

Blue Finance toward Sustainable Ocean Governance

APEC Roundtable Meeting on Sustainability of the Marine Environment

December 4 2019 @ Taipei, Taiwan

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The background of the entire image is a photograph of a blue ocean with white-capped waves. In the upper left and lower left corners, there are bright, sparkling reflections of sunlight on the water's surface.

OCEAN POLICY RESEARCH INSTITUTE

 SASAKAWA PEACE FOUNDATION

OPRI's Vision

To serve as a Leading Institute on Ocean Policy Studies and be recognized as a world class **THINK TANK** with an impact globally.

OPRI's Aims



To increase prosperity for all mankind — Ocean sustainability for the next 200 years

- 1) Identify and analyze ocean issues in a comprehensive manner utilizing approaches from the natural sciences, social sciences, and the humanities
- 2) Make feasible and tangible policy proposals based on discussions among international stakeholders
- 3) Work towards policy implementation in collaboration with The Nippon Foundation on local, national, regional, and global scales

OPRI will utilize policy research and a variety of approaches to contribute to solving ocean issues on a global scale.

OPRI's Mission: Contribute to “Ocean Governance”

Promoting Ocean Policy Research & Education

Making Policy Proposals on a Global Scale

Ocean Information Dissemination

Being a premier Ocean **THINK TANK**, OPRI will continue its research efforts to contribute to our mission of establishing “ocean governance” through strengthening our advocacy in the international community.



Ocean Policy



Islands and their
Surrounding Ocean Areas



Sustainability



Research and Investigation
on Ocean Resource



Ocean Education and
Capacity Building



Arctic Ocean



Maritime Security



Marine Environmental
Protection



Information Dissemination
about the Ocean

White Paper on the Oceans and Ocean Policy

Playing a leading role in the advocacy of ocean policy making, OPRI issued its first **White Paper on the Oceans and Ocean Policy** in 2004 to contribute to holistic and inter-disciplinary initiatives on Japan's ocean problems.

The **White Paper** is published annually, and adopts a "comprehensive ocean management perspective" in analyzing information on developments and activities in the ocean and coastal zones.



Ocean Newsletter



Since 2000, The **Ocean Newsletter** (previously known as the **Ship & Ocean Newsletter**) is published fortnightly, introducing cutting-edge observations by experts to facilitate a wide range of discussion and exchange in order to raise awareness on the importance of the world's oceans and their resources.

After every 50 editions of the Ocean Newsletter, the Opinion sections are edited and compiled into 13 categories and published as a single volume, entitled **Towards Coexistence with the Ocean: 150 Opinions**. The series is now highly valued as a resource for ocean studies.

UN High-Level Conferences, Multi-nation Ocean Governance



- Advocate the inclusion of Ocean Issues into COP agenda

Bilateral Dialogues:

