containers per hour (Logistics Cluster, 2025b). Yard operations are supported by mobile cranes, reachstackers, forklifts and tractors, and the overall condition of both the handling equipment and transit warehouse facilities is generally assessed as good (Logistics Cluster, 2025b).

The port at Chuuk, also known as Weno Port, operates at a scale comparable to that of Pohnpei and serves as one of FSM's primary international gateways. It receives approximately five cargo vessels per month, carrying almost exclusively containerized freight (Logistics Cluster, 2025b). The port has an annual handling capacity of around 8,000 TEUs, with throughput in 2018 comprising roughly 2,000 import containers, 100 export containers and about 1,900 empty containers returned outbound (PRIF, 2018). As with other ports in the country, all container handling relies on vessel-mounted gantry cranes due to the absence of shore-based container cranes. Discharge rates generally range from six to ten containers per hour (Logistics Cluster, 2025b). Available yard equipment includes reachstackers and forklifts, and the port's transit warehouse facilities are reported to be in good condition (Logistics Cluster, 2025b).

The port at Yap receives approximately three to five cargo vessels per month, carrying predominantly containerized freight (Logistics Cluster, 2025b). As in other ports in FSM, all container handling relies entirely on vessel-mounted gantry cranes, with typical discharge rates ranging from six to ten containers per hour (Logistics Cluster, 2025b). The port operates with a limited stock of handling equipment, including reachstackers and forklifts although some of this equipment is currently under repair. Infrastructure conditions further constrain operations: the main dock structures and warehouse facilities sustained significant damage during Typhoon Ester in 2006, and many remain in disrepair, with exposed walls and ceilings and no major reconstruction undertaken beyond initial debris removal (Logistics Cluster, 2025b). These limitations, combined with the constrained capacity of the available equipment, may result in operational bottlenecks, particularly during emergency response situations.

The port at Kosrae also receives approximately three to five cargo vessels per month, handling almost exclusively containerized freight (Logistics Cluster, 2025b). As in the other ports of FSM, all container operations rely on vessel-mounted gantry cranes, with typical discharge rates ranging from six to ten containers per hour (Logistics Cluster, 2025b). The port's handling equipment, comprising a reachstacker and several forklifts, is in good condition although limited in quantity. Transit warehouse facilities are similarly well-maintained and include several loading and unloading bays.

Across all FSM ports, however, the absence of shore-based container cranes remains a persistent constraint, reducing operational flexibility, particularly during peak periods or emergency response situations. While current cargo volumes are generally manageable, resilience and efficiency could be enhanced through targeted investments in port infrastructure. In this context, the Japan International Cooperation Agency (JICA) signed a grant agreement with the Government of FSM in 2024 to support the Project for the Expansion of Pohnpei Port, aimed at reducing congestion and strengthening regional maritime connectivity (JICA, 2024).

Kiribati: Betio (Tarawa), Kiritimati (Christmas Island) and Banaba

Kiribati has three international ports, of which the Port of Betio in Tarawa and Navy Harbour in Kiritimati (Christmas Island) are currently operational under the Kiribati Ports Authority. The Port of Banaba, formerly used for phosphate exports, ceased international operations following the depletion of phosphate reserves and now supports only domestic inter-island shipping (Logistics Cluster, 2025d).

The Port of Betio functions as Kiribati's principal international gateway, handling the vast majority of the country's imports. It processes approximately 2,500 import containers, 200 export containers and around 2,300 empty containers annually, against a design capacity of 4,000 TEUs per year (PRIF, 2018). The port maintains regular connections with the South Pacific, including Fiji, and North-East Asia, underscoring its critical role in facilitating international trade. Although it lacks shore-based container gantry cranes, the port is equipped with mobile cranes, reachstackers and forklifts, all reported to be in working condition. In addition, Betio provides eight refrigerated-container (reefer) stations for temporary cold storage, supporting the handling of perishable goods (Logistics Cluster, 2025d).

The Port of Navy Harbour in Kiritimati has relatively limited operational capacity. It primarily receives cargo shipments from Fiji and Hawaii and plays an important role in supporting the export of copra (Logistics Cluster, 2025d). Although it is the only port on Kiritimati Island capable of handling containers and larger vessels, operations are confined to twenty-foot containers, and port access is frequently constrained during periods of rough sea conditions (Logistics Cluster, 2025d). The port also has berthing space for only one vessel at a time, and overall facilities remain limited. Available handling equipment consists of mobile cranes and forklifts while refrigerated-container (reefer) facilities are not available (Logistics Cluster, 2025d).

Marshall Islands: Majuro, Ebeye and Kwajalein

Marshall Islands operates two state-owned international civilian ports: the Port of Majuro, located in Majuro Atoll, and the Port of Ebeye, located in Kwajalein Atoll. In addition, a military port is situated on Kwajalein, supporting United States defence operations and not accessible for civilian maritime trade (Association of Pacific Ports, n.d.). Despite their strategic importance, limitations in infrastructure and handling equipment, particularly at the Port of Ebeye, underscore the continued need for investment to enhance operational efficiency, strengthen resilience and ensure reliable maritime connectivity.

