



REPUBLIC OF FIJI



REPUBLIC OF THE MARSHALL ISLANDS

### Concept Note

## The Pacific Blue Shipping Partnership

Blended finance and capacity building, enabling a large-scale transition to sustainable, resilient and low-carbon sea transport for Pacific Island Countries (PICs).<sup>1</sup> Coordinated by Fiji and the Marshall Islands (RMI) in partnership with Kiribati, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, and others. Reflecting inter-governmental discussions at the 3<sup>rd</sup> Climate Action Pacific Partnership (CAPP) Conference (Suva, May 2019) and UN Climate Action Summit (New York, Sep 2019).

### Key Actions

- 10-year country-driven programme of concessional loan investment (from 2020–2030) in low-carbon sea transport infrastructure for PICs, including ships, ports, renewable energy generation, and supporting infrastructure.
- Initial investment from 2021 in retro-fit and purchase of low-carbon passenger and cargo ferries, including locally appropriate combinations of eco-diesel, wind-hybrid, or electric propulsion, reducing energy costs by 20%–80%.<sup>2</sup>
- Complementary grant and concessional loan investments to establish a self-sustaining Small-to-Medium Scale Enterprise (SME) Finance Facility, and Partnership Capacity and Research Hub, reinforcing the long-term prospects and wider development benefits of the Pacific Blue Shipping Partnership (PBSP).

### Summary

1. The PBSP is an open coalition currently comprised of eight Pacific Island countries—co-chaired by Fiji and the Marshall Islands—who have announced an ambitious commitment to accelerate development of a 100% carbon-free maritime transport sector by 2050, including a 40% reduction of greenhouse gas (GHG) emissions from shipping by 2030.
2. In consultation with multi-lateral and bilateral development partners, the PBSP is developing a blended finance package of at least USD\$500 million, enabling a 10-year initial work programme (2020–2030) focused on the following priority activities:
  - *[From 2021]* Investment in **retro-fit and purchase of low-carbon cargo and passenger ferries** (eco-diesel, sail, electric propulsion), with a financing structure enabling repayment of capital costs from a share of fuel savings.
  - *[From 2023]* Grant finance and concessional loans for high-ambition **projects that address country-defined priorities**, focusing for low-carbon fleet upgrades (fishing, cargo, or passenger vessels), climate-proofing of ports, and supporting renewable energy infrastructure.
  - *[From 2023]* Capitalising of a **Small-to-Medium Scale Enterprise (SME) Finance Facility**, offering revolving loans, guarantees, and equity investments, for SME commercial activity aligned with the objectives of the PBSP.
  - *[From 2020]* Grant finance for a **Partnership Research and Capacity Hub**, a decentralised collaboration between regional and international institutions focusing on research and technology development and piloting, and delivery of training, expert advice and analysis, and implementation programmes with particular attention devoted to the creation of opportunities for women and marginalised groups.
3. This Concept Note summarises the needs case for the PBSP, illustrative options for structuring its financial, institutional and governance components, and practical next steps to develop and implement the Partnership. The Note will be updated on an ongoing basis with support from the PBSP Advisory Committee.

<sup>1</sup> This document was prepared by the PBSP Advisory Committee Finance and Governance Working Group, co-chaired by the Governments of Fiji and RMI. Points of contact: Dr Ben Milligan (Finance Working Group Coordinator, [b.milligan@unsw.edu.au](mailto:b.milligan@unsw.edu.au)) cc Taholo Kami (Government of Fiji Oceans Representative, [tkami@cop23.com.fj](mailto:tkami@cop23.com.fj)), H.E. Albon Ishoda (RMI Ambassador to the Pacific, [rmiambassador.fiji@gmail.com](mailto:rmiambassador.fiji@gmail.com)).

<sup>2</sup> Depending on operational context and vessel type. Based on preliminary analysis undertaken by the PBSP Advisory Committee Technical Working Group, available at: <https://mcst-rmiusp.org/index.php/projects/current-projects/pacific-blue-shipping-partnership>.