US-Japan

Ocean Dialogue – Maritime security & blue economy

China-Japan

Maritime Dialogue – Ocean issues in East Asia

France-Japan

Maritime Dialogue – Project development & research

Palau-Japan

Ocean Collaboration – Ocean conservation policy & research

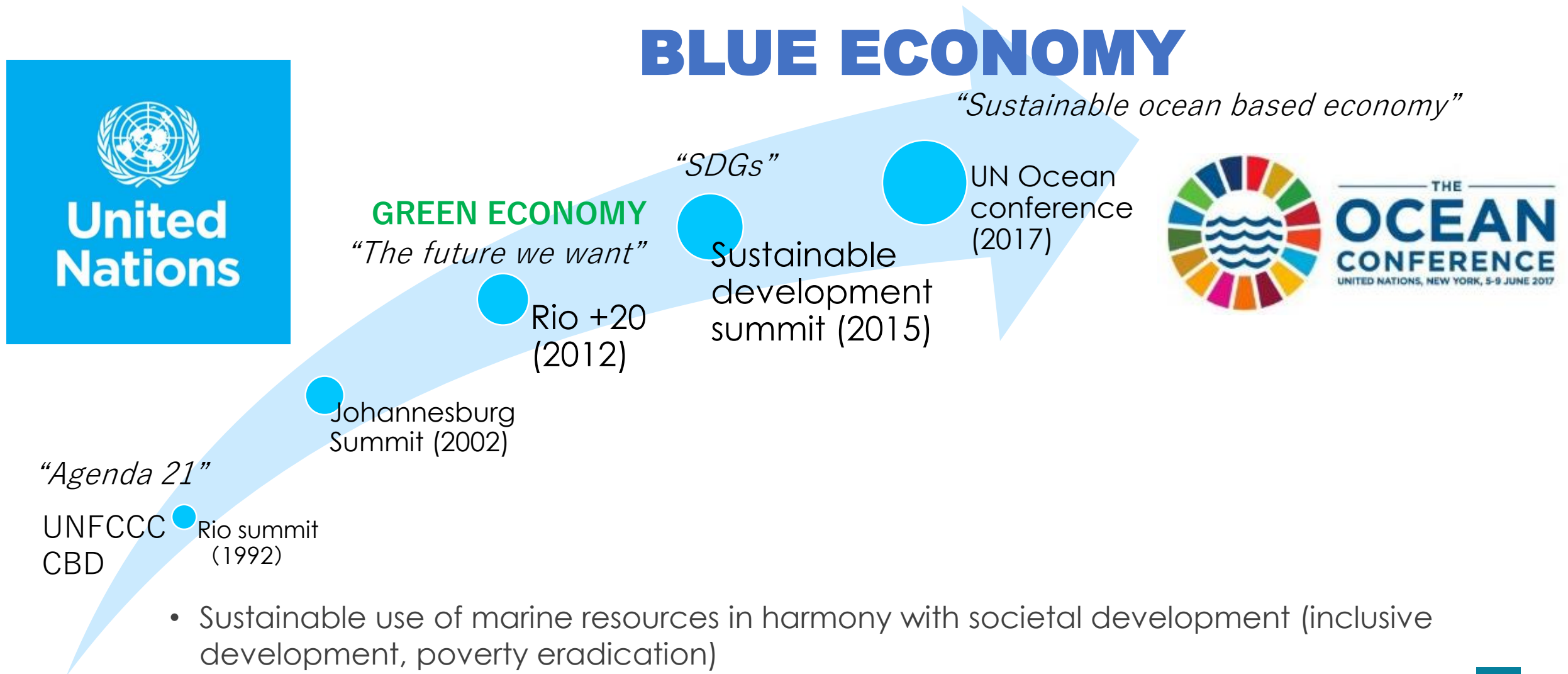


THE
OCEAN
CONFERENCE
Lisbon, 2020

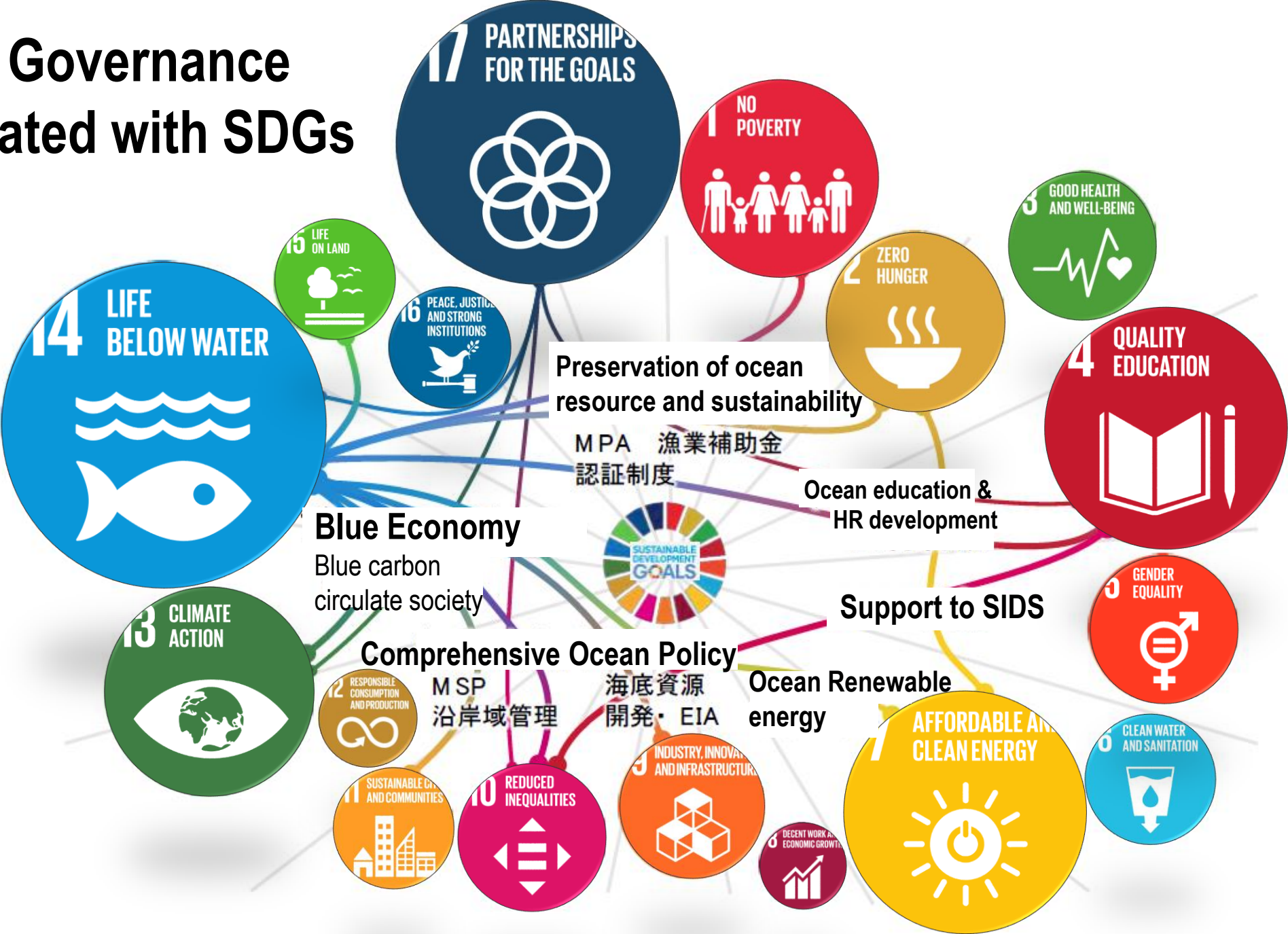


OUR OCEAN
Palau, 2020

Series of UN conferences towards sustainable use of earth and ocean



Ocean Governance associated with SDGs

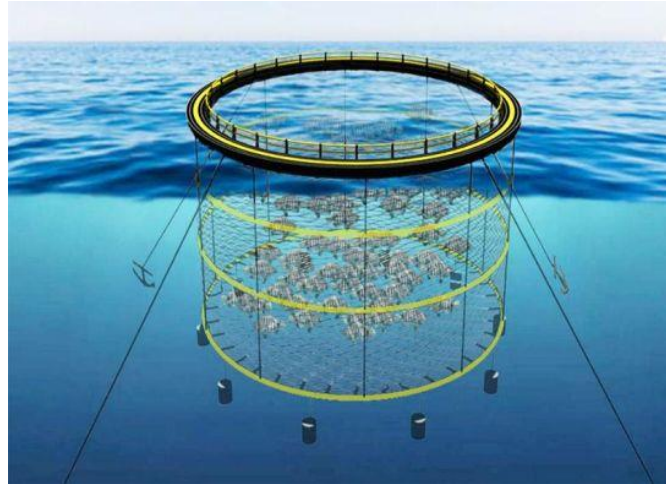


Greening the Ocean => *Blue Economy*



Industry sustainability & Environment

- External costs of marine industries
- Dependence on healthy environment (eg. Tourism in SIDS)



Growth in existing marine industries

- Stronger rates of growth than land based industries
- “Blue growth”



New Marine Industries and Innovation

- Potential for new jobs and competitive advantage

BLUE ECONOMY

The Blue Economy is sustainable use of ocean resources for economic growth, improved livelihoods and jobs, and ocean ecosystem health.

The Blue Economy encompasses many activities...

RENEWABLE ENERGY

Sustainable marine energy can play a vital role in social and economic development.

FISHERIES

Marine fisheries contribute more than **US\$270 billion** annually to global GDP. More sustainable fisheries can generate more revenue, more fish and help restore fish stocks.

MARITIME TRANSPORT

Over **80%** of international goods traded are transported by sea, and the volume of seaborne trade is expected to double by 2030 and quadruple by 2050.

TOURISM

Ocean and coastal tourism can bring jobs and economic growth. Coastal Least Developed Countries and Small Island Developing States receive more than **41 million visitors** per year.

CLIMATE CHANGE

The impacts of climate change on oceans—rising sea-levels, coastal erosion, changing ocean current patterns, and acidification—are staggering. At the same time, **oceans are an important carbon sink** and help mitigate climate change.

WASTE MANAGEMENT

80% of litter in the ocean is from land-based sources. Better waste management on land can help oceans recover.

Side event of ADB Annual Meeting in Fiji (1 May 2019)

Regional Workshop on Blue Economy, Ocean Infrastructure and Risk Financing

■ About 70 participants ranged from Academia, government officials and NGOs.