Compared with the ports of FSM, Marshall Islands handles a higher volume of containerized cargo. The Port of Majuro functions as the country's principal international gateway and has an estimated annual handling capacity of 20,000 TEUs (PRIF, 2018). As reported in 2018, the port processed approximately 4,181 import containers and 250 export containers while more than 3,931 outbound containers were returned empty (PRIF, 2018). Majuro also handles around 1,400 transhipment containers each year (PRIF, 2018). The port's main facilities comprise two docks: Delap Dock, which serves as the primary international cargo terminal, and Uliga Dock, which accommodates small government-owned vessels and passenger services (Logistics Cluster, 2025c).

The Port of Ebeye, the secondary international port of Marshall Islands, handles approximately 700 TEUs per year and receives two freight vessel services per month (Logistics Cluster, 2025c). Port infrastructure remains basic, characterized by open dock space and minimal handling equipment (Logistics Cluster, 2025c). All container unloading relies on vessel-mounted cranes while yard handling capacity is severely constrained. Containers are frequently positioned directly along the dock edge due to the lack of adequate relocation equipment. Only mobile cranes and forklifts are available, and the port lacks both container freight stations and refrigerated-container facilities. These limitations create significant operational bottlenecks, particularly during emergencies or sudden cargo surges.

The port at Kwajalein functions primarily as a major logistical hub for United States military activities in Kwajalein Atoll, supporting missile testing and defence-related operations. It includes warehouses, piers and handling facilities but remains strictly restricted and is not accessible for civilian maritime trade (Ahmed, 2023). Although its direct contribution to the national economy is limited, the port indirectly supports local employment and service provision associated with the military base.

Marshall Islands is highly exposed to a range of natural hazards, including droughts, coastal inundation, tropical storms and typhoons, which heightens the urgency of investing in resilient port infrastructure and strengthening operational capacity. In response to these risks, the World Bank launched the Marshall Islands Maritime Investment Project in 2019, with a total financing envelope of USD 33 million, aimed at improving port infrastructure and maritime services and enhancing the safety and security of navigation and port operations. The five-year project is expected to be completed in 2025 (World Bank, 2019).

Despite its modest port infrastructure and limited handling capacity, Marshall Islands is one of the world's three largest flags of registration, often referred to as a "flag of convenience," ranked behind Liberia and Panama and ahead of Hong Kong, China; Singapore; and China (UNCTAD, 2025). More than 4,250 vessels are registered under the Marshall Islands flag, representing 3.8 per cent of the global fleet by number, 10.7 per cent by vessel value and 12.5 per cent by total deadweight tonnage (see Appendix). Marshall Islands operates an open-registry system that permits foreign-owned vessels to register under its flag and offers a range of incentives, including minimal nationality requirements, the absence of taxes on income derived from international shipping, relatively low registration fees and efficient administrative procedures. The registry is also "whitelisted" by the International Maritime Organization (IMO), indicating compliance with international safety and oversight standards (The Republic of the Marshall Islands Maritime Administrator, 1990). In August 2023, the Maritime Act of 1990 was amended to allow for the electronic submission of all registry-related documentation, further streamlining administrative processes and enhancing the efficiency of the registry system.

Nauru: Aiwo

Nauru operates a single international port, located at Aiwo, which primarily receives cargo transhipped via Fiji, with most goods originating from Australia, New Zealand and China (Logistics Cluster, 2025e). The port accommodates three main categories of vessels: container cargo vessels, which call approximately once per month; fuel tankers, which also arrive monthly; and phosphate carriers, which make an estimated seven calls per year (Logistics Cluster, 2025e).

However, the port is in poor condition and poses significant safety risks, both for port workers and for the wider population of Nauru, which relies entirely on its continued operation for essential imports. As the port cannot accommodate large cargo vessels alongside the wharf, containers must be transferred individually using barges. This method results in slow and labour-intensive unloading processes that are highly dependent on favourable weather and sea conditions (Logistics Cluster, 2025e). Offloading approximately 200 containers may therefore take anywhere from several days to several weeks (Logistics Cluster, 2025e). Compounding these challenges, there are no commercial warehousing facilities available on the island. Even the National Disaster Risk Management Office lacks dedicated storage space, requiring emergency supplies to be stored in mobile units brought in from external partners when needed (Logistics Cluster, 2025e).

In response to these constraints, a series of port-upgrading initiatives has been launched to enhance the capacity, reliability and climate resilience of Aiwo Port. The port remains under development, with completion of major works scheduled for November 2024. Initial financing for the upgrades was approved by the Asian Development Bank (ADB) in 2017 to support berth and quay wall rehabilitation, port dredging and broader facility improvements (Green Climate Fund, n.d.). Subsequently, the Sustainable and Climate-Resilient Connectivity Project was initiated in 2022, supported by the ADB, the Green Climate Fund and the Government of Australia. This project focuses on constructing new infrastructure, including a wharf, berth pocket and breakwater, as well as improving container storage capacity and port security (Nauru Maritime and Port Authority, n.d.). Additional support for the acquisition of port-handling equipment is being provided by the Japan International Cooperation Agency (JICA). Under the Belt and Road Initiative (BRI), China has also expanded cooperation with Nauru, with China Harbour Engineering Company (CHEC) contributing to the upgrading of the Aiwo Port terminal (Global Times, 2024).