## Urgent and large-scale challenges for the sea transport sector in PICs

4. The critical importance of sea transport to PICs and its interrelationship to all levels of socio-economic development are widely recognised and documented.<sup>3</sup> The sector currently has a range of challenges including the prevalence of old, inefficient and undermaintained vessels, and a lack of supporting modern infrastructure including ports, facilities for bunkering, ship building, maintenance, and repair. Existing vessels service and underpin micro-economies at the end of long and narrow operating routes, with the consequence that sea transport within and between PICs is the most expensive per unit distance and per capita in the world. Transportation and mobility is a cross-cutting issue central to the sustainable development of PICs.<sup>4</sup> These challenges have several urgent and large-scale implications:
5. *Dependency on imported fossil fuels* — PICs are precariously dependent on imported fossil fuels raising critical issues of fuel price vulnerability and security of supply.<sup>5</sup> The Pacific is the most dependent region in the world on imported fuels at 95% dependency, or 99% if Papua New Guinea and Fiji are excluded.<sup>6</sup> Imported petroleum products account for an average of ~40% of GDP in PICs, with the transport sector often the largest user of fuel.<sup>7</sup> Although disaggregated data is limited, estimates of the share attributable to sea-transport as a subsector range from 22% in Fiji to 90% in Tokelau.
6. *Negative impacts and risks for the local and global environment* — The sector's reliance on fossil fuels increases the risk of environmentally damaging spills, and ecosystem damage associated with fuel transport, storage and vessel-source pollution.<sup>8</sup> Pacific Small Island States leaders have called for an end to all fossil fuel subsidies.<sup>9</sup> Leaders have also called for use higher quality fossil fuels that are less damaging to the environment than those currently in use.<sup>10</sup>
7. *Social, livelihood and employment implications* — The lack of regular connectivity amongst many islands in the Pacific is considered one of the binding constraints to both domestic social and economic development and international trade.<sup>11</sup> In the 2015 Hiri Declaration on Strengthening Connections to Enhance Pacific Regionalism, the importance of people-to-people relations, improved institutional governance and enhanced physical connectivity in the Pacific were underscored. It notes that a key component of better connectivity will be improved shipping, which remains the most important mode of transport and trade for PICs.<sup>12</sup>
8. *Climate change commitments and risks* — Climate change compounds the above challenges, as a driver of the need to reduce GHG emissions from sea transport, and of the urgent need to adapt fleets and maritime infrastructure to strengthen their resilience to changes (e.g. severe weather and sea-level rise) already visible in the region. Climate change is an urgent threat to the maritime transport sector (and sustainable development generally) in PICs, which can be addressed in part through accelerated efforts to decarbonise and adapt the sector in accordance with the 2015 Paris Agreement on Climate Change,<sup>13</sup> and 2030 Agenda for Sustainable Development, supported by the Talanoa Dialogue and other regional and global platforms.

## Current status of fleets in Partnership member countries

9. A lack of detailed and updated information concerning the maritime sector in PICs has been consistently identified as a barrier for effective decision-making, and as an ongoing challenge for planning of the sector's development. Current evidence available in various national government datasets is summarised below:
10. *Number and types of vessels* — approximately 1100 vessels larger than 15 metres operate in PBSP member countries. An uncertain but larger number of smaller vessels (<15 metres), powered mainly by outboard motors, service shorter routes between the many islands and atolls (n>1000) in PBSP member countries. The two figures below provide a general overview of fleet composition in current PBSP member countries:

<sup>3</sup> See: Nuttall et al, *Frontiers in Marine Science*, <https://doi.org/10.3389/fmars.2014.00020>.

<sup>4</sup> See: UN SIDS SAMOA Pathway (2014) paras 66-67, <http://prdrse4all.spc.int/sites/default/files/samoa-pathway.pdf>

<sup>5</sup> See: Woodruff, A. (2007). The Potential for Renewable Energy to Promote Sustainable Development in Pacific Island Countries, SOPAC.

<sup>6</sup> See: AusAID. (2008). '08 Pacific Economic Survey: Connecting the Region. Canberra, ACT: Pacific Affairs Group.

<sup>7</sup> See: Nuttall et al, *Frontiers in Marine Science*, <https://doi.org/10.3389/fmars.2014.00020>.

<sup>8</sup> See e.g.: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5274615/>

<sup>9</sup> Tuvalu Declaration on Climate Change for the Survival of Pacific Small Island Developing States, 12 August 2019.

<sup>10</sup> See: Communiqué of the Third Pacific Regional Energy and Transport Ministers' Meeting, Nuku'alofa, Tonga, 26–28 April 2017, para. 18; and <https://www.forumsec.org/wp-content/uploads/2019/08/50th-Pacific-Islands-Forum-Communique.pdf>

<sup>11</sup> See: Holland et al, Carbon Management (2014): <https://www.tandfonline.com/doi/pdf/10.4155/cmt.13.78>

<sup>12</sup> See: [https://www.unescap.org/commission/73/document/E73\\_4E.pdf](https://www.unescap.org/commission/73/document/E73_4E.pdf)

<sup>13</sup> See: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>.

