



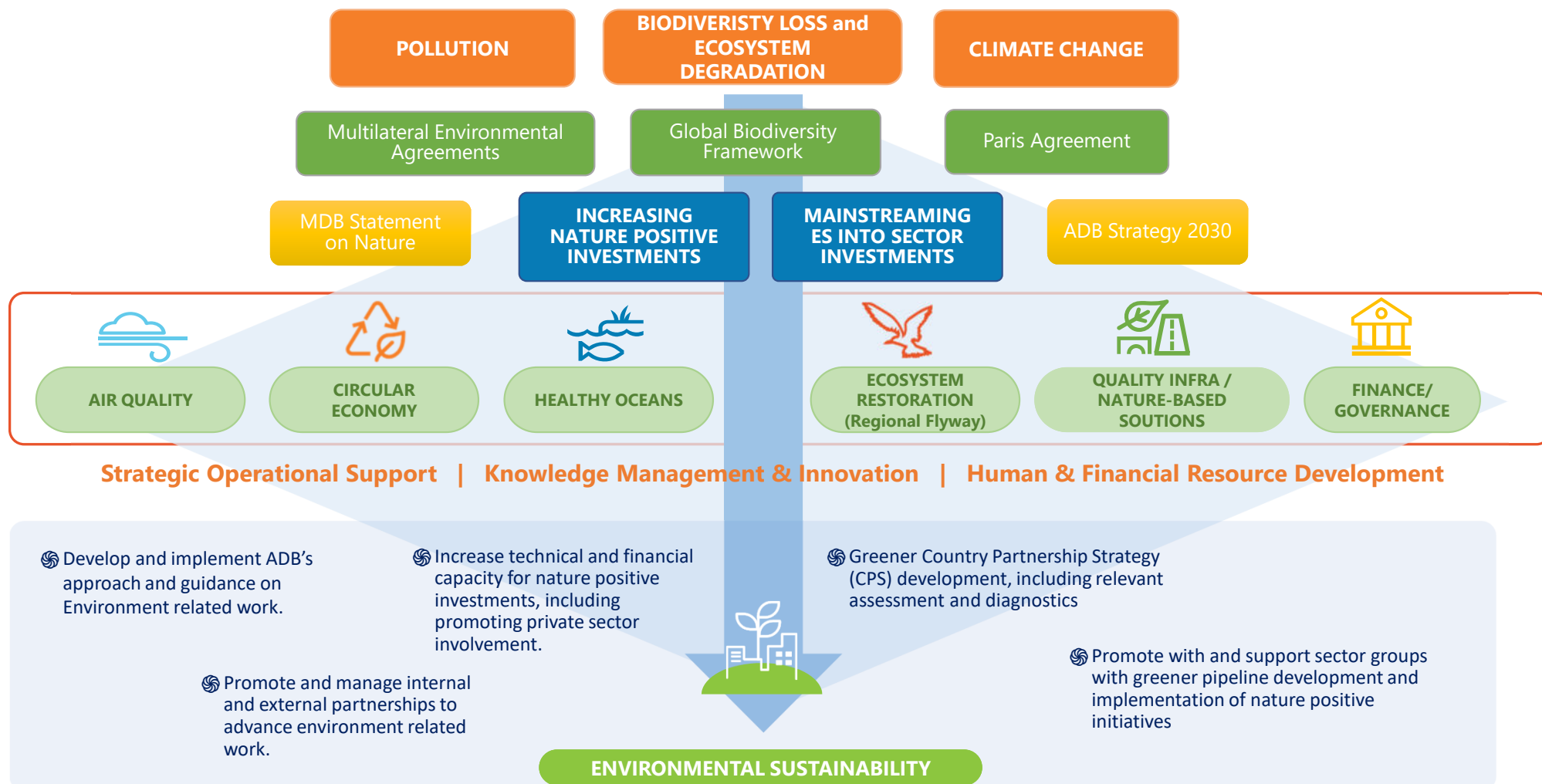
# ADB's activities on promoting Synergy between climate change, biodiversity and pollution

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Climate Change and Sustainable Development  
Asian Development Bank