Palau: Koror (Malakal)

Palau operates a single international port, the Port of Koror (formally known as Malakal), which is situated within a protected lagoon. The port is connected to regular shipping routes serving Guam and extending onward to various destinations in Asia. It typically receives between six and eight cargo vessel calls per month, almost all of which carry containerized freight, and it handles approximately 200 to 400 containers monthly (Government of the Republic of Palau, 2021). Although the port has a design capacity of around 8,000 TEUs per year, actual throughput remains relatively modest.

The Port of Koror handles approximately 2,800 import containers, 200 export containers and around 2,600 empty containers each year (PRIF, 2018). As the port does not have shore-based container cranes, all cargo is discharged using vessel-mounted gantry cranes, with typical unloading rates ranging from six to ten containers per hour (Logistics Cluster, 2025a). The port generally operates without congestion, and even during peak periods the limited yard-handling equipment has not resulted in significant operational bottlenecks.

Port yard handling relies on a small but functional fleet of equipment, comprising two reachstackers, one heavy forklift and two smaller forklifts (Logistics Cluster, 2025a). However, the port lacks refrigerated-container (reefer) stations for temporary storage, necessitating close coordination between port operations and consignees. Reefer containers are typically unloaded within four to six hours to avoid on-site storage, highlighting the port's limited flexibility in accommodating cold-chain cargo (Logistics Cluster, 2025a).

In summary, international shipping connectivity across the Micronesian countries remains uneven and is constrained by limited export backhaul and operational inefficiencies at many ports. While ports in FSM benefit from relatively regular international services, connectivity to other ports, particularly in Marshall Islands and Nauru, is more limited and prone to disruption. High proportions of empty containers on outbound voyages further reduce commercial incentives for carriers to expand or stabilize service frequencies, reinforcing the structural challenges that hinder the development of reliable and affordable maritime transport across the subregion.

4. Regional shipping hubs and connectivity

According to sailing schedules reported by major commercial shipping companies (table 1), international liner services serving Micronesia operate along routes originating from North-East Asia, the United States West Coast, Guam, Fiji, Australia and New Zealand. Ports in FSM and Marshall Islands benefit from comparatively regular connections, with weekly, bi-weekly or monthly services. Palau is covered by a smaller subset of these routes while services to Nauru and Kiribati are less frequent and provided by a limited number of operators.

Table 1. International shipping lines and their routes in Micronesia

Shipping lines	Ports of loading	Micronesian destinations	Service frequency
Kyowa Shipping Co., Ltd.	North-East Asia	FSM, Kiribati, Marshall Islands, Palau	Weekly
	Australia		Bi-weekly
	New Zealand	FSM, Marshall Islands, Palau	Monthly
Neptune Pacific Direct Line	Fiji	FSM, Marshall Islands	41 days
		Kiribati	21 days
Swire Shipping	North-East Asia	Kiribati, Marshall Islands	8 days
	New Zealand	Nauru	10 days
Matson	U.S. West Coast	FSM, Marshall Islands, Palau	Bi-weekly
Pacific International Line (PIL)	Guam	FSM, Marshall Islands	Bi-weekly
	North-East Asia	FSM, Marshall Islands, Palau	
Ocean Network Express	North-East Asia	Kiribati	10–12 days

Note: Adapted from routes reported by commercial shipping companies, including Kyowa Shipping, Matson, Neptune Pacific Direct Line, Ocean Network Express, PIL and Swire Shipping.

Matson remains the principal United States-linked carrier serving the region; however, many of its scheduled routes overlap with those of Kyowa Shipping, particularly in FSM and Marshall Islands. This overlap reflects the registered Space Charter Agreement between Matson and Kyowa, which governs vessel-sharing arrangements for services operating between Guam and Pacific island ports (Federal Maritime Commission, 2012). Such agreements provide a formal mechanism for sharing vessel capacity on selected routes and are commonly employed in markets characterised by limited and irregular cargo volumes.

Due to the limited scale and wide geographical dispersion of individual Micronesian countries, no single country is able to sustain a cost-effective and regular shipping network independently. As a result, the subregion's maritime connectivity relies heavily on key external logistics hubs, particularly those located in Guam, Honolulu (Hawaii) and Suva (Fiji). These hubs provide essential links between Micronesia and major global trade routes spanning the South Pacific, North-East Asia, South-East Asia, Australia and the United States (table 2 and figure 1). They also serve critical operational functions, including cargo consolidation, transhipment, warehousing and the coordination of feeder services, which facilitate the efficient routing of goods to and from the small and dispersed islands of Micronesia.