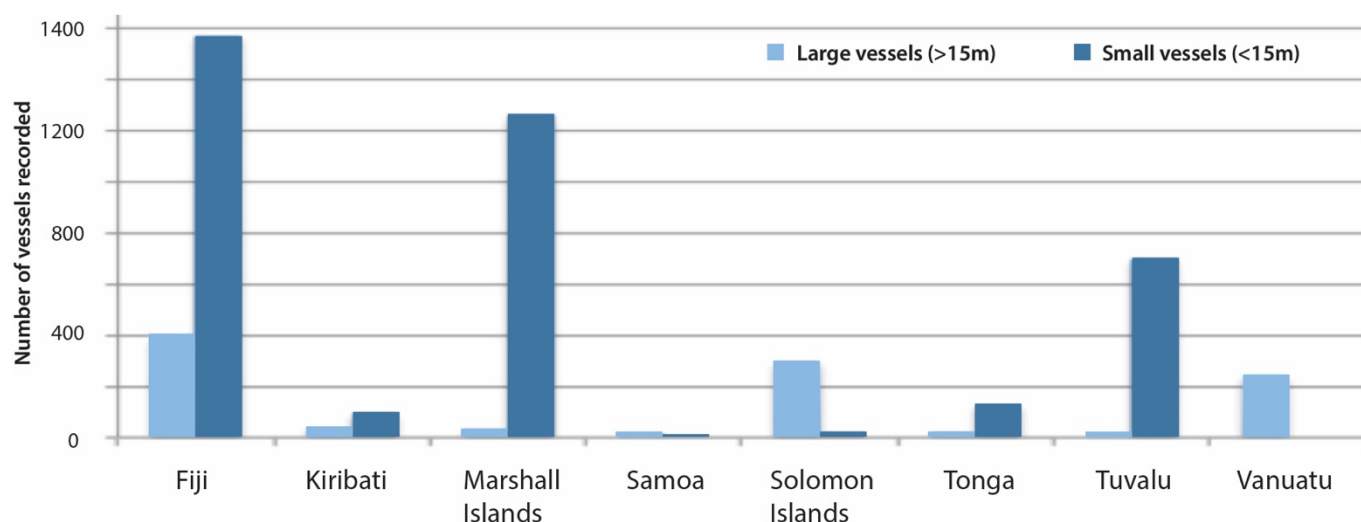


Figure 1: Distribution of small (&lt;15m) and large (&gt;15m) vessels in PBSP member countries

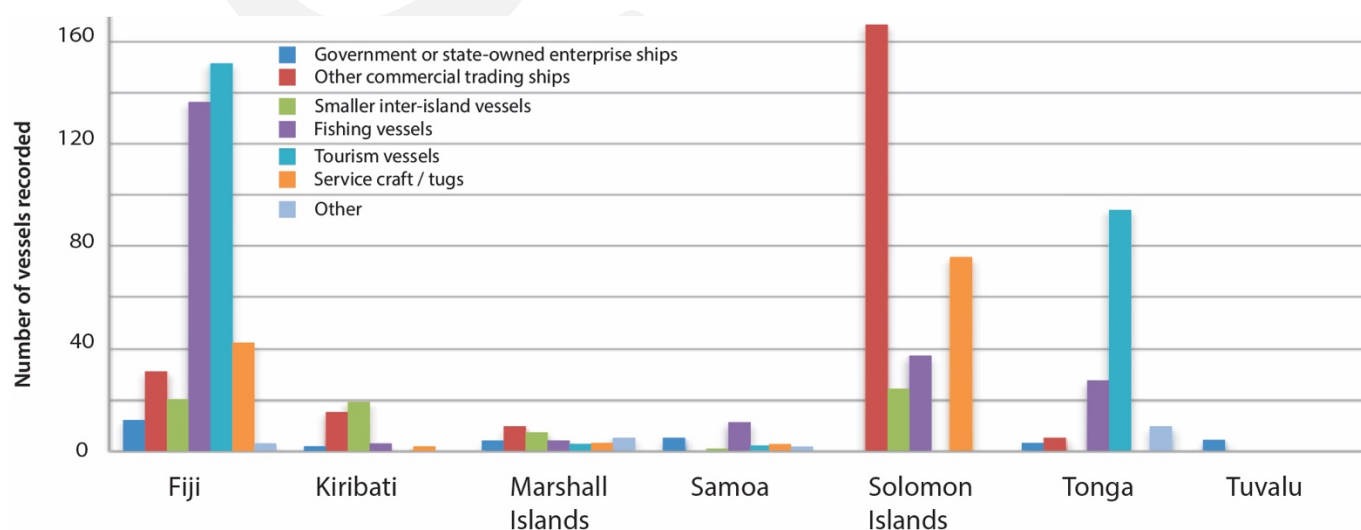


Figure 2: Distribution of vessels in PBSP member countries by type of vessel

11. *Condition of vessels* — As noted previously, PBSP member countries are reliant generally on inefficient, old and under-maintained vessels, with limited supporting infrastructure (e.g. modern ports, bunkering, shipbuilding and repair). Across Kiribati, Fiji, Samoa, Solomon Islands, the Marshall Islands, and Vanuatu, vessels in service have the following age distribution as of 2020:

