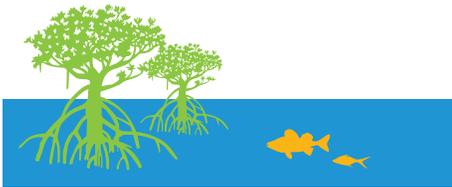


FINANCE FOR OCEAN-POSITIVE INVESTMENTS IN ASIA AND THE PACIFIC

Asia and the Pacific depend on healthy and resilient oceans for disaster resilience, food security, and livelihoods. Healthy oceans also drive economies through tourism, fisheries, and aquaculture. However, climate change, overfishing, pollution, and unsustainable development have pushed our oceans to the brink of collapse. In order to address the growing funding gap required to protect and restore ocean health, global markets need to systematically change. Blue bonds encourage that shift by increasing the amount of capital that can be invested in oceans to finance solutions at scale.

ADB BLUE BONDS

The Asian Development Bank (ADB) has expanded its green bond framework to include ocean health investments. The new green and blue bond framework has taken a rigorous scientific approach to boost investor confidence and transparency in this emerging and important market. The framework aligns with both the International Capital Market Association's Green Bond Principles and the Sustainable Blue Economy Finance Principles hosted by the United Nations Environment Programme – Finance Initiative. ADB will issue its own Blue Bonds that cover investments across a diverse range of sectors and economic activities that impact ocean health, these include the following:



Marine and Coastal Ecosystem Management and Restoration:

- **Ecosystem management and natural resources restoration.** Projects that sustainably manage, conserve and/or restore the health and resilience of coastal, marine, and river ecosystems. Projects must be within rivers that drain to the ocean, the marine environment, or within 100 kilometers (km) of the coast.
- **Sustainable fisheries management.** Projects that improve environmental sustainability of fisheries and the seafood value chain.
- **Sustainable aquaculture.** Projects that improve environmental sustainability of aquaculture, mariculture, and algaculture.



Marine Pollution Control:

- **Solid waste management.** Projects that reduce marine debris and/or associated impacts to marine life. Projects must be within 50 km of the coast or a river that drains to the ocean.
- **Resource efficiency and circular economy.** Projects that reduce marine debris and/or associated impacts to marine life.
- **Non-point source pollution.** Projects that reduce pollution (e.g., nutrients, sediments, and chemicals) of coastal and/or marine environments. Projects must be within 200 km of the coast or within 50 km of rivers (and their tributaries) that flow to the ocean.
- **Wastewater management.** Projects that reduce wastewater pollution of coastal and/or marine environments. Projects must be within 100 km of the coast and/or the marine environment.



Sustainable Coastal and Marine Development:

- **Ports and shipping.** Ports and shipping. Projects that increase environmental performance and sustainability of maritime infrastructure and transport (e.g., reducing and mitigating ship strike, invasive species, pollution, and other impacts to ocean health).
- **Marine renewable energy.** Projects that reduce greenhouse gas (GHG) emissions and increase contribution of marine and offshore renewable energy (e.g., offshore wind, tidal, wave, or ocean thermal energy) and renewable energy projects that support blue economy sectors (e.g., aquaculture and fishing). Increase capture and storage of GHG emissions using marine-based solutions and technologies.

INDICATIVE ADB BLUE BOND PROJECTS

MALDIVES: Greater Malé Waste-to-Energy Project

ADB finance: \$73 million. Blue bond finance: 100%

The Greater Malé region and its neighbouring outer islands suffer from severe environmental pollution and deteriorating liveability because of inadequate collection and haphazard disposal of solid waste. The lack of a sustainable system to manage the 836 tons per day (solid waste generated in the project area in 2019) results in waste spillage into the ocean, and open dumping and burning of garbage, creating a severe public health and environmental hazard.

The project area covers the Greater Malé region, and 32 inhabited outer islands and 86 tourist resorts, with a population of 295,000 (53% of Maldives' total population). The main outcome of the project is to improve solid waste treatment and disposal services in the Greater Malé region and its outer islands. The project will develop a disaster- and climate- resilient regional waste management facility and improve institutional capacity and public awareness in reducing, reusing, and recycling waste, as well as waste-to-energy. The project is co-financed by the Government of the Maldives, the Asian Infrastructure Investment Bank, and the Japan Fund for the Joint Crediting Mechanism (total project cost \$151 million).

Target Results by 2027:

- At least 80% of combustible municipal and commercial solid waste in the project area treated, with residuals safely disposed or recycled
- GHG emissions reduced by about 28,000 tons of carbon dioxide equivalent per annum
- At least 50,000 megawatt-hours of electricity per year (of which 50% is renewable energy) generated from the waste-to-energy plant



Concept design for Thilafushi Facility Plant. Photo by ADB.