Table 2. Regional shipping hubs and their connectivity

Hub ports	Locations	Functions	Micronesian destinations	Key operators

Guam	Western Pacific, U.S. territory	Regional hub port providing relay services to Micronesia	FSM, Palau, Marshall Islands	Matson; Kyowa Shipping; Ocean Network Express; PIL; Swire Shipping
Honolulu	Central Pacific, the United States	Regional base for U.S.-linked liner services connecting the U.S. West Coast with Micronesia	FSM, Palau, Marshall Islands	Matson
Suva	South Pacific, Fiji	South Pacific hub port for relay services linking Micronesia with South-East Asia, Australia and New Zealand	Kiribati, Marshall Islands, Nauru	Neptune Pacific Direct Line; PIL

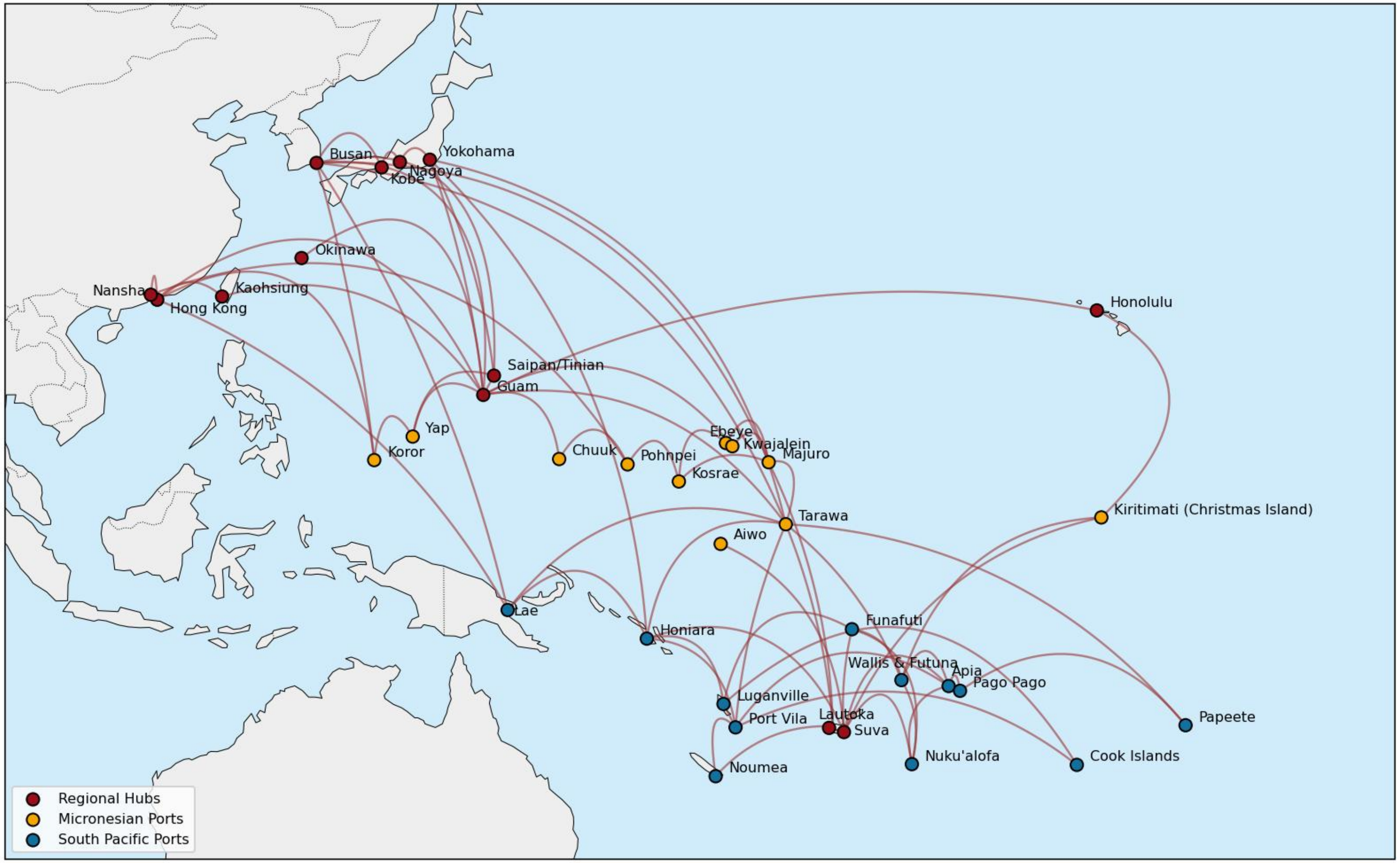
Note: Adapted from routes reported by commercial shipping companies, including Kyowa Shipping, Matson, Neptune Pacific Direct Line, Ocean Network Express, PIL and Swire Shipping.

Guam plays a central role in the Micronesian logistics network, serving as a critical hub that connects the small island economies of the subregion to major global shipping routes, particularly those linking Micronesia with the United States and North-East Asia. Several international carriers are active in this network, including U.S.-based Matson, Japan-based Kyowa Shipping and Ocean Network Express and Singapore-based Pacific International Line (PIL) and Swire Shipping (Matson, n.d.; Kyowa Shipping, n.d.; Ocean Network Express, n.d.; PIL, n.d.; Swire Shipping, n.d.). Among these, Matson is a principal carrier, providing regular services between Guam and the United States West Coast via its terminals in Long Beach, Oakland and Tacoma (Matson, n.d.a). From Guam, Matson also operates services to neighbouring island ports, including Saipan, Palau and the four states of FSM, Yap, Chuuk, Pohnpei and Kosrae, as well as to Okinawa in Japan. In addition to its commercial operations, Matson provides United States-flagged government shipping services that support the transport of containerized and bulk cargo between the United States West Coast and Guam, Palau, FSM and Marshall Islands.