38% of vessels are more than 30 years old

21% of vessels are 20–30 years old

41% of vessels are less than 20 years old

Given that more than half of all vessels are over 20 years old, the potential is large for replacing vessels with highly efficiency vessels that are capable of operating on zero-carbon fuels once those become available in the region. Depending on their characteristics and operating profile, younger current vessels might be suitable for retrofitting with energy efficiency and emissions abatement technologies. Preliminary analysis suggests the following roadmap for vessel decarbonisation in PBSP member countries:<sup>14</sup>

By 2030, 40% GHG emissions reduction across fleets of member countries, from targeted deployment of current on-market technology, including upgrades to: propulsion, ship design, main machinery and engine, energy management and recovery, speed / voyage optimisation, trim, just-in-time berthage.

By 2050, +30% (=70%) GHG emissions reduction from widespread deployment of current on-market technology.

By 2050, +30% (=100%) reduction in GHG emissions from pre-market technology (e.g. zero carbon fuels).

<sup>14</sup> See: <https://mcst-rmiusp.org/index.php/projects/current-projects/pacific-blue-shipping-partnership>.

12. *Transport and fuel costs* — PICs have the highest shipping costs in the world. The most remote and vulnerable islands and communities are the worst affected. Imported fuels are the largest operational cost—accounting for 40%–60% of cost per unit distance across PBSP member countries.

### Benefits of a sustainable, resilient and low-carbon transition

13. A large-scale retro-fit and replacement programme for vessels in PBSP member countries, coupled with improvements to supporting infrastructure (e.g. ports, energy generation) and associated capacity building, will require substantial investment. If deployed effectively in line with wider national priorities, such investment could yield a range of enduring social, economic and environmental benefits,<sup>15</sup> across the full range of topics covered in the UN Sustainable Development Goals<sup>16</sup> and Framework for Resilient Development in the Pacific.<sup>17</sup> Key potential benefits of progressively decarbonised sea transport sector across PICs include:
14. *Macro-economic and fiscal sustainability* — reducing need for public expenditure on fuel subsidies, and freeing up private sector resources for investment in more productive activities. Fuel duty concessions and other subsidies in PICs are associated with a range of adverse long-term development outcomes.<sup>18</sup>
15. *Poverty alleviation and support for local livelihoods* — fuel shortages and price volatility have major impacts on local communities across PICs, and on productive sectors such as fisheries which are key contributors to food security and local livelihoods in the region.<sup>19</sup>
16. *Technology development, local innovation and skills* — The regional sea transport sector is currently heavily dependent on imported technology, commodities and skills. A major structural transition of the sector to low- or no-carbon options presents opportunities for the development of nationally appropriate vessels, ports and supporting services, interlinked to regionally-based enterprise, education and training, and underpinned by revitalised pride in the Pacific's rich seafaring heritage.
17. *Opportunities to demonstrate global leadership on climate change mitigation* — the opportunities described above exist in a global context where more sustainable and low carbon sea transport is gaining momentum. Norway is pursuing a domestic maritime decarbonisation target for its fjords of 100% by 2026.<sup>20</sup> Numerous technological advances are either at proof of concept or market readiness stage. The International Maritime Organisation (IMO) has agreed an initial decarbonisation target for international shipping of at least 50% by 2050.<sup>21</sup> Major industry leaders such as Maersk, MAN and Wartsila have committed to carbon neutrality by 2050. A coalition of maritime leaders have also committed—through the Getting to Zero Coalition—to pre-competitive development of commercially viable and scalable deep-sea zero emissions vessels by 2030.<sup>22</sup> An ambitious country-driven Pacific strategy for sustainable, resilient and low carbon sea transport could make a significant contribution to the ongoing development of Nationally Determined Contributions (NDCs) in the region,<sup>23</sup> serve as a powerful example of global leadership and be a catalytic contributor to efforts to limit global warming to below 1.5°C, immediately scalable to other SIDS and LDCs.