# Synergy and multiple benefits through Environment

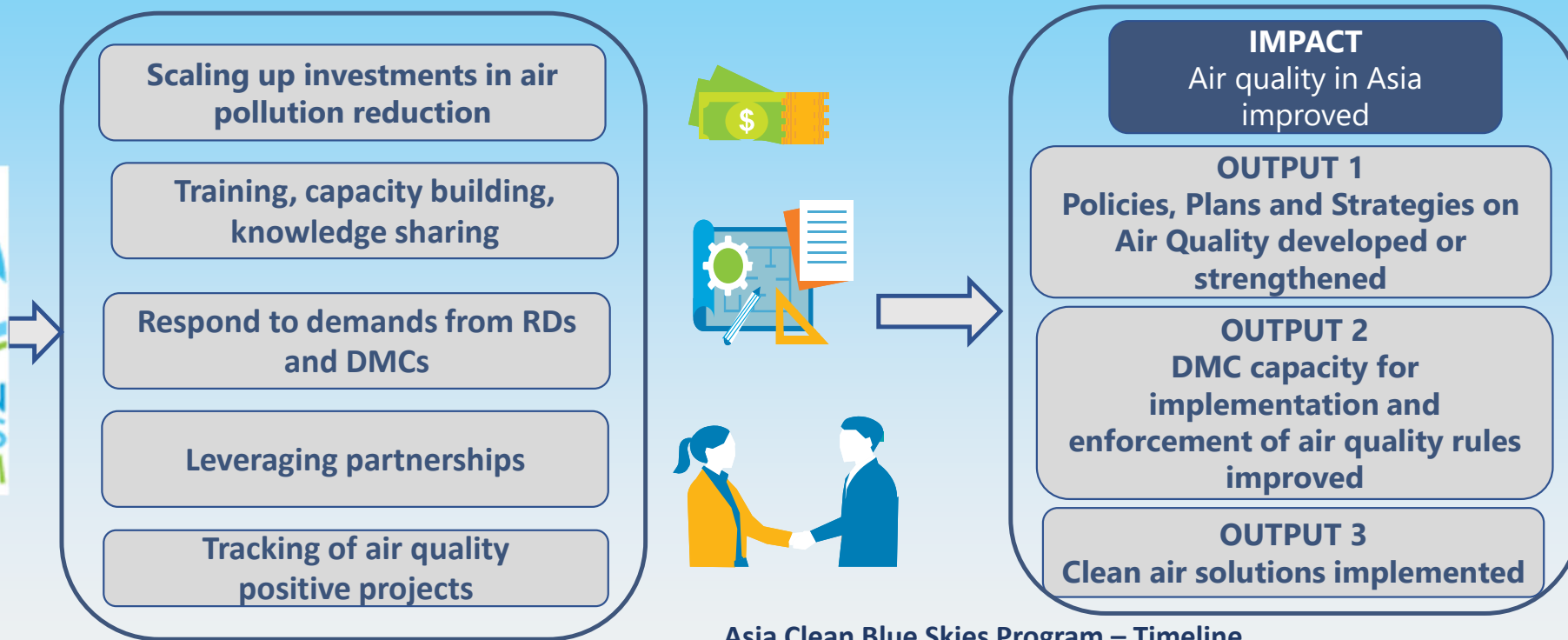


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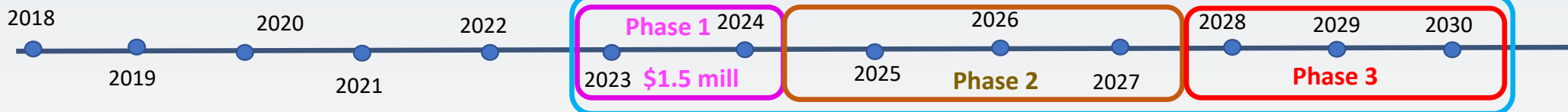
# Asia Clean-Blue Skies Program