Honolulu, located in Hawaii, also serves as an important transhipment node within Matson's trans-Pacific shipping network, primarily facilitating connections between the United States and the North Pacific. Although it does not function as a primary hub for Micronesia specifically, Honolulu plays a significant upstream role by supporting cargo consolidation and onward redistribution across Matson's wider regional operations.

Further south, Suva in Fiji, together with Lautoka, functions as a critical regional hub linking Micronesia with South-East Asia, Australia and New Zealand. Suva provides access to major South-East Asian routes, particularly those serving Singapore while Lautoka operates as a transhipment port connecting to Brisbane, Melbourne and Auckland. These linkages are facilitated by services operated by Neptune Pacific Direct Line and PIL, which play an important role in sustaining Micronesia's maritime connectivity with broader Asia-Pacific trade networks (Neptune Pacific Direct Line, n.d.; PIL, n.d.).

Figure 1. International shipping routes linking Micronesia with key regional hubs



Note: Adapted from routes reported by commercial shipping companies, including Kyowa Shipping, Matson, Neptune Pacific Direct Line, Ocean Network Express, PIL and Swire Shipping.

Beyond commercial trade, several of the shipping routes that connect Micronesia also align with, and at times directly support, United States defence logistics in the North and Central Pacific. Guam functions as a principal theatre gateway and defence hub, anchoring U.S. force posture and logistics across the Indo-Pacific, with growing military infrastructure and dedicated government supply chains (Congressional Research Service, 2023; Council on Foreign Relations, 2024). Commercial carriers such as Matson openly advertise U.S.-flag government services linking the U.S. West Coast to Honolulu and Guam and onward to Micronesian ports, including scheduled calls to Kwajalein, thus operating in parallel with, and complementary to, defence supply flows (Matson, n.d.b). In Marshall Islands, Kwajalein Atoll hosts the U.S. Army's Reagan Test Site, where port access and movements are tightly controlled for national security purposes, further highlighting the strategic overlay of these maritime connections (eCFR, 2026; U.S. Army Garrison Kwajalein Atoll, n.d.). Regionally, the U.S. Military Sealift Command's prepositioning squadrons positioned around Guam and Saipan, together with Defence Logistics Agency distribution and energy nodes on Guam, underpin contingency sealift and fuel support, reinforcing the dual civilian-military character of key shipping corridors serving Micronesia (DLA, n.d.a; n.d.b; Military Sealift Command, n.d.).

Together, the three hubs, Guam, Honolulu and Suva, form the backbone of a multi-hub regional network that supports transhipment, relay services and cargo consolidation across the Pacific. This network structure helps mitigate structural challenges such as low outbound cargo volumes and long transit distances by enabling more efficient routing options and improved service coordination. In doing so, it reduces per-unit transport costs and enhances the Micronesian subregion's overall connectivity to international supply chains.

5. Domestic inter-island shipping

Domestic inter-island shipping provides a critical lifeline to outer islands across Micronesia, except for the single-island Nauru. It ensures the delivery of essential goods and supports the collection of export products such as copra and fish. Across the subregion, inter-island shipping services are generally operated either by government entities or by very small independent shipping companies (ADB, 2007). Service provision is largely demand-driven, and, as elsewhere in the Pacific, seasonality and irregular peaks in passenger demand present persistent operational challenges (ADB, 2007).

In Palau, domestic shipping services rely primarily on privately operated vessels, supplemented by a small number of state-operated boats that provide essential transport links to the outer islands (United Nations Multi-Country Resident Coordinator's Office for Micronesia, 2025). On the other hand, in FSM, domestic shipping is managed almost entirely by the public sector, with services operated by the federal government through a vessel managed by the Marine Department of the Department of Transport, Communications and Infrastructure (DTCI) (ADB, 2007).

In Marshall Islands, domestic shipping services are operated by the government-owned Marshall Islands Shipping Company (MISCO). MISCO provides freight delivery services across the entire country and plays a central role in supporting the collection of copra, Marshall Islands' largest export commodity. According to the Logistics Cluster (2025c), all inhabited locations are served at least four times per year.

In Kiribati, domestic shipping services are provided by the government-owned Kiribati Shipping Services Ltd. (KSSL), which operates regular routes linking Betio with the outer islands (Ministry of Finance and Economic Development of Kiribati, 2010). These domestic services are generally more frequent than international connections. However, most outer-island ports are equipped with only basic facilities and cannot accommodate direct berthing by larger vessels, requiring ships to anchor offshore and use smaller boats for cargo transfer. The Port of Banaba, for example, no longer supports international trade but continues to provide limited services for the island's small resident population through this method.

6. Challenges and opportunities for improved shipping in Micronesia

Overcoming market and infrastructure constraints

The small, dispersed and highly fragmented nature of Micronesian markets severely limits the commercial viability of regular shipping services. Low and uneven cargo volumes, combined with significant import-export imbalances and a high proportion of empty outbound containers, constrain the ability of shipping operators to achieve economies of scale. Consequently, freight rates remain high, and service frequencies often fall short of local needs, particularly for remote outer islands. These structural conditions also generate wider macroeconomic repercussions, including elevated prices for imported goods and uncompetitive cost, insurance and freight (CIF) charges on exported products, factors that collectively hinder economic development and private-sector expansion across the subregion (Twin, 2025).

