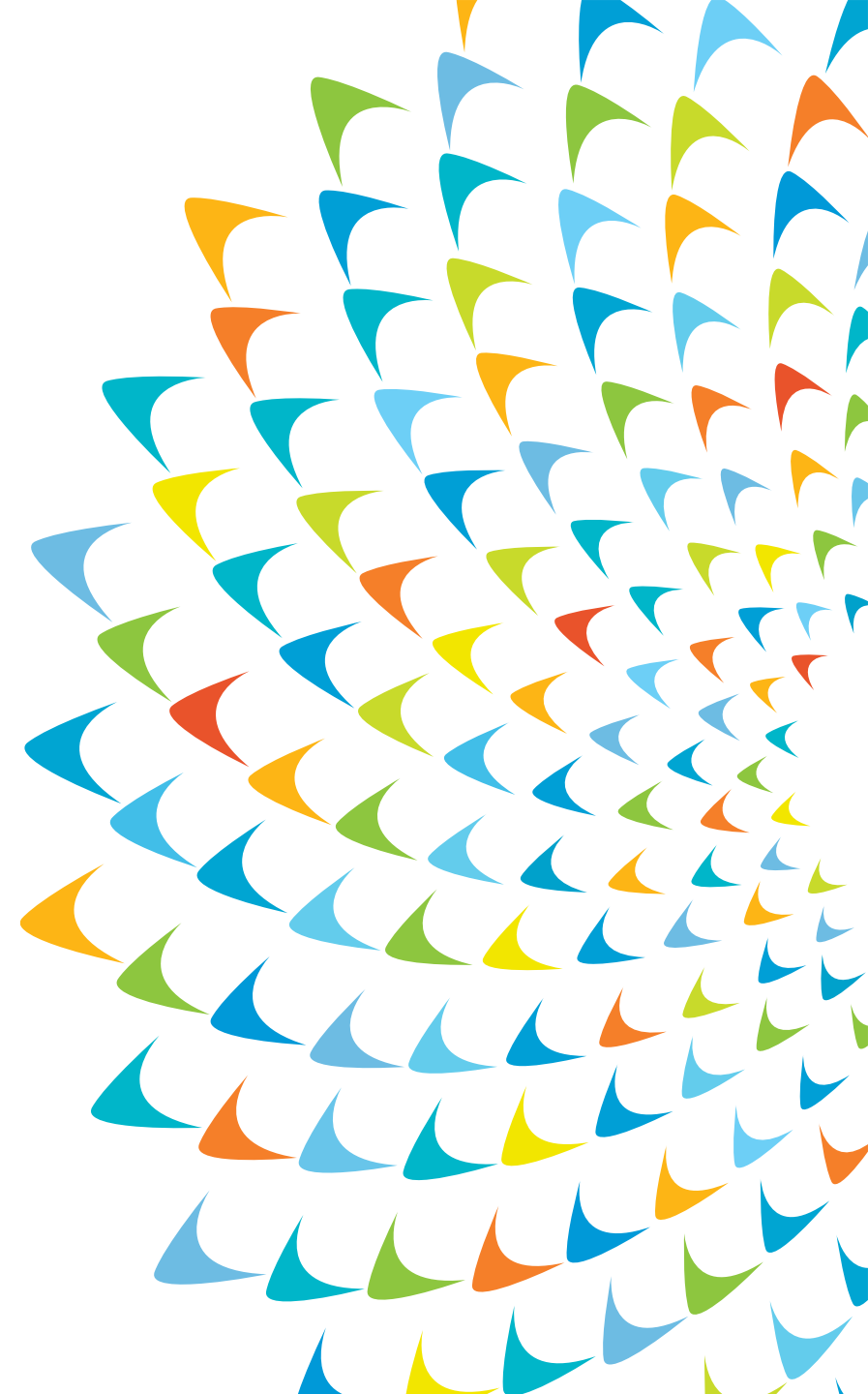




# ADB's Role in Green Port Development and Maritime Decarbonization

R. Duncan McIntosh, PhD  
Senior Regional Maritime Specialist  
Asian Development Bank





# ADB's STRATEGY 2030 VISION



To achieve a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty.