### Priority activities of the Partnership: 10-year work programme

18. Supported by a combination of finance modalities (see Financing the Transition below), the PBSP seeks to deliver the above benefits through an initial 10-year work programme comprised of the following activities:
19. From 2021, *investment in retro-fit and purchase of low-carbon cargo and passenger ferries*—including locally appropriate combinations of increased efficiency measures, eco-diesel, wind-hybrid, and electric propulsion—has been identified by PBSP member countries as a key short-term priority for the Partnership.
20. From 2023, the focus will shift to implementation of *high-ambition projects that address country-defined priorities*, including an intensive pilot-phase (to 2025) and deployment—at-scale phase (to 2030). These projects will collectively adopt a holistic 'whole-of-sector' focus, spanning the following contexts:

<sup>15</sup> See: [https://unctad.org/en/PublicationsLibrary/ditcted2014d5\\_en.pdf](https://unctad.org/en/PublicationsLibrary/ditcted2014d5_en.pdf)

<sup>16</sup> See: <https://sustainabledevelopment.un.org/post2015/transformingourworld>

<sup>17</sup> See: <http://gsd.spc.int/frdp/>

<sup>18</sup> See: <https://ieep.eu/publications/greening-taxes-and-subsidies-in-the-pacific-islands>

<sup>19</sup> See: <https://www.adb.org/sites/default/files/publication/27511/pacific-fisheries.pdf>

<sup>20</sup> See: <https://maritimecleantech.no/2018/05/03/norwegian-parliament-adopts-zero-emission-regulations-fjords/>

<sup>21</sup> See: <http://www.imo.org/en/MediaCentre/HotTopics/GHG/Pages/default.aspx>

<sup>22</sup> See: [https://www.globalmaritimeforum.org/content/2019/05/ZEV2030\\_Overview\\_Context.pdf](https://www.globalmaritimeforum.org/content/2019/05/ZEV2030_Overview_Context.pdf)

<sup>23</sup> See: <https://unfccc.int/process/the-paris-agreement/nationally-determined-contributions/ndc-registry>

Intra- and Inter- island or atoll transport  
 Inter-country transport  
 Fast passenger transport  
 Bulk cargo sector  
 Medical evacuation, search and rescue, and disaster response  
 Maritime heritage revival and cultural resilience  
 Fisheries at subsistence, artisanal and commercial scales  
 Land-sea inter-connections and maritime support services  
 Maritime manufacturing, ship construction and maintenance.

21. By 2023, the PBSP member countries plan to capitalise a *Small-to-Medium Scale Enterprise (SME) Finance Facility*, offering revolving loans, guarantees, and equity investments, for SME commercial activity aligned with Partnership objectives in light of national and international commitments concerning sustainable development. The facility will continue to operate beyond the initial 10-year term of the programme.
22. Finally, PBSP member countries have commenced efforts to establish a *Partnership Research and Capacity Hub*—a decentralised collaboration between regional and international institutions, focusing on: provision of technical and policy advisory support for member countries, locally-relevant R&D, and development and delivery of training and implementation programmes with particular attention to creating opportunities in the maritime sector for women and marginalised groups. PBSP training programmes will cover all professions, trades and institutions (public and private) involved in the maritime transport sector, and include apprenticeships and other technical training, degree programmes, short-courses, and specialised workshops. The Research and Capacity Hub builds in particular on leadership shown by the Micronesian Center for Sustainable Transport (MCST) and the IMO Maritime Technology Cooperation Centre (MTCC).

### **Coordinating the transition: Governance of the Pacific Blue Shipping Partnership**

23. The PBSP is a country-driven initiative, supported by an institutional structure for coordination and programme delivery that links member countries with international development partners and other relevant stakeholders. The four core institutional components of the Partnership are as follows:
24. *Ministerial Council* — The national governments of the Member Countries have overarching responsibility for setting the objectives of the Partnership and will oversee implementation in accordance with a bespoke inter-governmental agreement. Co-chaired by Fiji and RMI, their representatives will meet regularly under the auspices of a dedicated Ministerial Council, supported by a Partnership Secretariat with certain delegated oversight responsibilities for the operation of the Finance Facility, including reporting and submission of official requests to development partners (e.g. for disbursement from trust funds held by those partners).
25. *Advisory Committee* — brings together technical, finance and other experts from various institutions (e.g. universities, UN agencies, development banks, private sector) and coordinates technical assistance/advisory activity provided to the Partnership as a whole, reporting to the Ministerial Council. The Advisory Committee will also perform a key independent scrutiny function, providing (1) recommendations on project selection in light of priorities set by the Council, (2) technical and performance review of funded projects.
26. *Implementing institutions* — Consistent with priorities determined by Member Countries and officially communicated through the Secretariat, participating institutions (including the local/regional/international private sector) and key regional institutions will be responsible for in-country implementation of funded infrastructure projects, and for the activities of the Partnership Research and Capacity Hub. Eligible private sector implementing institutions will also access support through the SME Finance Facility as outlined above.
27. Multilateral and bilateral development partners are encouraged to support the Partnership in a range of capacities, including as: donors supporting specific activity areas (e.g. policy, governance, capacity building); co-hosts and/or providers of funds capitalising the Finance Facility; accredited entities for climate finance; providers of loan guarantees and other concessional support; participation in the Advisory Committee; and as observers contributing to formal discussions between Member Countries.