Further, most domestic ports remain under-equipped to meet modern operational requirements. Many vessels serving outer islands are outdated and not well-suited to the long distances and challenging sea conditions characteristic of the region. In addition, the absence of essential handling infrastructure, particularly shore-based loading cranes and refrigerated-container facilities, together with limited berthing space, contributes to prolonged vessel turnaround times and heightened safety risks. These constraints become even more pronounced during periods of increased demand, when surges in cargo volumes or passenger traffic place additional pressure on already stretched port systems.

In this context, opportunities exist for regional cargo pooling and targeted investment in port modernization. Cross-country cargo pooling, shared procurement and joint contracting arrangements could help reduce costs and stabilize service schedules across the subregion. Beyond physical infrastructure upgrades, improvements in port and cargo-handling performance are also essential, including a transition toward greater digitalization in shipping-related services (UNESCAP, 2022). The introduction of digital infrastructure and enhanced data-sharing mechanisms can significantly improve operational efficiency within ports and strengthen coordination across global supply chains.

However, these initiatives will require substantial financial and technical support from a wide range of stakeholders, as well as strengthened governance and management arrangements to ensure effective implementation (UNESCAP, 2022). Joint efforts by international development partners, national transport authorities and multilateral institutions will be essential, particularly in mobilizing the resources and expertise needed to modernize port systems and shipping services. In addition, increased private-sector participation. potentially through public–private partnership (PPP) arrangements, could play an important role in expanding investment options and enhancing operational efficiency.

Likewise, investments in renewable energy, such as solar, wind and hybrid diesel systems, can strengthen operational reliability and improve long-term cost efficiency, particularly in outer-island contexts where energy insecurity undermines cold-chain integrity and the performance of port equipment. FSM, for example, has already begun deploying such renewable energy systems with support from ADB (2019).

There may also be value in reviewing ownership and control arrangements in the ports and shipping sectors of the Micronesian countries, particularly where oligopolistic market structures may be generating inefficiencies or market distortions that disproportionately benefit certain operators. Moreover, where external financial and technical assistance is mobilized, it is essential to ensure that such support does not lead to unsustainable debt burdens or create vulnerabilities that could pose risks to national sovereignty, challenges that have been experienced by other least developed and developing countries in Asia and beyond.

Mitigating reliance on external hubs

Micronesian shipping remains highly dependent on major regional transhipment hubs, most notably Guam, Honolulu and Suva, for access to global markets. These hubs provide indispensable connectivity, yet this reliance also heightens the subregion's exposure to external disruptions. Any port congestion, operational delays, logistical bottlenecks or policy shifts at these gateway ports can reverberate across Micronesian supply chains, highlighting the region's limited control over critical nodes of its maritime transport network.

In response, greater collaboration among governments, port authorities and shipping operators has been increasingly recognized as essential for strengthening connectivity and service reliability across the Pacific. Regional mechanisms such as the Central Pacific Shipping Commission and the Micronesian Shipping Commission offer important platforms for such cooperation. With further strengthening, these bodies could enhance the subregion's collective bargaining power, support more regular and predictable services and facilitate the exploration of innovative approaches to shared maritime transport infrastructure (UNESCAP *et al.*, 2025).

Reducing exposure to global supply disruption

Micronesian countries, constrained by limited economic resources, are particularly vulnerable to sudden external shocks, including global fuel price increases and disruptions in international logistics networks (World Bank, 2023a). Recent global crises have repeatedly exposed the fragility of their maritime connectivity. During the 2008–2009 global financial crisis, international trade volumes and shipping services declined sharply, immediately reducing demand for high-value fresh fish exports from the region (State Government of Pohnpei, 2010). More recently, following the Russian invasion of Ukraine in 2022, Pacific Island countries experienced substantial rises in fuel and commodity prices, pressures that were further exacerbated by renewed conflict in the Middle East in 2023; by February 2024, global freight shipping costs had reached record highs (Pacific Islands Report, 2024). The COVID-19 pandemic further disrupted maritime transport through border closures, crew-change restrictions and a significant contraction in export demand, underscoring the region's continued exposure to external shocks.

At the same time, these disruptions have underscored the importance of strengthening connectivity resilience and promoting adaptive measures across the maritime sector. Discussions at the 2025 Asia-Pacific Regional Dialogue on Sustainable Maritime Connectivity highlighted that "strengthening resilience through the integration of environmental sustainability and digitalization is becoming a central strategic response" (UNESCAP, 2025, p.6). In parallel, several multilateral initiatives have supported efforts to advance digitalization in Micronesian and other small island contexts. For example, the International Telecommunication Union's Smart Villages and Smart Islands (SVSI) Initiative aims to expand digital connectivity and improve access to digital services in remote communities, thereby indirectly enhancing logistics coordination and supply chain management (ITU, n.d.).

Addressing climate-related vulnerabilities and increasing compliance costs

Shipping services in Micronesia face significant long-term risks from climate change. Rising sea levels, more intense cyclones and storm surges pose major threats to coastal infrastructure and can severely disrupt service continuity. Atoll countries such as Kiribati and Marshall Islands are particularly vulnerable; even minor flooding can impede port operations and jeopardize essential imports of food, fuel and medicine (World Bank, 2023b). Seasonal variability associated with *El Niño*-Southern Oscillation (ENSO) events further heightens the frequency of droughts and storms, intensifying disruptions to maritime transport across the subregion.