Focal points:

- Economic effect of ocean infrastructure investment
- Funding accessibility of coast area community
- Innovative financing instrument for coral reef

OPRI Perspectives:

- The importance and vulnerability of tourism sector in Fiji
- Possibilities of blue bond application on Pacific SIDS (Cf. first blue bond issued in Seychelles in 2018)



SASAKAWA PEACE FOUNDATION
THE OCEAN POLICY RESEARCH INSTITUTE

Regional Workshop on Blue Economy, Disaster Risk Financing and Ocean Infrastructure (1 May 2019 Nadi, Fiji)



The 52nd ADB Annual Conference in Fiji (2-5 May 2019)



ADB OCEANS FINANCING INITIATIVE ACCELERATING BLUE INVESTMENTS IN ASIA AND THE PACIFIC

The Oceans Financing Initiative supports ADB developing member countries to catalyze financing for projects that will help protect and restore marine ecosystems and promote sustainable blue economies. The initiative will leverage public sector funds to create investment opportunities able to attract financing from a range of sources, including the private sector. Technical assistance and funds from ADB and donors, along with innovative financing instruments such as revenue guarantees and credit-enhanced blue bonds, will be used to reduce project risks and make them "bankable". ADB will work with development and financing partners from around the world to accelerate the investment needed to meet the Sustainable Development Goals, including SDG 14: Life Below Water.

OUR APPROACH Supporting countries to develop bankable investment opportunities in ocean health and the blue economy.

- Blue finance frameworks**
Developing detailed principles, criteria, and indicators for selecting projects and measuring impacts.
- Bankable projects**
Working with governments and other partners to develop innovative and bankable projects.
- Innovative instruments**
Supporting the development of financing mechanisms that reduce investment risks, such as blue bonds, blue credits for avoided cost, and first loss guarantees.
- Access to funds**
Increasing access to funds from ADB, development partners, donors, and the private sector.

FOCUS AREAS The Oceans Financing Initiative is aligned with ADB's Action Plan for Healthy Oceans and Sustainable Blue Economies, which aims to expand ADB investments and technical assistance to \$5 billion between 2019 and 2024 to promote ocean health and the blue economy.

- Blue Economy**
Creating inclusive livelihood and business opportunities in sustainable tourism and fisheries.
- Ecosystem Management**
Protecting and restoring coastal and marine ecosystems and key rivers.
- Pollution Control**
Reducing land-based sources of marine pollution including plastics, wastewater, and agricultural runoff.
- Sustainable Infrastructure**
Improving sustainability in port and coastal infrastructure development.

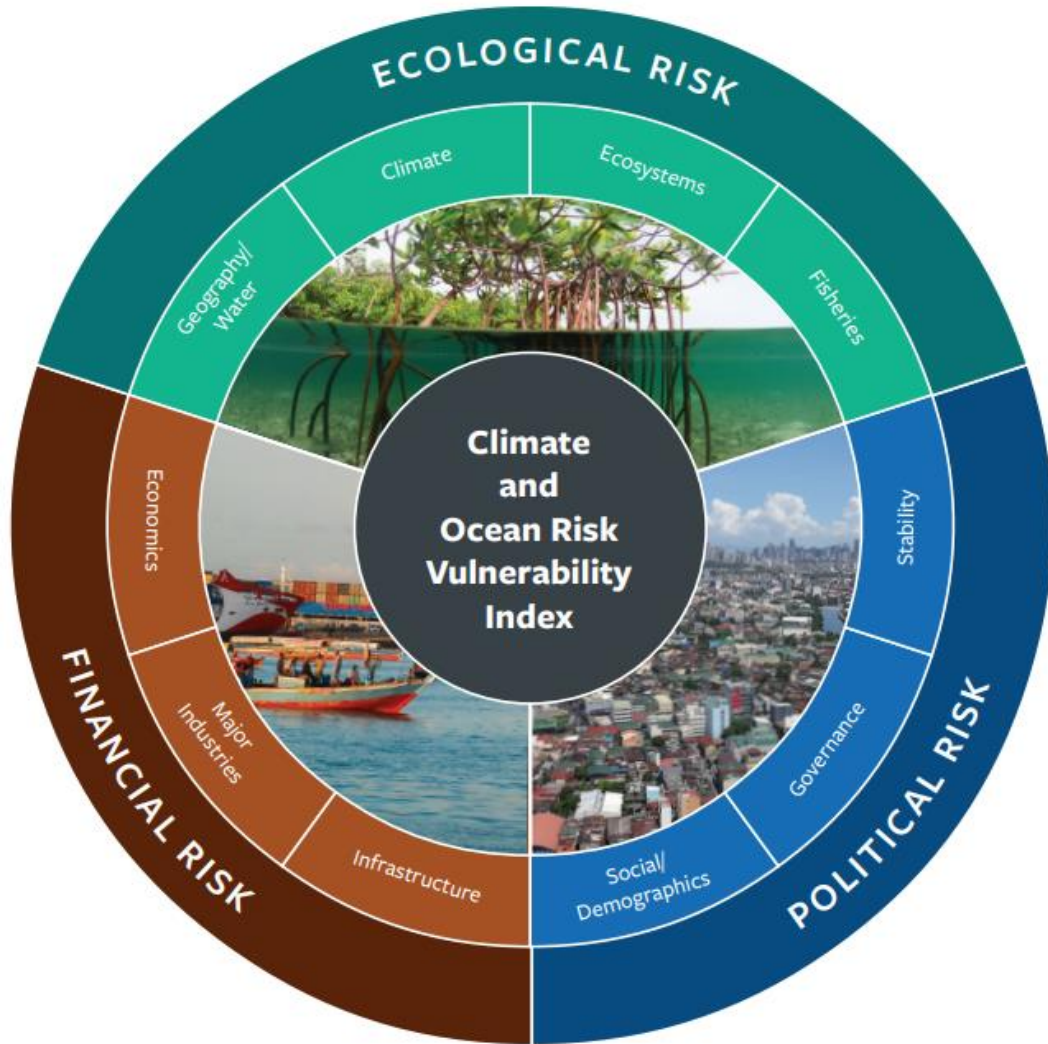
■ First time Pacific island chosen for venue.

■ ADB Ocean Financing Initiative

- Actions for Healthy Ocean and sustainable blue economies
 > 2019-2024 5 billion USD for support ocean related activities
- Ocean Financing Initiative
 > Facilitate financing activities of private sector for ocean sectors



The Climate and Ocean Risk Vulnerability Index (CORVI)



On launching a research partnership between OPRI and the Stimson Center on "Climate Change and Ocean Risk Vulnerability Index" in July 2019.

How to mobilize the money for ocean preservation and sustainable development?

