Regional Strategies on Sustainable and Resilient Port Developments for the Pacific

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PORTS IN THE PACIFIC ISLANDS COUNTRIES AND TERRITORIES (PICTS)

- 60+ Ports servicing international shipping
- Majority falls under the very small port category
- Some Ports receive less than 20 cargo ship calls and handle an average 2000 TEUs per year.
- Only 6 ports handles more than 100,000 TEUs a year
COMMON ISSUES IN PICTS PORTS

• Insufficient depth of water in ports;
• Limited berthing space;
• Lack of storage space;
• Under-utilisation of available technology, financial and management strategies that can enhance port efficiency;
• Limited port and stevedore operating hours, and insufficient number of workers in a stevedore gang;
• Insufficient (or outdated) mechanical equipment; and
• Most of ports in the Pacific are still operated in conventional development model, where financial and physical capital are given priority
PACIFIC PORTS 2030 -2050 : A VISION OF RESILIENT, GREEN AND CLEAN PORTS IN THE PACIFIC

• Originally developed in 2015 by SPC in collaboration with SPREP as the Green Pacific Port Initiative

• Pilot activities with Fiji Port Corporation Limited and first energy audit to support energy management in 2016

• 2018-2019: pilot project with Tonga and Solomon Islands on Green Pacific Port initiative using SPC Innovation Fund

• Concept further improved in 2019 and adopted by the 4th Pacific Regional Energy and Transport Ministers Meting as the “Pacific Ports 2030 -2050 : A vision of resilient, green and clean ports in the pacific”
OBJECTIVES

• Overall objective
  – to support the sustainable economic development of PICTs by improving the efficiency and sustainability of maritime ports as an essential element of the transportation system

• Specific objectives
  – Adapting port development, and strengthen preparedness, response and recovery to climate change and disasters
  – Improving the efficiency of port operations
  – Ensuring energy efficiency and carbon footprint reduction
  – Preventing marine pollution and managing waste
PURPOSE

• To implement plans aiming:
  • to increase the efficiency and the sustainability of port operations
  • to address energy efficiency, renewable energy and carbon footprint, climate change and disaster risk management and waste management and pollution control
• To support PICTs in developing strategy and quality management system (QMS)
PACIFIC PORTS 2030 -2050 : A VISION OF RESILIENT, GREEN AND CLEAN PORTS IN THE PACIFIC

SPC & SPREP partnership

Resilience
Minimizing Risks and maximizing productivity
- Climate/Disaster Resilience
- Policy and Legal Framework
- Operational Efficiency

Green
Reducing port carbon footprint
- Energy Management
- Energy audits
- Energy Conservation

Clean
Preventing port marine pollution
- Environmental Management
- Waste Management
- Pollution Response
## PORT RESILIENCE

<table>
<thead>
<tr>
<th>Component</th>
<th>Expected result</th>
<th>Approach/activities</th>
<th>Expected Output</th>
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<tbody>
<tr>
<td>Improving Resilience and Port Operations Efficiency</td>
<td>PICTs have a strategy and a Quality Management System (QMS) in maritime ports improving efficiency and sustainability of port operations as well as discharging country responsibilities regarding international conventions. PICTs have a master plan for climate proofing of Port infrastructure and equipment.</td>
<td>Conduct a port function review and outline a consistent and integrated strategy that includes all aspect of sustainability and efficiency of port operation. Review relevant ports legislative and regulatory frameworks, including to implement international conventions. Develop QMS in ports to improve sustainability and efficiency of port operations ensuring safety and security, facilitating trade. Collect relevant information to assess climate resilience and disaster risk of port infrastructure and outline a response plan.</td>
<td>Port review and recommend strategies for improved port efficiency and sustainability. Legislation reviewed and Gaps identified with recommendations. Quality Management System is developed and implemented. Response plan/BCP developed for a more resilient and Ports are better prepared to recover after a Disaster.</td>
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# GREEN PORT

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<td>Reducing port carbon footprint</td>
<td>PICTs have and implement a programme of assessment and management of energy efficiency, carbon footprint in their ports</td>
<td>Conduct energy audits in maritime ports&lt;br&gt;Develop an Energy Management Policy and plan&lt;br&gt;Implement low-cost energy conservation measures (incl. mentoring/coaching)</td>
<td>Recommendations are provided to reduce GHG from port infrastructure and operations including GHG baseline data&lt;br&gt;Energy Policy and Management Plan is developed&lt;br&gt;Low-cost energy conservation implementation report provided including emissions reduction</td>
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CLEAN PORT

• Related Activities
  – draft, implement and maintain port environment management plans (EMP) for waste management and pollution control
  – carry out proper disposal of derelict vessels and wrecks
  – collect and analyse water quality in ports
  – Investigate options for utilizing waste for renewable energy and other uses
  – carry out port waste reception facilities audits and remediate action in support of waste collection systems for final disposal including re-use in country and export
  – conduct oil spill risk assessment for ports and develop and maintain marine spill response plans
  – Collect and analyse data regarding the management of invasive marine species from shipping via ballast water and hull bio-fouling
## RESULTS WITH THE FIJI PORTS CORPORATION LIMITED

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<th>Change process</th>
<th>Results and impact</th>
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<tr>
<td>• Port of Suva have reduced electricity consumption thorough upgrading the lighting system to LED and upgrading to high efficiency air conditioning system</td>
<td>• Estimated savings of FJD $350,000/year and 50 tonnes GHG/year for the last 3 years.</td>
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<td>• Port of Suva installed a new power switch board (Power correction factor)</td>
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<td>• Port of Suva : change in the behaviour to eco-driving</td>
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<td>• Fiji Ports now certified for Integrated Management System, ISO 9001 QMS, ISO 14001 EMS, ISO 45001 OHS.</td>
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<td>• Fiji Ports Launched a Green port Master Plan</td>
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LESSON LEARNT AND WAY FORWARD

• Capacity building and awareness raising to improve commitment at all levels of the organisation and highest levels (Board and Ministry)

• Continue to improve management through effective implementation of policies, processes and systems (incl quality, energy, environmental, risk, asset management)

• Collate data and information and establish KPI under all policies

• Invest in projects, improving efficiency and reinvest all savings in further improving efficiency (virtuous cycle)

• Reach out potential donors and partners with the consortium of regional organisations in port to support the Pacific Port Vision 2030-2050.

• Promote at the subregional levels and through PMTA the Green Pacific Port approach with ambitious targets by 2025, 2030, 2050 and regional recognition framework

• GROW GREEN WITH PACIFIC PORTS! and advocate in the whole Pacific maritime sector the contribution to climate mitigation and reduction of GHGe and marine pollution
• Thank you