# ADB Membership

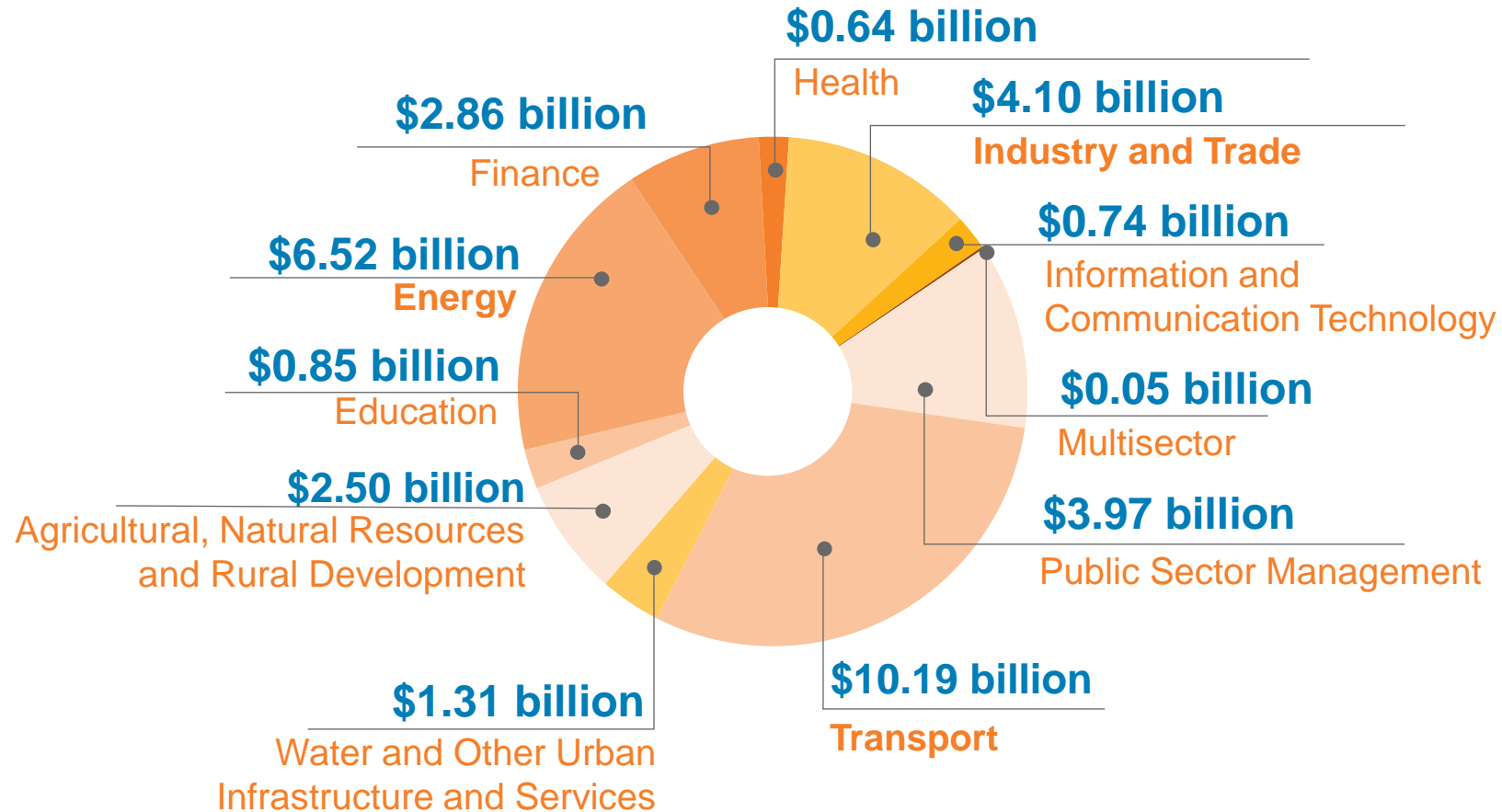




# ASSISTANCE BY SECTOR

TOTAL OPERATIONS

**\$33.74  
BILLION**





# ADB's CORE BUSINESS



- Finance
- Knowledge
- Partnerships



# Allocation of Concessional Resources

- A performance-based allocation (PBA) mechanism is used to divide a limited pool of concessional resources among eligible countries using a formula that links country performance to individual country allocations.
- The risk of debt distress determines the proportion of grants in the country allocation.
  - countries at low risk of debt distress receive no grants
  - countries at moderate risk of debt distress receive grant allocation equivalent to 50% of PBA share
  - countries at high risk of debt distress receive full grant share.