Beyond these physical risks, Micronesian shipping services also face rising environmental compliance costs. As highlighted in the *Review of Maritime Transport 2025*, "overall maritime transport costs are increasingly shaped by additional charges, especially due to environmental regulations. These encompass the growing costs of regulatory compliance, including those related to decarbonization and emissions controls. Evolving environmental cost components impact both shipping companies and cargo owners, ultimately affecting the final landed prices of goods" (UNCTAD, 2025, p.82). These trends imply that efforts to green the maritime sector, while essential, may impose additional financial burdens on small island economies unless accompanied by targeted support measures.

A growing number of international climate-financing and technical-assistance programmes are becoming available to support adaptation efforts in Micronesia. At the global level, the Green Climate Fund provides grant-based financing to enhance climate adaptation and resilience in several Pacific SIDS, including Palau and Marshall Islands, with a focus on strengthening climate information and knowledge services (Green Climate Fund, 2022). At the regional level, the Pacific Resilience Facility (PRF), a Pacific-led climate and disaster-resilience financing mechanism, has received its first capitalization contribution from Japan to support investments aimed at strengthening climate and disaster resilience across Pacific islands (Pacific Islands Forum, 2025). Leveraging these resources would help Micronesian countries better align their maritime strategies with long-term adaptation and sustainability objectives, while also mitigating the financial pressures associated with rising environmental compliance costs.

Strengthening regional coordination

Despite individual country-level efforts, maritime planning in Micronesia remains fragmented. The absence of a standing coordination mechanism limits opportunities for joint procurement, shared service contracts and the development of harmonized regional standards. Capacity constraints within national agencies further impede the effective management of international partnerships and the oversight of increasingly complex logistics systems.

Establishing a dedicated coordination platform, potentially facilitated by multilateral institutions and regional organizations, could help institutionalize joint planning, promote harmonised data management and embed resilience more systematically across Micronesia's maritime transport systems. Recent developments in the broader political and institutional landscape, including the renewal of the CoFA, may also provide a conducive environment for strengthening subregional cooperation and advancing more integrated maritime strategies.

7. Conclusions and policy recommendations

To support more resilient and sustainable maritime transport across Micronesia, a comprehensive and coordinated policy package is required, one that integrates regional cooperation, infrastructure investment, service enhancement and governance reforms. The following recommendations are proposed for governments, development partners and regional institutions:

Promote shared infrastructure investment

A regional infrastructure strategy should be developed to prioritize interoperable port upgrades, modern cargo-handling equipment and improved inter-island connectivity. PPPs and pooled financing mechanisms should be leveraged to reduce duplication, distribute costs and ensure long-term financial sustainability.

Strengthen regional service coordination

Joint route-planning frameworks across the five Micronesian countries should be established to enable cargo aggregation, reduce per-unit shipping costs and promote more regular and predictable service schedules. Digitalized scheduling systems and harmonized customs procedures should be introduced to enhance operational efficiency and transparency. Pooled cargo-logistics platforms could help mitigate risks for carriers serving low-volume or remote routes. These arrangements should be supported by targeted donor-backed financial instruments and risk-sharing mechanisms to sustain essential services to remote and outer islands.

Coordinate engagement with shipping providers

Engagement with key regional shipping lines, such as Kyowa, Matson and Swire, should be organized through joint contracting platforms or competitive tender frameworks. These mechanisms would improve bargaining power, facilitate more favourable freight terms and better align shipping services with aggregated regional demand and coverage needs.

Integrate climate resilience and low-carbon goals

Climate-resilient and low-emission maritime technologies should be adopted, including hybrid-propulsion vessels, renewable-powered port infrastructure and green logistics practices. These interventions should be incorporated into medium- and long-term maritime development strategies rather than treated as stand-alone upgrades. Climate-finance channels should be accessed to ensure that investments align with broader adaptation and decarbonization objectives.

Leverage regional partnerships and institutional support

Cooperation with organizations such as ADB, PIF and SPC should be strengthened to mobilize technical assistance, capacity-building and data-sharing initiatives. Through these partnerships, a unified regional information platform could be established to support institutional coordination and inform joint decision-making on shipping services, port operations and logistics performance.

Ensure inclusive governance and a just transition

Inclusive governance arrangements should be institutionalized by systematically involving local governments, port authorities, private operators and community stakeholders in decision-making processes. Structured dialogue on a just transition is essential to ensure that the costs of low-carbon and climate-resilient maritime policies do not fall disproportionately on remote communities or small operators.

By implementing these recommendations collaboratively, the five Micronesian countries can develop more resilient, efficient and sustainable maritime transport systems that contribute meaningfully to broader economic development. However, these reforms must be embedded within an integrated national and regional transport policy framework that strengthens port–hinterland connectivity and builds logistics capacity across the subregion, alongside efforts to enhance regional economic integration.