REGIONAL: Indorama Ventures Blue Loan Project

ADB finance: \$50 million. Blue Bond finance: \$37.5million



Sorting facility. Photo by Indorama Ventures.

Marine plastic pollution is a complex problem, largely resulting from mass volumes of low-residual value, single-use, non-degradable plastics; and inefficient recycling and solid waste management systems. The traditional “take, make, dispose” approach should be replaced by a circular economy in which products and materials are redesigned, recovered, and reused to divert plastic waste away from landfills and oceans.

This project aims to reduce the environmental impact of plastic and promote a circular economy by boosting the capacity of Indorama Ventures Group's (IVG) plastic recycling plants in India, Indonesia, the Philippines, and Thailand, while also generating employment and avoiding GHG emissions.

Despite higher production cost of recycled polyethylene terephthalate, (rPET), compared to virgin PET, global food and beverage brands have increasing demand for rPET as they have commitments to increase recycled plastic content in packaging to comply with European Union regulations. These global brands in turn require the suppliers of their packaging materials, including IVG, to use rPET. IVG has established long-term, strong sales relationships with a range of global brands, and is itself one of the signatories of the New Plastics Economy. An initiative led by the Ellen MacArthur Foundation to improve the circularity of plastic packaging. To fulfill this objective, IVG aims to recycle 750,000 tons of post-consumer PET bottles by 2025. IVG has advanced technologies it can transfer to ADB developing member countries (DMCs), capable of producing rPET to the standard required for further bottle-to-bottle recycling.

Target Results:

- Additional PET or sodium polystyrene sulfonate (SPS) resins or pellets produced from rPET in India, Indonesia, the Philippines, and Thailand
- Generation of direct employment in the funded recycling plants

Anhui Huangshan Xin'an River Ecological Protection and Green Development Project

ADB finance: \$100 million. Blue Bond finance: \$55 million

The Yangtze River Economic Belt (YREB) is one of the three key economic growth engines in the People's Republic of China. Its nine provinces and two specially administered municipalities account for more than 40% of the country's population, 40% of its freshwater resources, and about 45% of its economic output. While having benefited from extensive growth since the late 1980s, the YREB is now facing significant development challenges as a result of increasing pollution and pressure on natural resources; slow transformation into green development; limited integration of waterways, ports, and intermodal logistics; and weak institutional coordination for strategic planning. The project will promote ecological protection and green development from "source to sea" by instituting and applying international best practice in the management of point source water pollution in urban areas; introducing new financing mechanisms to improve the management of agriculture-based nonpoint source pollution; and promoting green development in rural areas through piloting small and medium-sized green businesses. Reducing upstream river pollution will benefit the downstream river as it flows into Hangzhou Bay and toward the arm of the Pacific Ocean.

Target Results:

- 5,000 hectare of farmland shifted to green farming with pesticide and fertilizer use control
- Green farming practice adopted on 548 hectare of farmland
- €2.8 million sustainable green incentive fund established, and compensation provided to 4,500 farmers, including 40% women



Yangtze River, People's Republic of China. Photo by ADB.

ADB HEALTHY OCEANS ACTION PLAN

ADB launched the Action Plan for Healthy Oceans and Sustainable Blue Economies (the Action plan) in 2019 to scale up investments and technical assistance to \$5 billion between 2019 and 2024. The action plan has three priorities to address crucial challenges in achieving healthy oceans and sustainable ocean economies:



Conserve and restore critical marine habitats and species



Reduce marine pollution



Grow blue economies

Partners who support ADB investments in Asia and the Pacific can make positive impacts across the world. Asia and the Pacific accounts for the majority of the world's aquaculture and fisheries, and demand for seafood is projected to rise as populations grow. The region is the epicenter of global marine biodiversity, yet it is also the epicenter of marine plastic pollution. With the right support, blue economies of Asia and the Pacific have the potential to drive global environmental sustainability.

Notes: "\$" refers to United States dollars and "€" to euros.

PARTNERSHIPS FOR ACTION

ADB is actively seeking catalytic partnerships to secure healthy oceans and sustainable blue economies in our DMCs. By joining with ADB, partners can:



Support projects in 30 of ADB's DMCs



Transfer knowledge, technologies, and innovations through ADB's projects, programs, and events



Accelerate programming, reduce transaction costs, and catalyze more financing



ASIAN DEVELOPMENT BANK

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1996, it is owned by 68 members—49 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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