# Allocation of Concessional Resources

We determine the eligibility of DMCs to borrow:

- from [ordinary capital resources \(OCR\)](#) at near-market terms,
- or at concessional OCR loan (COL) terms,
- or to receive grants from the [Asian Development Fund \(ADF\)](#).
  
- DMCs are classified based on their gross national income (GNI) per capita, and creditworthiness, in accordance with ADB's classification and graduation policy.



# Infrastructure Financing

examples





# Samoa: Enhancing Safety, Security, and Sustainability of Apia Port



- \$65M Grant
- Climate and disaster resilience:
  - As the existing breakwater is inadequate to withstand the impact of future climate change (sea level rise) and the 100-year storm, the project will reconstruct and strengthen the breakwater, to enhance its resilience serve as a lifeline port, to operate in the aftermath of disasters to receive vessels carrying aid and emergency supplies.
  - Developed Green Ports Policy



# Nauru: Sustainable and Climate-Resilient Connectivity Project



- \$40M Grant
- building a wharf, breakwater, and a berth pocket at Aiwo, reconstructing port buildings and the container storage area, and strengthening the institutional capacity of the Nauru Maritime and Port Authority (NMPA).



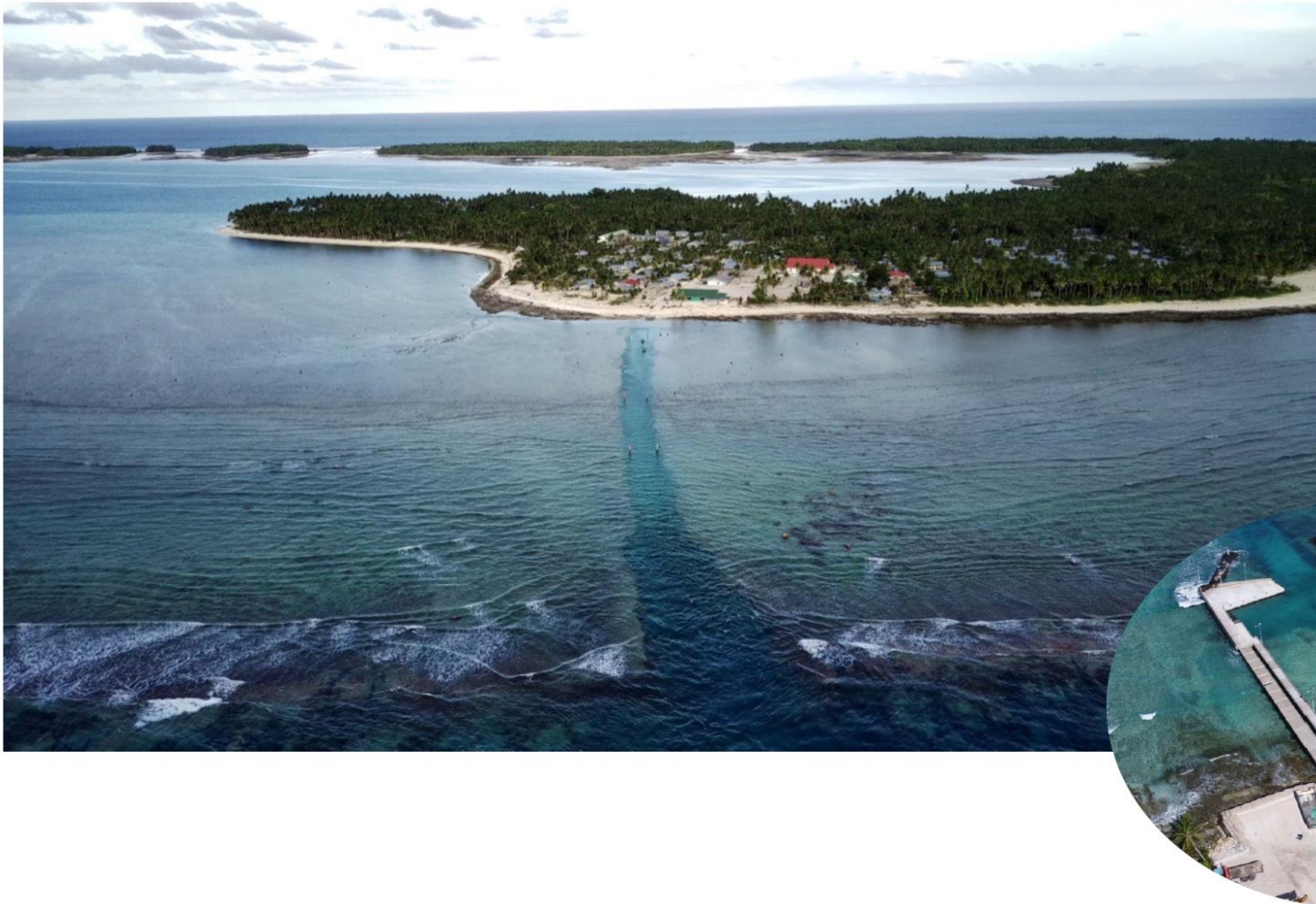
# Solomon Islands: Land and Maritime Connectivity Project