Scope of Blue Finance



Blue Economy Enhancing

Fishery, Tourism,
Sea transportation



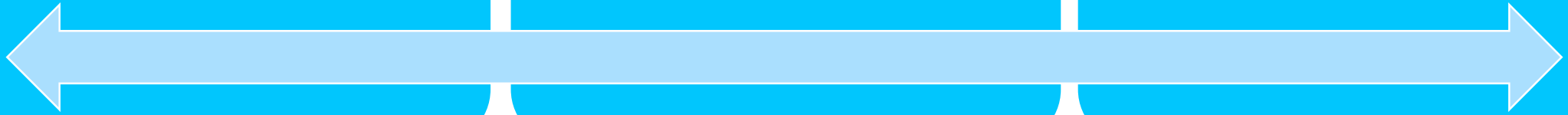
Ocean Risk Resilience

Cyclone, Sea-level Rise
Water Shortage



Ocean Resource Protection

Fish, Coral Reef, Blue Carbon



Financing Instrument for **Blue finance**

	Aid/Grant	Fund	Insurance	Bond
Responsibility	×	×	○ (Premium)	○ (Coupon)
Effect	Ex-post	Ex-ante	Ex-post	Ex-ante
Sustainability	△	△	○	◎
Source	International	International /Public	Public/Private	Public/Private

Seychelles Government

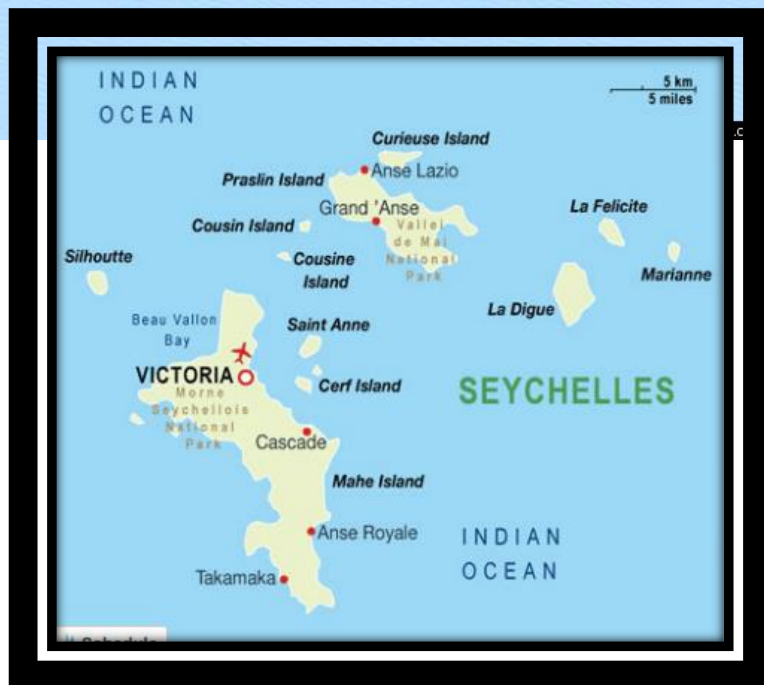
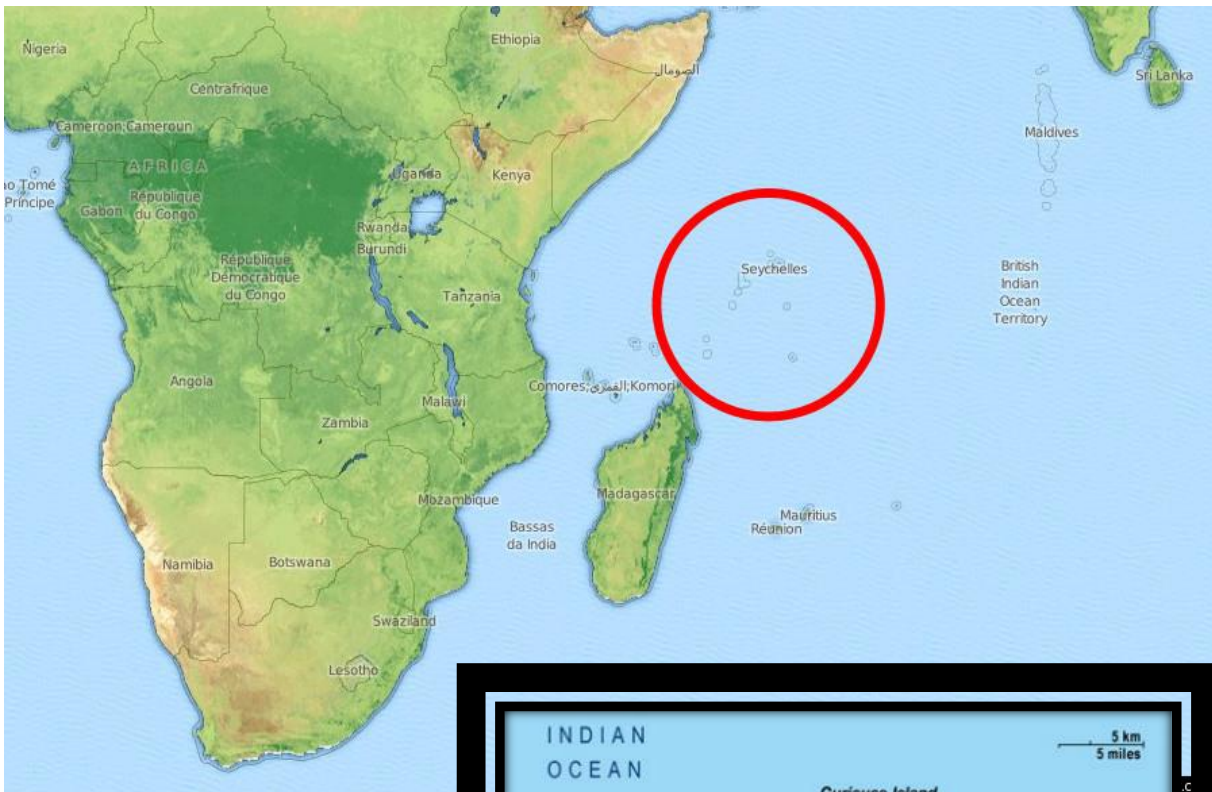
“Blue Bond”

for 15 million USD (2018)



Utilize the financial resource from blue bond to support fishery by improving the vassal and assist government strengthen commitment for environment by reinforcement of IUU regulation, private sector and international cooperation toward sustainable ocean governance.