**GOAL: ADB to play a more active role and be a leader in Air Quality Management in the region**

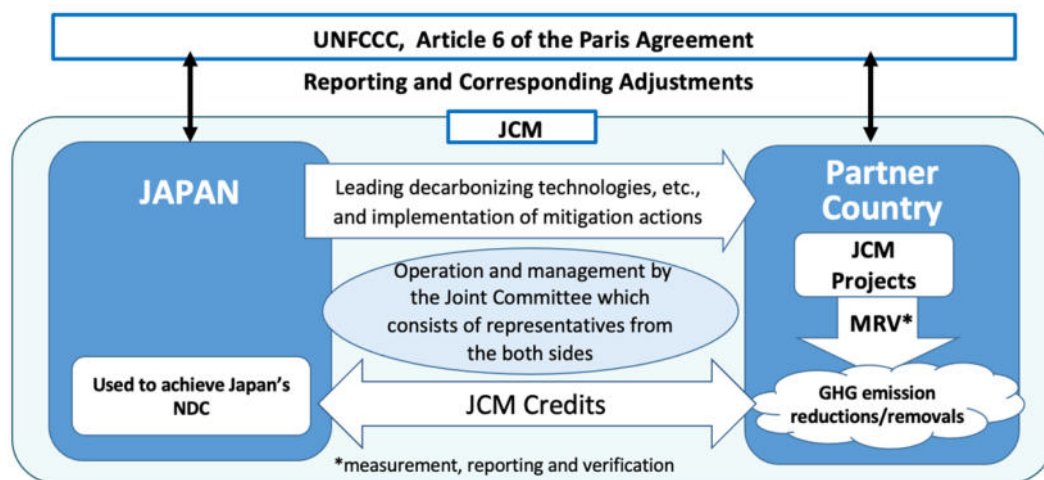


Asia Clean Blue Skies Program – Timeline



# Japan Fund for the Joint Crediting Mechanism

- Established in June 2014 as one of ADB's trust funds
- Contribution by Government of Japan: **\$118.77M** (2014-2023)
- Provides **financial incentives (grant)** for adoption of **advanced low-carbon technologies** in **ADB-financed projects** that use the Joint Crediting Mechanism (JCM)\*



## ➤ Requirement for co-benefits

The project should deliver environment and social benefit on recipient DMCs through:

- a reduction of environmental pollution, including air or water pollution, solid waste treatment, or conservation of natural resources; and/or
- other social economic benefits, including increased job creation opportunities, better access to basic infrastructure, and gender equality.

# ADB NbS projects Evidence-based landscape approach

## 1. Hybrid approach

Combination of green & gray infrastructure

## 2. Core sectors with potential for NbS



Agriculture



Transport



Urban



Water

Landscape approach with science-based systematic process and tools based on multistakeholder participation

## 3. Comprehensive and integrated perspective

### Sponge Cities

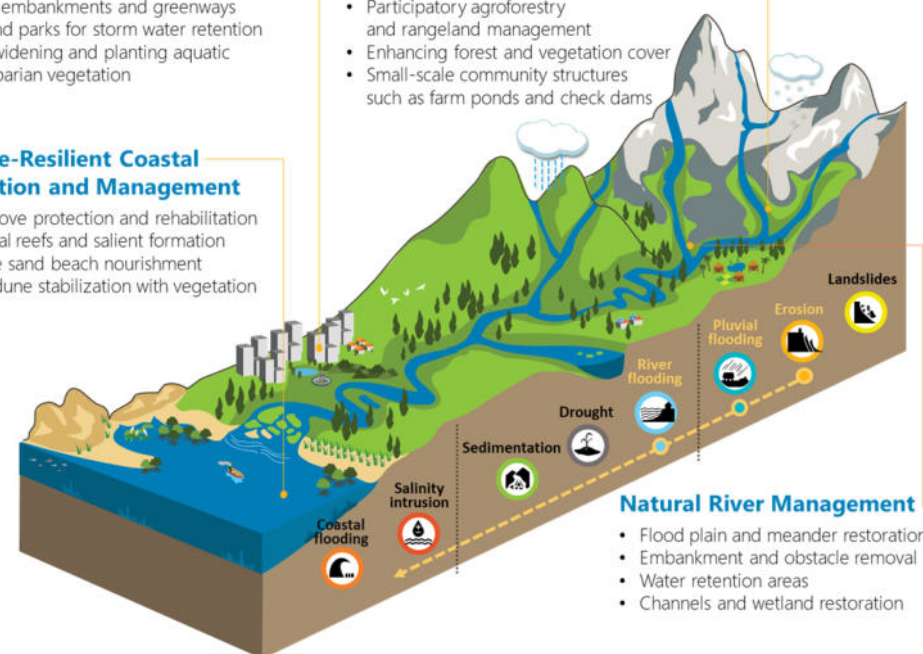
- Green embankments and greenways
- Wetland parks for storm water retention
- River widening and planting aquatic and riparian vegetation

### Climate-Resilient Coastal Protection and Management

- Mangrove protection and rehabilitation
- Artificial reefs and salient formation
- Coarse sand beach nourishment
- Sand dune stabilization with vegetation

### Integrated Watershed Management

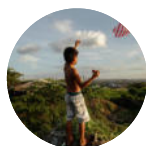
- Participatory agroforestry and rangeland management
- Enhancing forest and vegetation cover
- Small-scale community structures such as farm ponds and check dams



### Natural River Management

- Flood plain and meander restoration
- Embankment and obstacle removal
- Water retention areas
- Channels and wetland restoration

# ADB projects using NbS (examples)



## **Regional**

Revitalization of Informal Settlements and their Environments using a Water-Sensitive Approach