- \$75M Grant
- to upgrade about 35 km of roads in Honiara city and the surrounding regions, construct 2 rural wharves, and reconstruct and strengthen an old wharf in Honiara port.
- to improve connectivity, efficiency, and disaster resilience of transportation network in Solomon Islands.



# Tuvalu: Outer Island Maritime Infrastructure Project



- \$50M Grant
- Small-scale harbors constructed in Nui, Niutao, and Nukulaelae, and boat ramps in Nanumaga and Niutao rehabilitated.
- transport sector master plan for future harbor development in the outer islands created, with a view to promote fisheries and tourism.
- Also \$30M Grant to replace the existing passenger and cargo ship Manu Folau, which is in an unserviceable state



# Tonga: Nuku'alofa Port Upgrade Project



- \$45M Grant
- to upgrade the Nukualofa port, rehabilitate, renew and expand the existing infrastructure and improve the management and operations practices

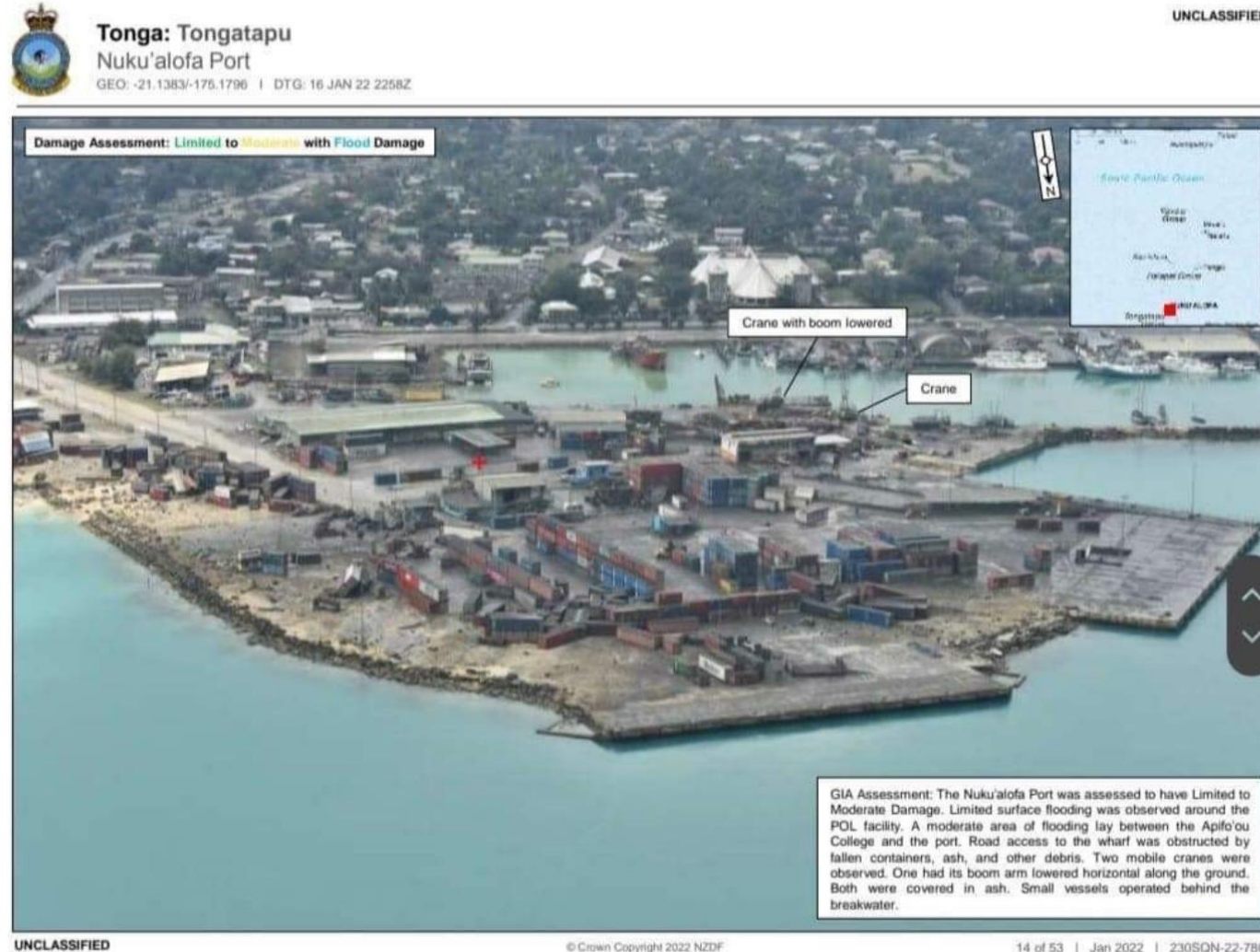


# Knowledge Products

examples



# Tonga Volcano Damage Assessment

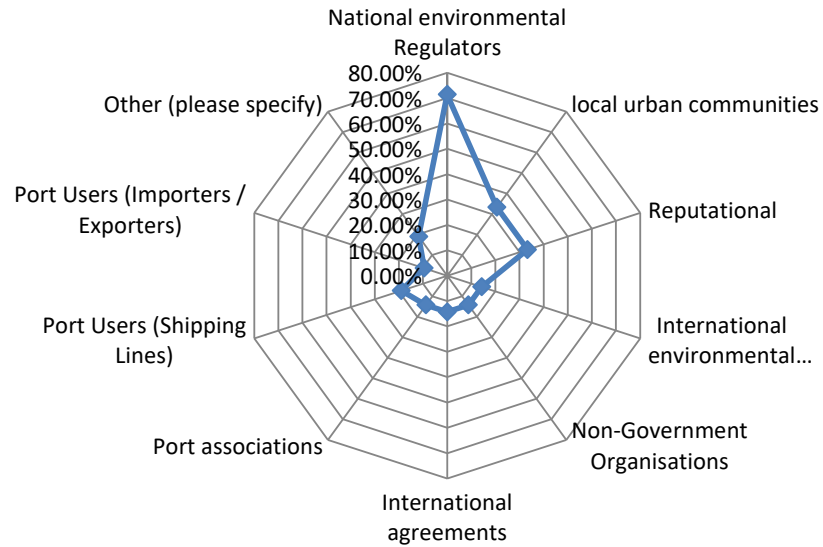