- Understand financial needs & market condition,
- Identify the need for a guarantee
- Donation to cover transaction costs
- Find investment banks and trustee to collaborate with Global Environment Facility



Seychelles



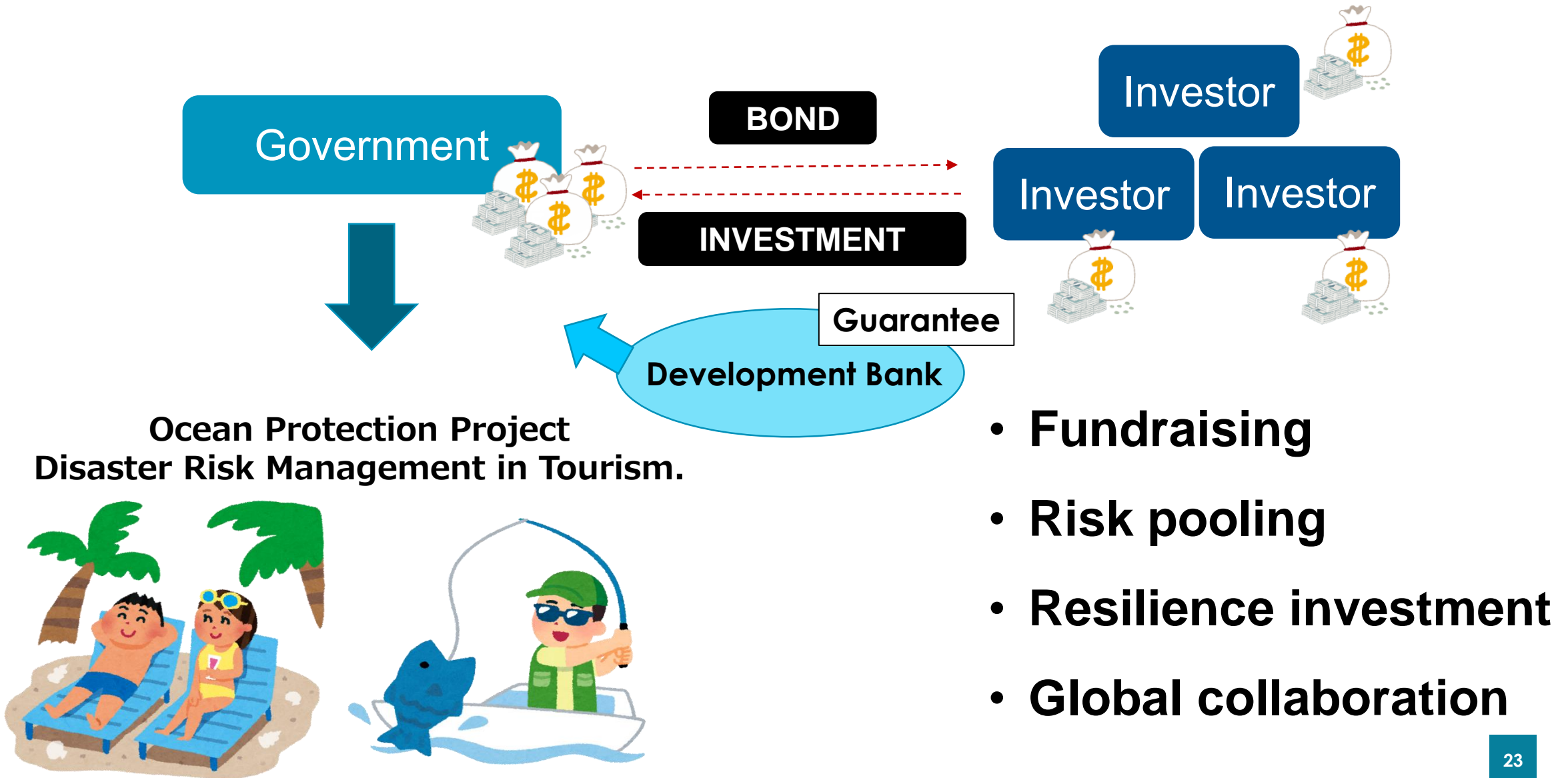
Population	96,762
GDP	1.59 bil. USD
GNI/capita	15,600 USD
Economic growth	3.6% (2018)