## Financing the transition

28. The large-scale transition envisaged by the PBSP will require substantial investment, including at least **USD 500 million** to support implementation of the initial 10-year work programme outlined above. In comparison to other major economic sectors, investment in the sustainable development (including climate change mitigation and adaptation) of sea transport for PICs has been extremely limited to date.
29. Implementation of the PBSP will need to be supported by a range of institutional and financial structures, tailored to Partnership priorities concerning (1) large-scale infrastructure transformation—i.e. both the short-term ferry upgrades and high-ambition projects described above; (2) small-to-medium scale enterprise development; and (3) capacity building, analysis, and R&D underpinning the long-term success of the Partnership. Illustrative structures for each of these key components of the Partnership are summarised below, as a basis for further planning and discussion between PBSP member countries and development partners.
30. *Large-scale infrastructure transformation:* Maritime sector expenditure in member countries is *operationally intensive* focusing on recurrent purchase of fuel and on expensive reactive repairs. Rapid advances in maritime technology create immediate opportunities for a transition to a *capital-intensive* model for the sector, characterised by upfront investment in highly-efficient low-carbon vessels, which have lower operational costs over time (energy savings alone ranging from 20–80% as noted above).
31. The diagram below summarises a financial and institutional structure to deliver this transition — underpinned by USD \$200-300 million of concessional loan finance. Supporting technical evidence is available in a series of Working Papers developed by the PBSP Advisory Committee.

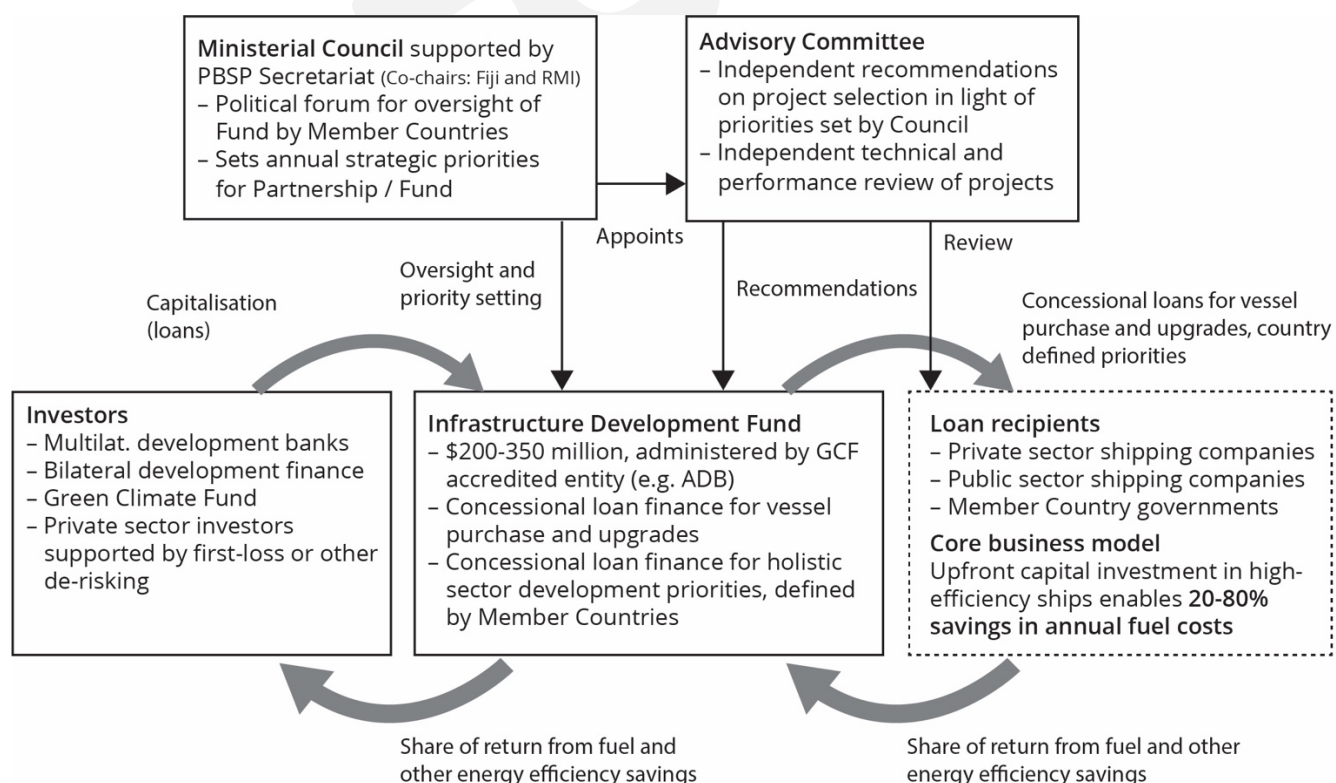


Figure 3: loan-based finance structure for large-scale maritime infrastructure transition