Nuku'alofa Port  
Tonga, 16 January 2022



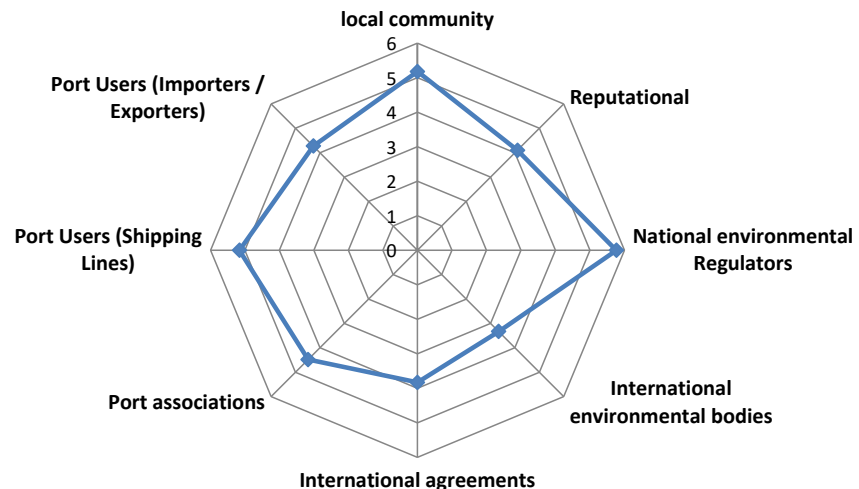
# SEA Green Ports Scoping Study

## Current Pressures to “Go Green”



- **Defined** environmental regulatory settings for;
  - Air quality management including GHG emissions,
  - Water quality management; and
  - Solid waste disposal, noise and light pollution
- **Defined** scale and operation of port activities
- **Analyzed** application and compliance of port management to national legislation
- **Recommended** enhanced approach to expanding coverage and compliance of environmental concerns emanating from seaport operations

## Expected Future Pressures to “Go Green”







# SA-SEA Maritime Connectivity Study

## Shipping Service Recommendations

- More direct hub-to-port feeder links – reduction in circuit voyages
- Deployment of larger feeder vessels
- Reduction in geared and non-cellular container ships
- Increase in direct mainline services (East India - Thailand & Vietnam initially via hubs and linkages with West India)