> Decentralized, green infrastructure



## **Pakistan**

Flood Emergency Reconstruction and Resilience Project

> Bioengineering to stabilize slopes



## **Viet Nam**

Promoting Climate Resilient Rural Infrastructure in the Northern Mountain Provinces

> Bioengineering

Secondary Green Cities Development Project

> Water-sensitive urban design



## **India**

Sustainable Coastal Protection and Management Investment Program

> Artificial geotextile submerged reefs and the enlargement and stabilization of beaches



## **PRC**

Jiangxi Pingxiang Integrated Rural-Urban Infrastructure Development

> Sponge city

Yangtze River Green Ecological Corridor Comprehensive Agriculture Development

> Protection and rehabilitation of agro-ecosystems



## **Philippines**

Integrated Flood Risk Management Sector Project

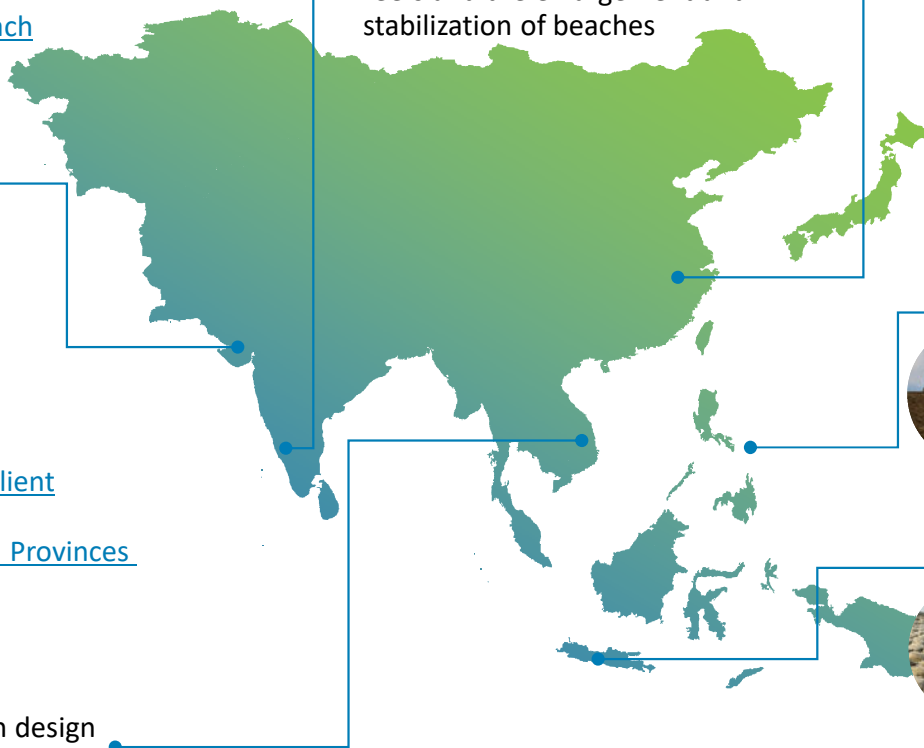
> Landscape approach



## **Indonesia**

Revitalization of Informal Settlements

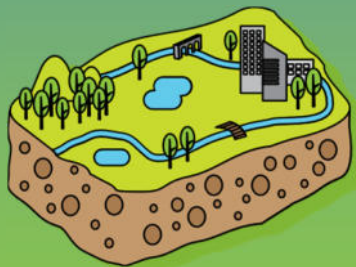
> Green infrastructure to biologically treat water





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## Building resilience through nature-based solutions



*In Pingxiang, People's Republic of China – “Sponge Cities”  
Project – wetlands are flooded during heavy rainfall  
events and used as a park during normal water levels.*

# Sustainable coastal protection and management

## Hybrid approach –

- (i) artificial geotextile submerged reefs to address sea level rise and intensive storm surges and
- (ii) beach nourishment, dune construction, and plantations to enlarge and stabilize beaches

Before



After

## GEOTEXTILE SUBMIREG REEF



## BEACH NOURISHMENT



Coasts are sensitive to sea level rise, changes in the frequency and intensity of storms. Addressing the additional stress of climate change require new and innovative approaches to minimize losses and mitigate damages due to climate change.