32. *SME development:* Maritime transport in PBSP Member Countries is delivered at multiple scales, including a wide variety of small-to-medium scale transport services within and between islands or atolls, serving a range of critical needs including cargo, passenger transport, medical evacuations and disaster response, and coastal fisheries at artisanal and commercial scales. The sector is also supported by a range of SMEs focused on maintenance and repair, construction, energy supply, and other services. The diagram below summarises an illustrative financial and institutional structure for supporting the sustainable development of maritime SMEs in PBSP member countries. A revolving SME Finance Facility (capitalised to USD\$50–100 million) is the central component of this structure, which would offer loans, guarantees, and equity investments, for eligible activity aligned with Partnership objectives.

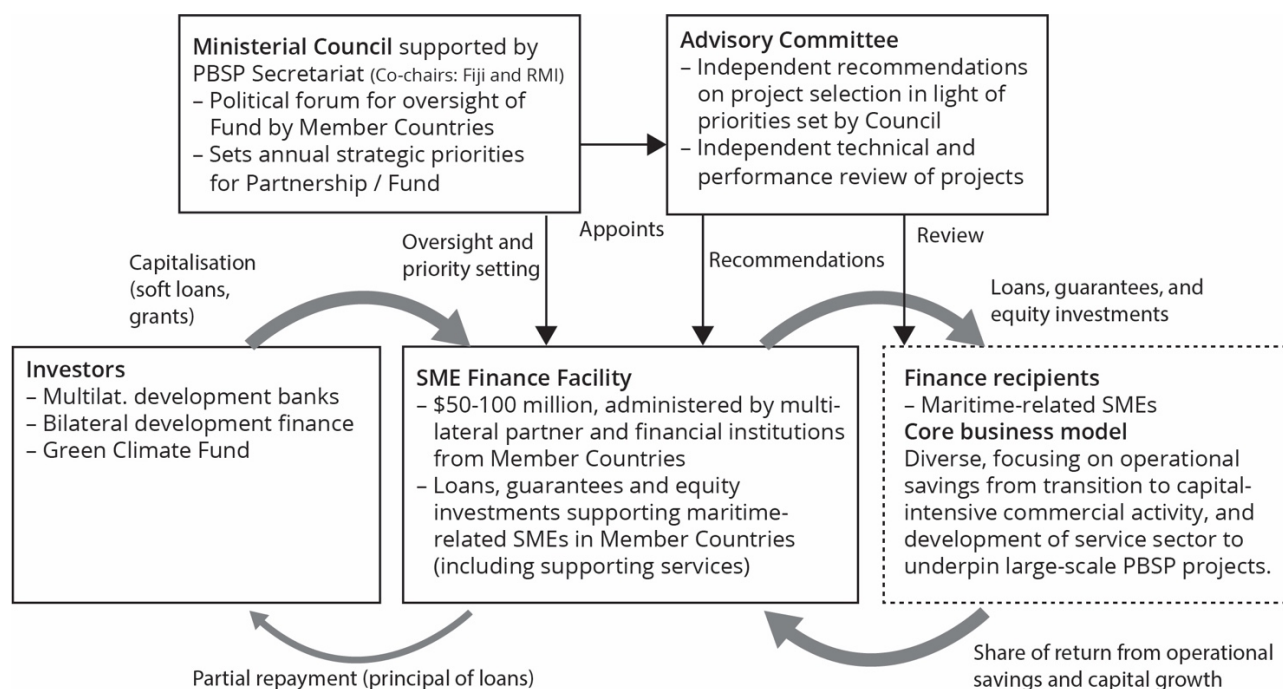


Figure 4: Blended (concessional loans, grants) finance structure for maritime SME development

33. *Research and capacity for the Partnership:* As noted above, this priority area builds on the leadership shown by the Micronesian Centre for Sustainable Transport (MCST), the IMO–EU Maritime Technology Cooperation Centre (MTCC) and a range of international partners, and would involve establishing a decentralised Partnership Research and Capacity Hub for addressing a range of technical and capacity challenges that are critical to the successful implementation of the broader Partnership. In the short term, this would involve start-up support for the Ministerial Council and Advisory Council, enabled by **catalytic grant funding**.
34. In the longer term, the Hub focus would broaden to include locally relevant research and technology development, including piloting of low-carbon technologies and infrastructure options prior to investment. The Hub would also focus on development and delivery of training and implementation programmes with particular attention devoted to the creation of opportunities for women and marginalised groups. PBSP training programmes will have a broad focus covering all professions, trades and institutions (public and private) involved in the maritime transport sector. The diagram below summarises an illustrative financial and institutional structure for the Hub, which would rely initially on grant funding.