- Reduction in 'double-hubbing'

## Ports and Infrastructure Recommendations

- Expansion of existing terminals
- Increasing Draught at Riverine Ports
- Additional Specialist Handling Equipment
- Improved Port Access Roads
- More off-dock support infrastructure ICD/CFS/ED
- Additional IT Linked Applications
- Adoption of Green Port Standards

## • **Analyzed**

- Shipping services
- Ports and multimodal infrastructure

- **Developed** roadmap of maritime investments to facilitate inter-subregional trade between SA and SEA

- **Recommended** detailed pipeline of projects to support economic growth



# Partnerships

examples

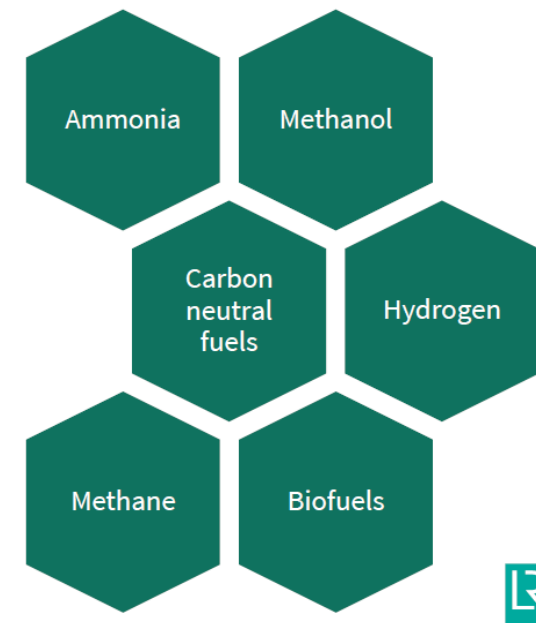


# The Silk Alliance

## The objectives

### The Alliance

To pilot a viable, zero-carbon “Green Corridor” maritime route in Southeast Asia



Build a resilient, long-term, fleet-specific decarbonisation plan in collaboration with stakeholders from across the supply chain.



Enable tangible commitments from selected stakeholders to invest in actions drawn out of the plan and build pilot demonstrations.