Source: World Bank

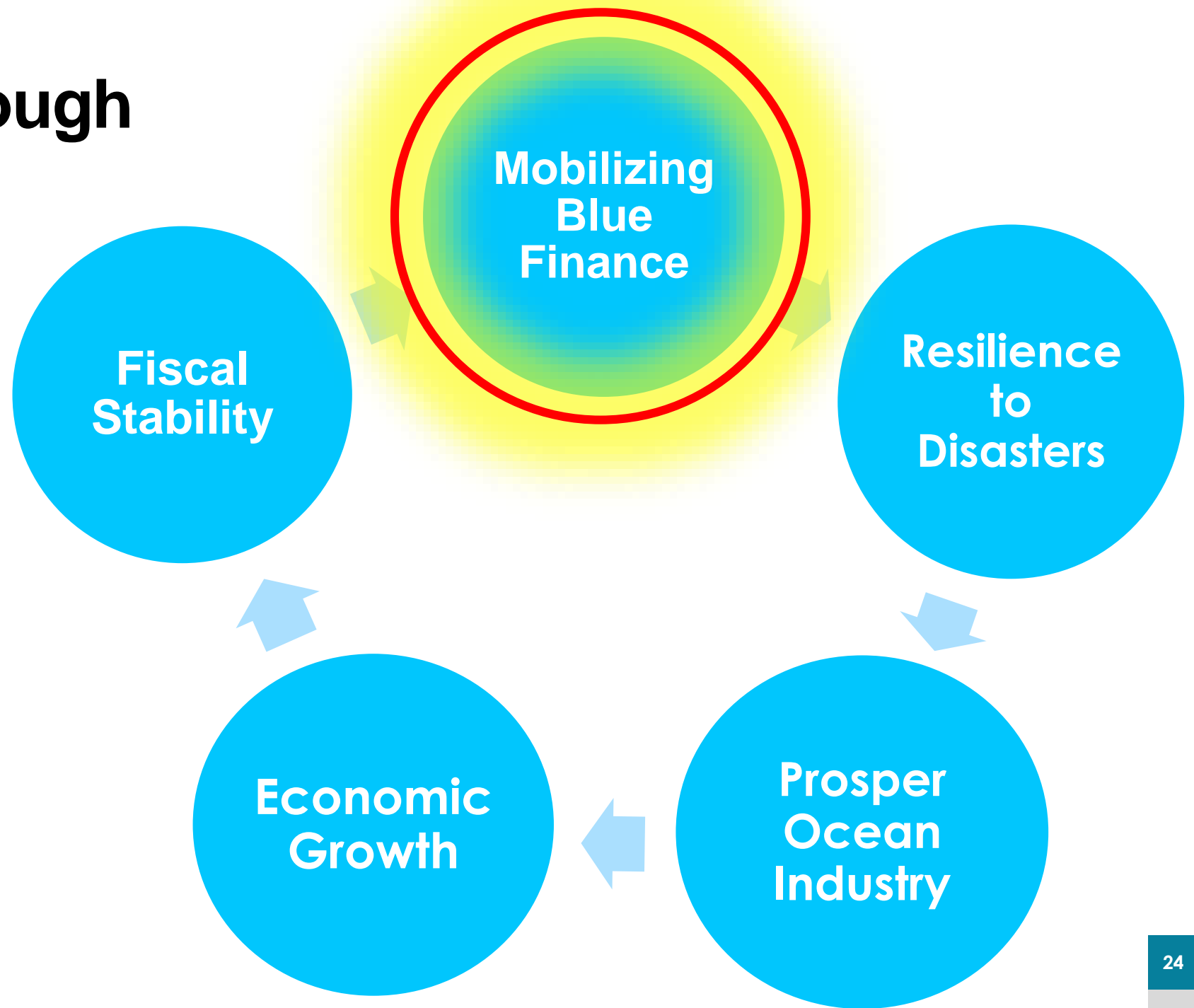
Blue & Green Bond

	Seychelles Blue Bond	Fiji Green Bond
Issued Year	2018	2017
Issuer	Government (+WB, GEF)	Government
Total Amount	15 million USD	40 million FJD (18.8 million USD)
Maturity	10 Years	5 years/ 13 years
Coupon Rate	6.5%	4.0% / 6.3%
Purpose	expansion of marine protected areas, improved governance of priority fisheries, and development of blue economy	renewable energy, waste management, resource conservation, and disaster resilience etc...