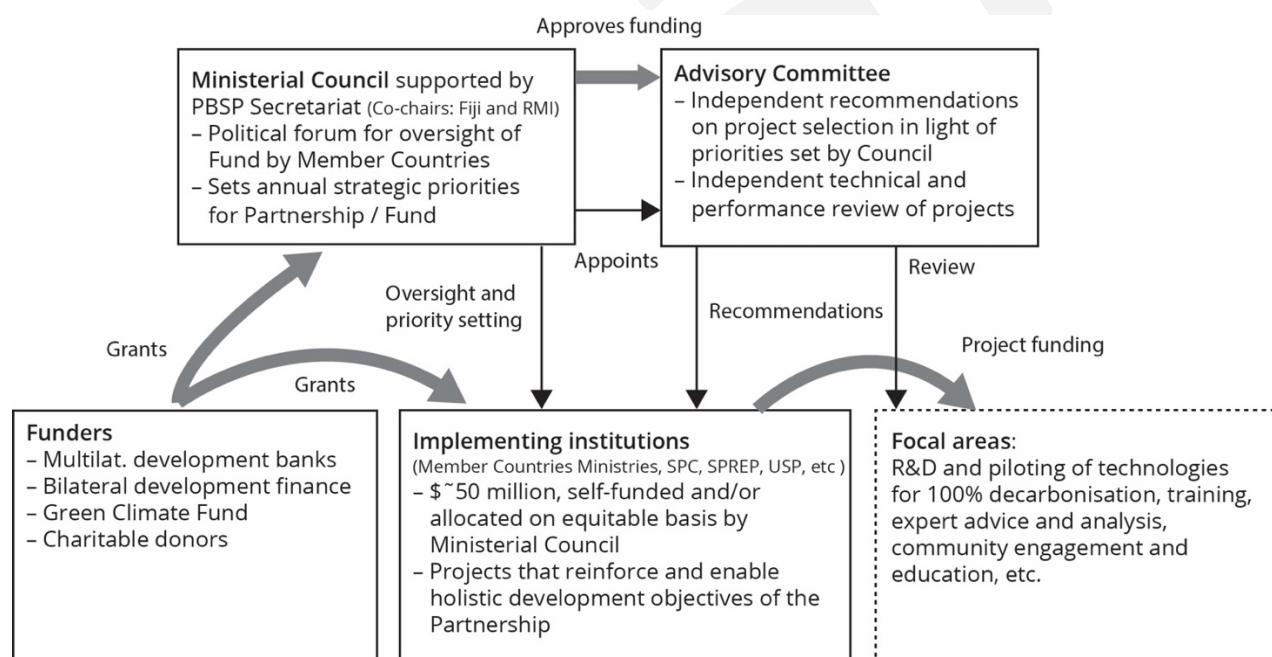


Figure 5: Grant finance structure for the Research and Capacity Hub

## Summary timeline of the Partnership and next steps for the Partnership

### 35. Previous events and achievements:

- *Nov 2018*: Endorsement of the Laucala Declaration on the Decarbonisation of Pacific Islands Transportation, at the 2018 Pacific Islands Transport Forum, Suva, Fiji.
- *May 2019*: Preliminary inter-governmental discussions at the 3<sup>rd</sup> Climate Action Pacific Partnership Conference in Suva, and announcement by Prime Minister Bainimarama (Fiji) on behalf of leaders present.
- *June 2019*: Appointment of Co-Chairs (from Fiji and Marshall Islands respectively) of the Partnership development process, preliminary Advisory Committee including a Finance Working Group and Technical Working Group.
- *September 2019*: Announcements of the Partnership at the UN Secretary General's Climate Action Summit, by Prime Minister Bainimarama (Fiji), Attorney-General Sayed-Khaiyum (Fiji) and Minister Paul (Marshall Islands).

### 36. Next steps:

- *First half of 2020*: Convene first formal planning meeting of Member Countries to establish a work-plan and agreed responsibilities for the Ministerial Council and Advisory Committee.
- *First half of 2020*: Intensive consultations with key development partners who have contributed to the informal PBSP development process, including: Green Climate Fund, Asian Development Bank, World Bank, bilateral partners, regional institutions, international experts, etc.
- *Lisbon Conference*: Formal international launch of the Pacific Blue Shipping Partnership and discussions with public sector development partners (focusing on catalytic activities).
- *Second half of 2020*: Submission of catalytic grant funding proposals and iterative refinement of financial and institutional structures.
- *UNFCCC COP26*: Subsequent international launch of the Pacific Blue Shipping Partnership and discussions with development partners and financial institutions.