**The slope and embankment protection combining bioengineering and traditional infrastructure has increased the resilience of local communities in Viet Nam to natural extreme events such as flooding.**

## Slope failures



*Fill slope: Vetiver grass lines*



# Financing nature



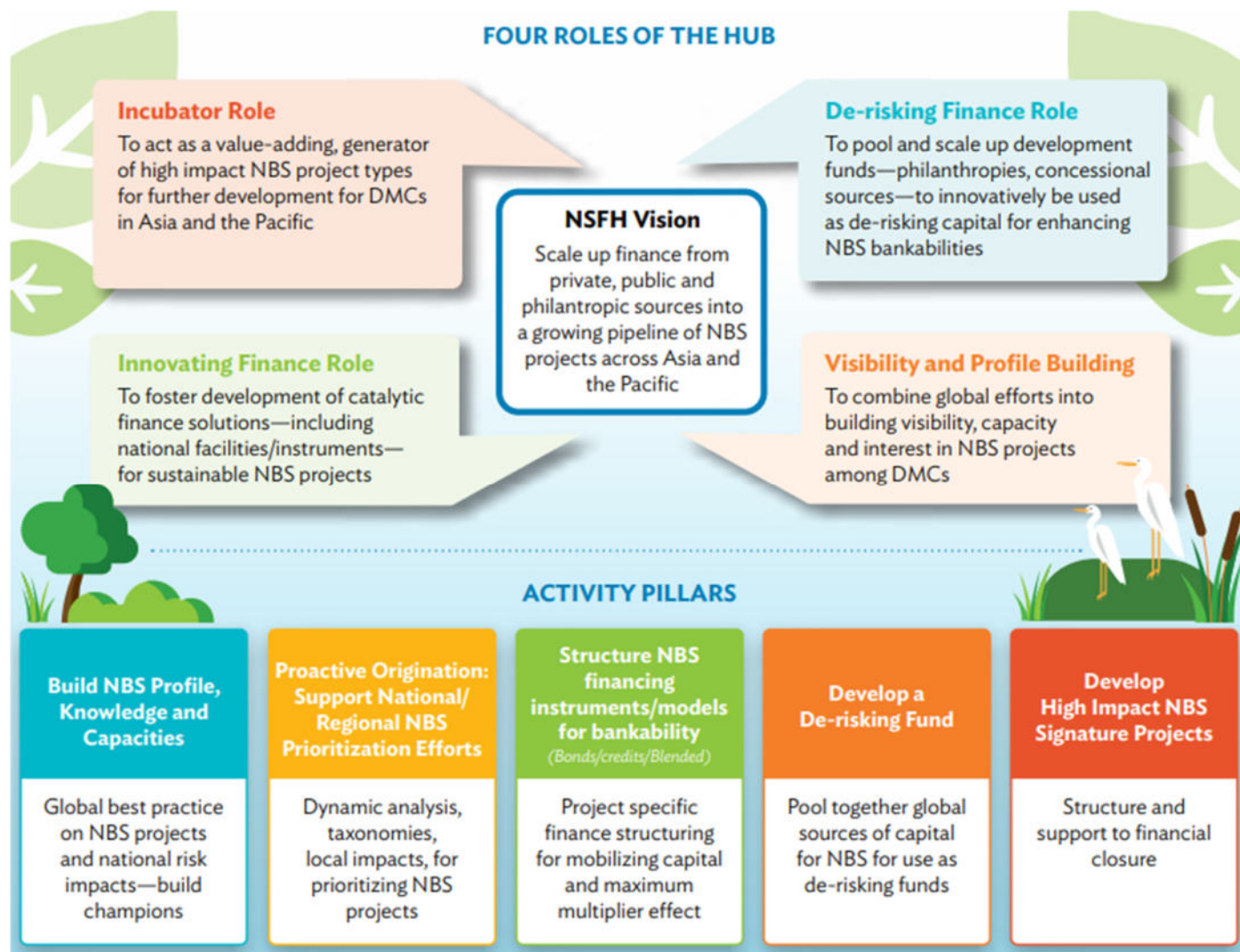
**Strategic use of concessional loans and grants** to finance ecosystem conservation and restoration

**Increase funding for nature** with innovative financial instruments (e.g., green and blue bonds, PES/eco-compensation, carbon credits)

**Redirecting financial flow from “gray” to “green”** solutions by incentivizing natural capital investment through grants and technical assistance

# Nature solutions finance hub (NSFH)

- Aiming to support developing member countries to create **bankable projects**, mobilizing public and private capital
- Financing high impact **biodiversity and nature-based adaptation/resilience** initiatives



# Partnership for nature



- **Working with development partners** to mobilize technical and financial resources to ensure the highest-quality service
- **Collaborating with Japan's Ministry of Environment** since late 80s in biodiversity conservation, sustainable natural resource use, climate change through nature positive investments, air quality management, ocean health, regional flyway initiative
- **Partnership with Satoyama Initiative** bringing opportunities and innovations for enhancing environmental sustainability in Asia and the Pacific





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**THANK YOU!**