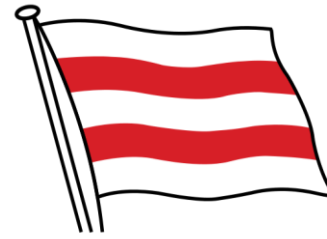
The Structure of Blue Bond



Circulating through Blue Finance

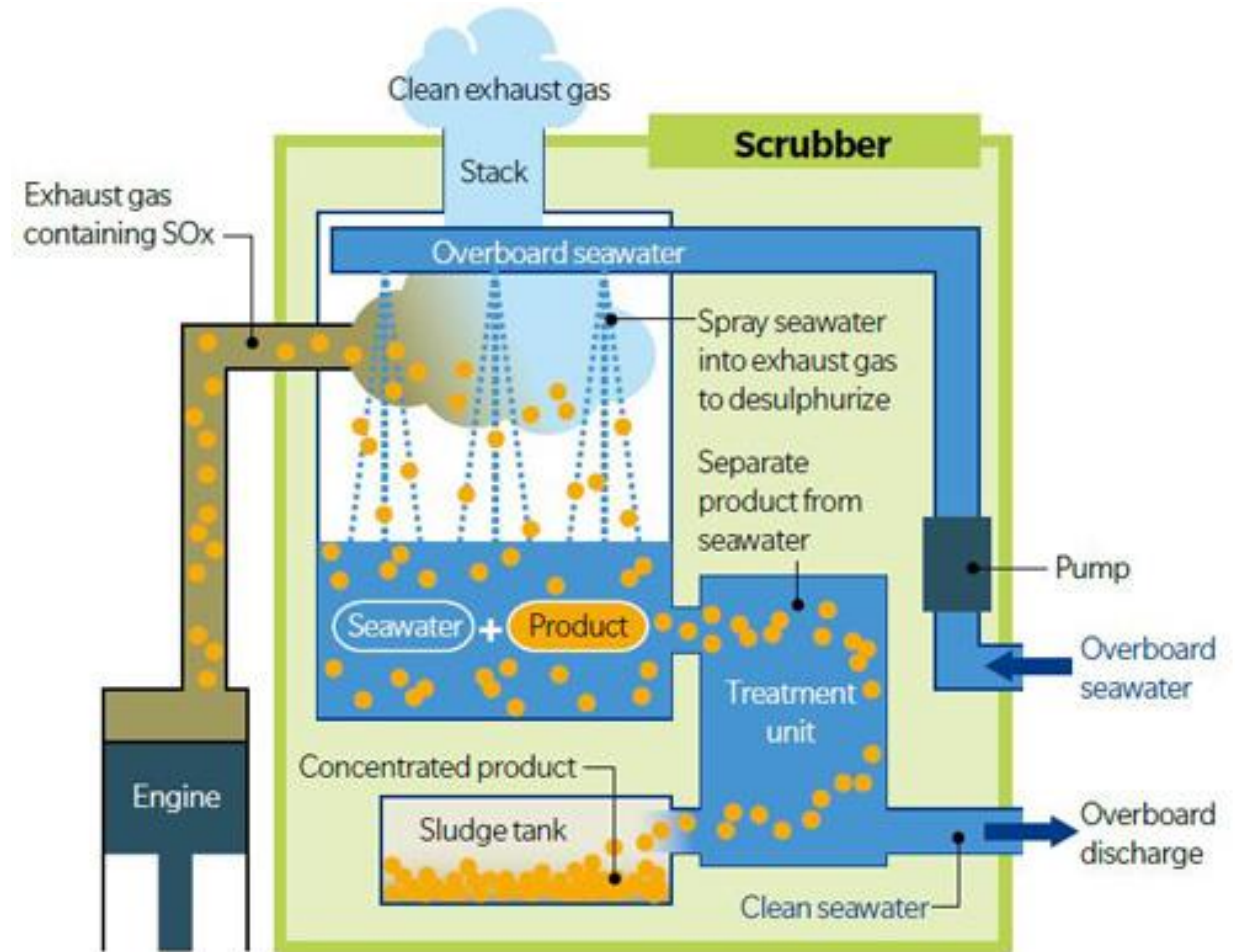


NYK Green Finance

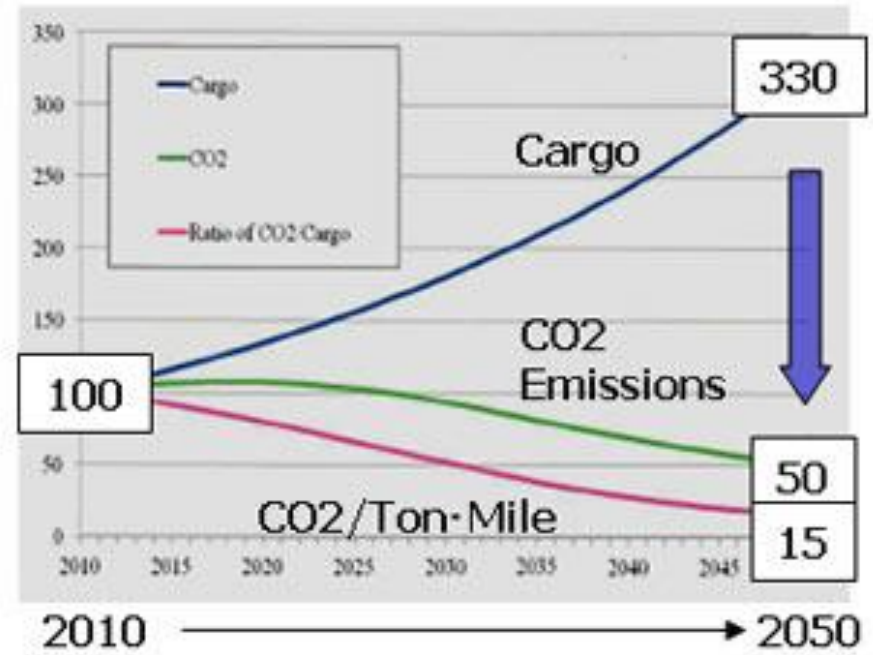


NYK_{LINE}
NIPPON YUSEN KAISHA

- 10 billion JPY Blue Bond (approx. 91.7 mil USD)
- Maturity: 5 years
- Coupon: 0.290%
- Invest in "Roadmap for Environmentally Friendly Vessel Technologies"



NYK Super Eco Ship 2030



Not a joke, Not a toy,
Not only a dream-

Source: <https://www.nyk.com/english/csr/envi/ecoship/>



NYK SUPER ECO SHIP 2050

Year	Issuance	Feature
2007	EURO 600 million	European Investment bank issues a Climate Awareness Bond targeting energy sectors
2008	USD 440 million (equivalent – issuance in Swedish krona)	First green labeled green bond, issued by the World Bank
2012	USD 2.6 billion	Green bond issuance picks off
2014	USD 36.6 billion	Green bond principles – voluntary guidelines formed
2017	USD 155 billion	Green bond issuances – predominantly energy sector
2018*	USD 167.6 billion	


From Green to Blue

Bond	Objective	Size/ Duration	Investors	Key Terms
Seychelles Blue Bond	Transition support to sustainable fisheries	USD 15mn; 10 years	World Bank; Private Placement: Calvert Impact Capital; Nuveen, and Prudential	Loan provided by GEF reduced interest rate for government from 6.5% to 2.8%
Nordic-Baltic Blue Bond	Bond issuance focus on investments within water resource management and protection	USD 213mn; 5yrs	Capital Market	0.375% coupon

Source: Climate Bond Initiative,
Dr Raghu Dharmapuri Tirumala,
University of Melbourne

ADB OCEANS FINANCING INITIATIVE

ACCELERATING
BLUE INVESTMENTS
IN ASIA AND THE
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A stylized graphic of a blue wave with a white circular center, located on the left side of the page.

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Blue Economy

Creating inclusive livelihood and business opportunities in sustainable tourism and fisheries.



Ecosystem Management

Protecting and restoring coastal and marine ecosystems and key rivers.



Pollution Control

Reducing land-based sources of marine pollution including plastics, wastewater, and agricultural runoff.



Sustainable Infrastructure

Improving sustainability in port and coastal infrastructure development.

An aerial photograph of a tropical archipelago, likely in the Philippines. The image shows numerous small, lush green islands scattered across a vast expanse of turquoise and deep blue water. The islands are densely forested, and the water around them shows varying shades of blue and green, indicating different depths and coral reefs. A semi-transparent grey banner is overlaid across the middle of the image, containing the word "Sustainability" in a large, bold, black serif font.

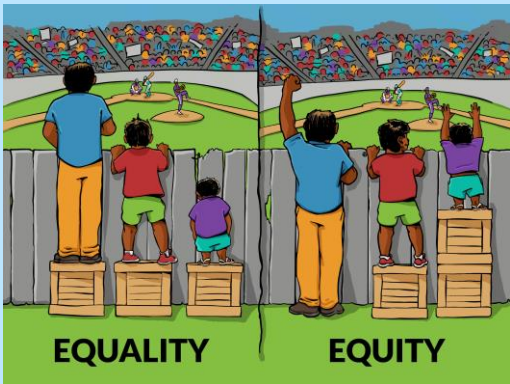
Sustainability



Environmental Sustainability



Economic Sustainability



Social Sustainability

Developing states:

- Self-dependent for economic growth
- Invest in disaster reduction and resilience
- Require fund for better infrastructure Investments
- Commitment on environmental preservation for support (Coral reef, IUU fishery elimination, coastal management)



Not to be profitable in the short run...

NGOs, think tanks and IGOs

- Call for global partnership
- Demand for commitments from all states
- Advocate for environmental preservation project
- Review and evaluate on commitments and support program
- Evidence-base research



Development banks & global funds:

- Reduce poverty and support development projects
- Provide incentive for developing states to make commitment
- Encourage global collaboration