These initiatives must also be complemented by broader efforts to advance domestic economic development. Ports and shipping, much like rail infrastructure in landlocked countries, serve as critical enablers of economic activity rather than ends in themselves. Addressing the structural challenge of high outbound empty-container rates, which contributes to elevated shipping costs, lies beyond what port authorities or shipping companies can manage alone. Domestic businesses need to diversify and expand exportable products to fill outward-bound containers. For policy-makers, this requires enabling conditions that ensure Micronesia's economies do not function merely as terminal destinations in global supply chains, points where finished goods are off-loaded but where few goods are loaded for export. As with the gantry cranes that hover over berthed vessels, the "heavy lifting" must occur both within the ports and across the wider economic landscape to unlock sustainable maritime connectivity for Micronesia.

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Appendix

Micronesia's shipping statistics

	FSM	Kiribati	Marshall Islands	Nauru	Palau	Pacific SIDS	SIDS
Percentage of global fleet value, by registration (2019)	0.00	0.01	11.31	0.00	0.04	17.68	29.54
Percentage of global fleet value, by registration (2025)	0.00	0.01	10.72	0.00	0.15	17.83	27.79
Percentage of global fleet value, by beneficial ownership (2019)	-	-	0.02	-	-	4.92	8.00
Percentage of global fleet value, by beneficial ownership (2025)	-	0.00	0.03	0.00	-	5.63	7.79
Beneficial ownership, dead weight tonnage in thousands (2025)	1.87	2.32	1,530.47	12.80	-	155,195	213,876
Beneficial ownership, number of ships (2025)	3	2	83	2	-	3,101	3,757
Deadweight tonnage: Oil tankers (2025)	3	13	105,258	-	3,824	139,516	191,204
Deadweight tonnage: Bulk carriers (2025)	-	12	154,782	12	1,627	224,646	261,812
Deadweight tonnage: General cargo (2025)	16	42	1,428	-	1,105	4,801	13,266
Deadweight tonnage: Container ships (2025)	-	-	11,852	-	-	53,457	58,888
Deadweight tonnage: Others (2025)	23	42	32,150	12	1,040	51,648	90,735
Deadweight tonnage: Total (2025)	43	109	305,471	24	7,732	474,068	615,906
No. of officers (2021)	92	190	1	11	0	-	-
No. of ratings (2021)	174	284	7	16	0	-	-
Total mariners (2021)	266	474	8	127	0	-	-
Crude oil loaded (2023)*	0.01	-	527.00	-	-	15,558.59	22,935.77
Other tanker trade loaded (2023)*	73.00	746.00	253.77	-	437.00	87,582.14	108,213.63
Dry cargo loaded (2023)*	136.53	56.51	526.46	275.50	11.08	35,330.30	57,111.52
Total goods loaded (2023)*	136.62	57.26	780.75	275.50	11.52	124,471.03	188,260.92
Crude oil discharged (2023)*	-	-	174.00	-	-	42,165.58	48,550.94
Other tanker trade discharged (2023)*	-	29.83	3,217.96	21.73	-	106,546.35	127,218.47
Dry cargo discharged (2023)*	-	58.36	4,809.20	17.43	-	80,891.71	125,465.55
Total goods discharged (2023)*	-	88.18	8,027.33	39.16	-	229,603.64	301,234.96
Port call arrivals: All ships (2023)	-	-	-	-	-	75,702	124,791
Port call arrivals: Liquid bulk carriers (2023)	-	-	-	-	-	35,615	42,243
Port call arrivals: Liquefied petroleum gas carriers (2023)	-	-	-	-	-	491	1,409
Port call arrivals: Liquefied natural gas carriers (2023)	-	-	-	-	-	322	487
Port call arrivals: Dry bulk carriers (2023)	-	-	-	-	-	1,488	3,364
Port call arrivals dry breakbulk carriers (2023)	-	-	-	-	-	4,896	14,239
Port call arrivals: Roll-on/roll-off ships (2023)	-	-	-	-	-	1,462	2,701
Port call arrivals: Container ships (2023)	-	-	-	-	-	19,001	27,508
Port call arrivals: Passenger ships (2023)	-	-	-	-	-	12,427	32,840
Container part throughput TEU (2010)	-	-	-	-	-	28,938,388	37,151,217
Container part throughput TEU (2023)	-	-	-	-	-	39,537,758	49,010,061
Liner shipping connectivity index (3Q2010)**	6.13	10.48	10.48	4.22	11.84	-	-
Liner shipping connectivity index (3Q2025)**	14.99	16.19	21.64	-	6.87	-	-

*Thousands of metric tons or equivalent. Data for the Micronesian countries are estimates derived from mirror data.

**Index average 1Q2023 = 100

TEU = Twenty foot equivalent throughput)

Source: UNCTAD

	Kiribati: Betio	Marshall Islands: Kwajalein	Marshall Islands: Majuro	FSM: Kosrae	FSM: Pohnpei	FSM: Truk	FSM: Yap	Palau: Koror
Port liner shipping connectivity index (3Q2010)**	16.33	-	16.33	-	-	10.96	10.96	23.50
Port liner shipping connectivity index (3Q2025)**	25.97	13.75	39.11	24.99	24.99	13.75	11.07	11.07

**Index average 1Q2023 = 100

Source : UNCTAD (2025).

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