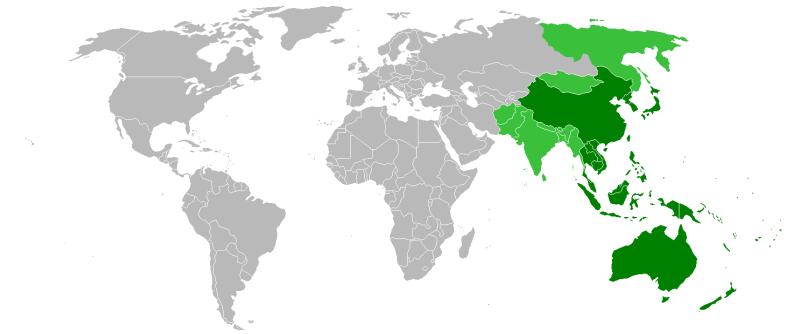
Demonstrate regional leadership that can build wider industry confidence in an earlier transition, whilst building first-mover capability and knowledge that can contribute to the wider industry.





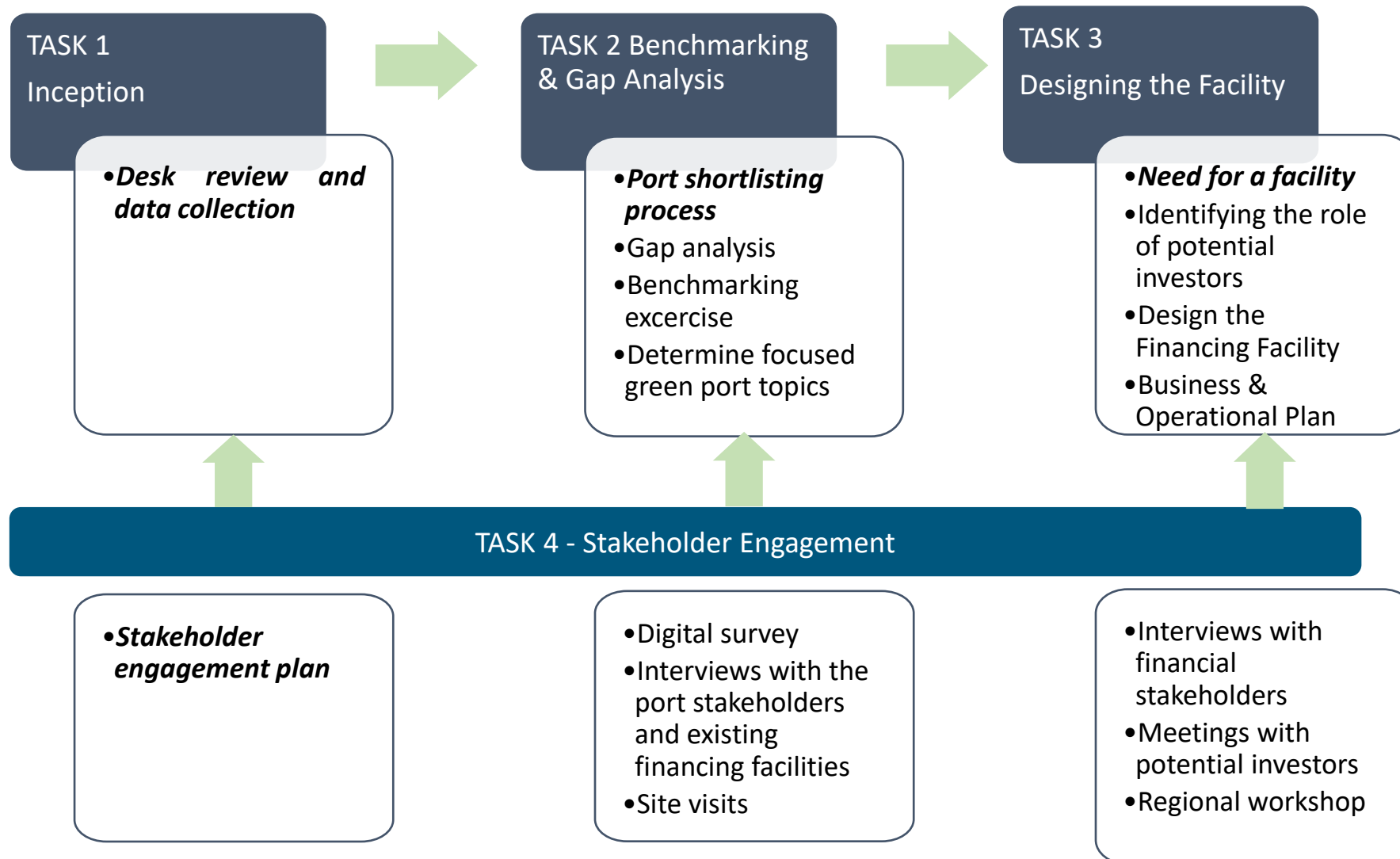
# A New Financing Facility for Green Ports and Maritime Decarbonization