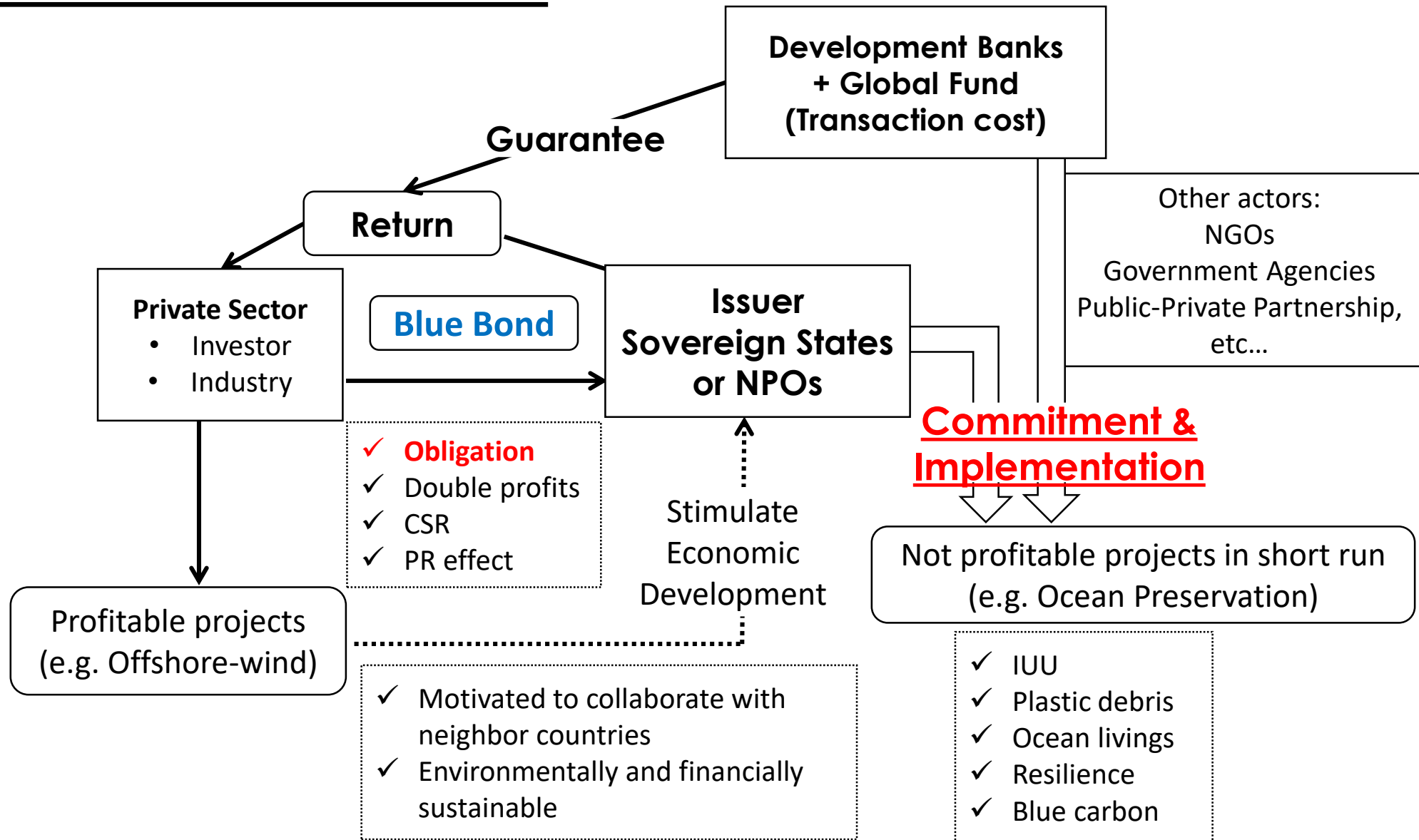
ASIAN DEVELOPMENT BANK

Private sectors & industries:

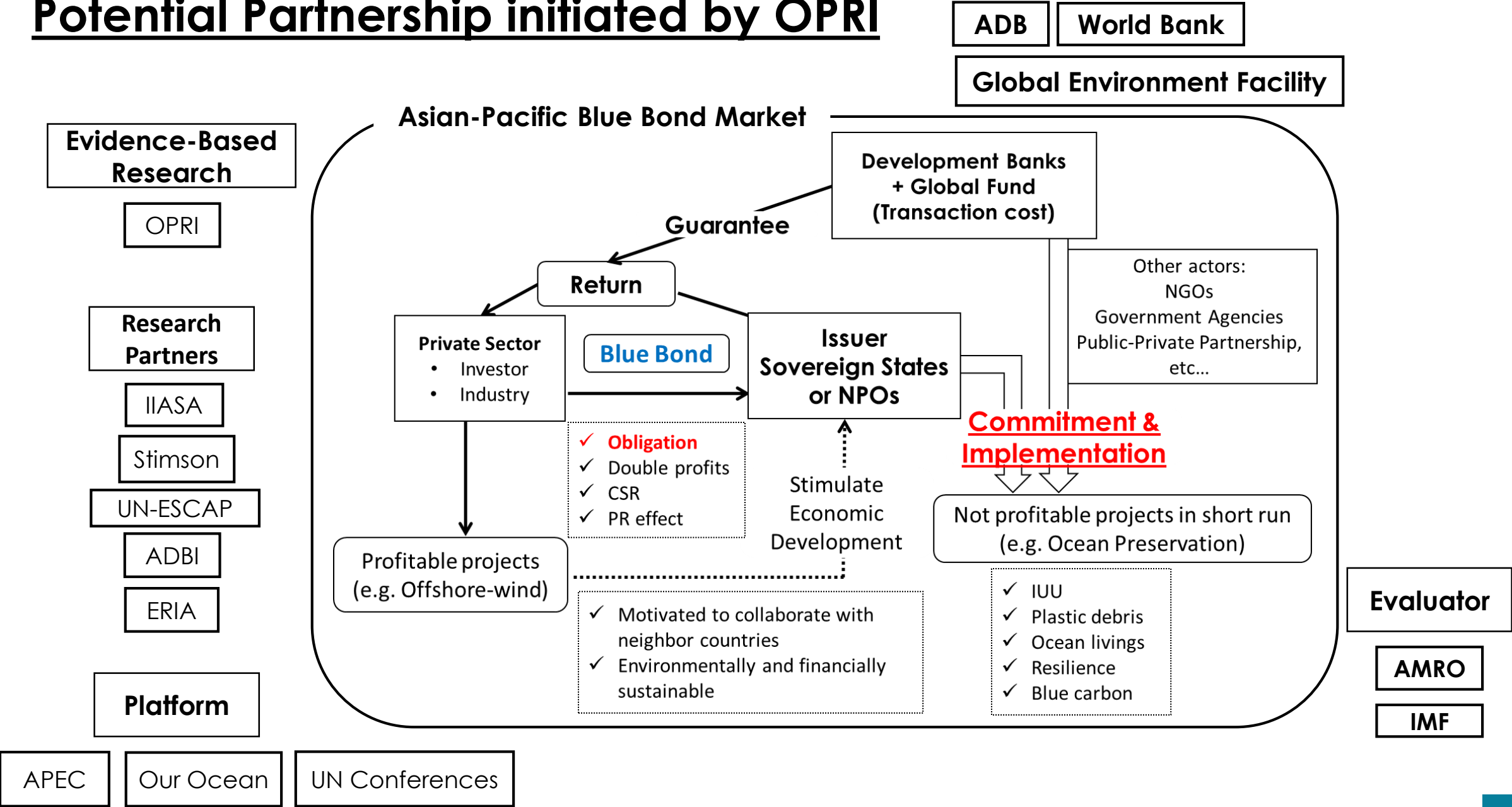
- Invest in potential profitable development project
- Provide better equity to shareholders
- Contribute social responsibility to environment compensation



Blue Bond Market Structure



Potential Partnership initiated by OPRI



Pacific Ocean Finance Conference (11-15 Nov 2019)

Fiji delegate Apisalome Movono

- Missing link to our conservation efforts and efforts to protect the oceans for future generations.

Tuvalu delegate Fa'au-Ekapale Telii

- There's very little that's been provided for effective management of ocean health and governance.

Palau's delegate Fleming Umiich Sengebau

- Great opportunity for SIDS to share lessons learned in our own respective countries.
- More importantly, how we can bring those resources to bear and really help our countries move forward.



**Ocean resource
development
and utilization**

**Ocean resource
preservation**

**Commitment &
Regulation**

Ocean Partnership for BLUE GROWTH
Sustainable Ocean Governance

**Function of Policy
Research Institute-
OPRI, etc:**

- Knowledge
- Awareness
- Practice
- Policy-making
- Evaluation



海洋政策研究所



<https://www.spf.org/opri-intl/>

Thank You