- Currently developing a business plan for a Financing Facility for green infrastructure investment projects in ports across Asia and the Pacific to:
  - reduce carbon emissions and air and water pollution;
  - improve solid waste management; and
  - enhance the resilience of the ports and emergency response preparedness
- Within the framework of existing port development plans.
- Supporting greening of ports and decarbonization of maritime transport.



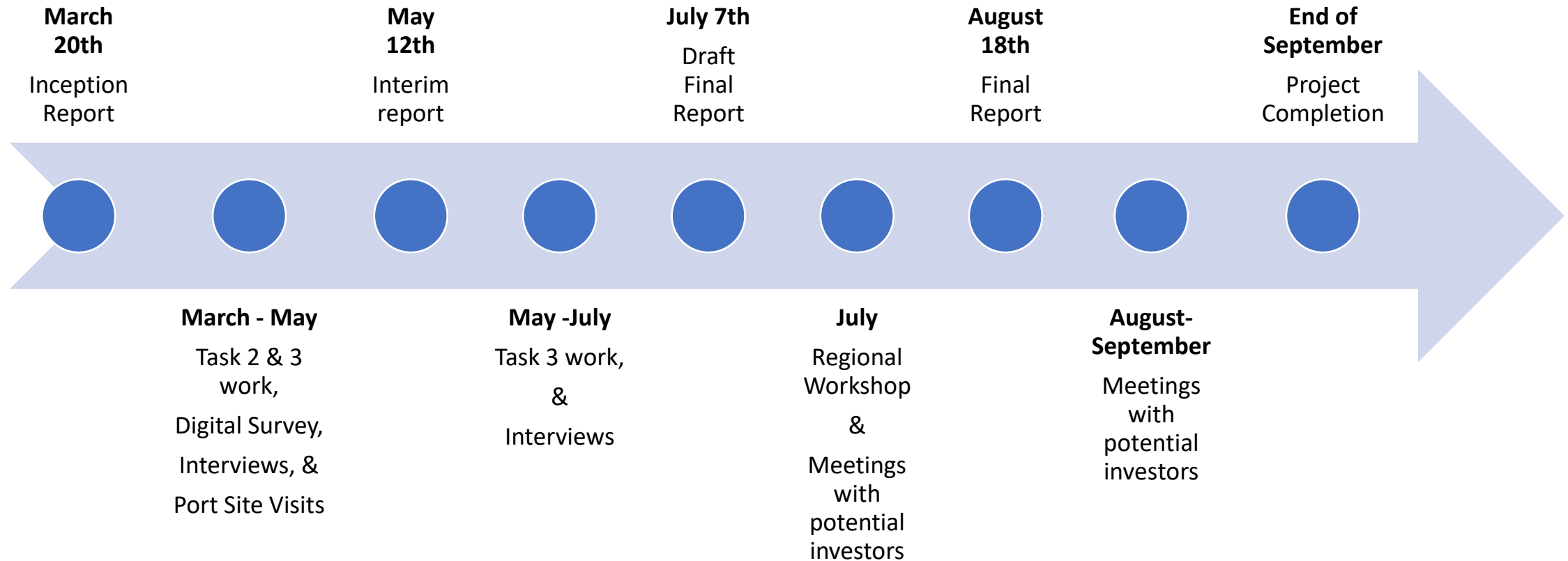


# A New Financing Facility for Green Ports and Maritime Decarbonization





# A New Financing Facility for Green Ports and Maritime Decarbonization





# Thank you

R. Duncan McIntosh, PhD  
Senior Regional Maritime Specialist  
Asian Development Bank

