

The views expressed in this presentation are the views of the author/s and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this presentation and accepts no responsibility for any consequence of their use. The countries listed in this presentation do not imply any view on ADB's part as to sovereignty or independent status or necessarily conform to ADB's terminology.

WAVES OF CHANGE

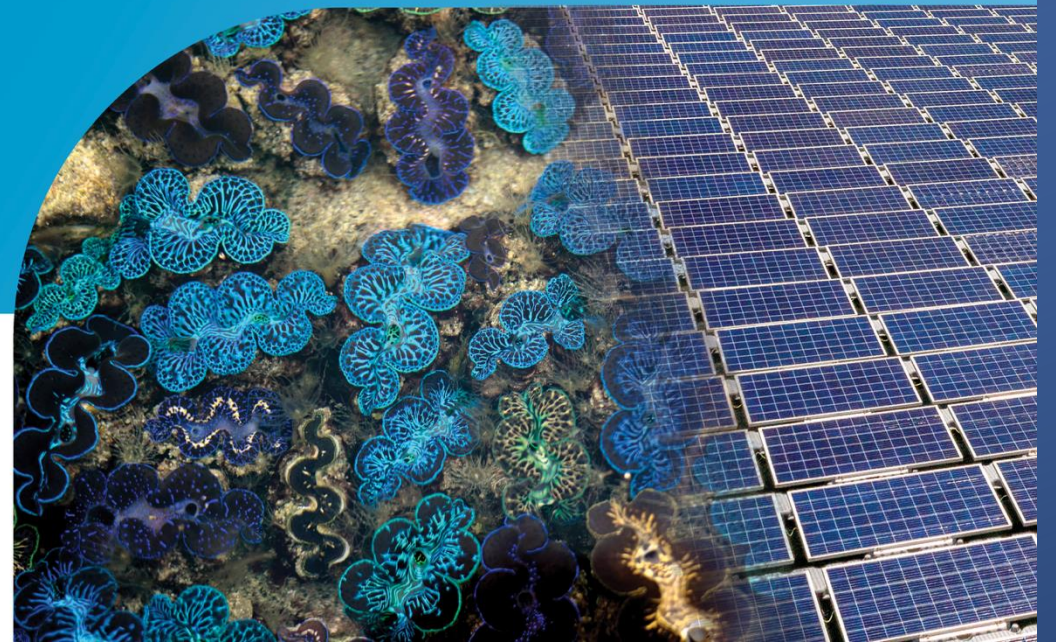
Harnessing Technology to Power the Sustainable Blue Economy

Workshop Two

25–28 May 2026 • Busan, Republic of Korea



Ministry of Oceans
and Fisheries



Blue acceleration, technology and ADB's role

ADB



The global blue economy generates around **\$2.5 trillion** annually.

It has an estimated ocean asset base of **\$24 trillion**.

It supports around **300 million jobs** and provides food security for **3.5 billion people**.

In Asia and the Pacific, ocean sectors are central to fisheries, aquaculture, tourism, ports, coastal infrastructure, transport, food systems, and disaster resilience.

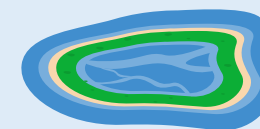




Ocean warming could reduce tropical fish catch potential by up to 40% in parts of Asia and the Pacific.



Annual economic losses from coastal flooding in Asia and the Pacific are estimated at \$26.8 billion today and could rise to \$197.8 billion by 2050.



Atoll nations such as Kiribati, Maldives, Marshall Islands, and Tuvalu face especially severe losses relative to GDP.

What are your terms?

ADB



What is the first word or phrase that comes to mind when you hear ‘technology in the blue economy’?

What are the terms we use?

Ocean economy

all economic activity linked to oceans, seas, coasts, and marine resources.

Blue economy

sustainable use of ocean resources for growth, livelihoods, jobs, and ecosystem health.

Sustainable blue economy

ocean-based development that also protects biodiversity, reduces pollution, supports communities, and strengthens resilience.

Blue acceleration

rapid expansion and intensification of ocean-based activity in the 21st century.

Ocean-positive technology

technology that reduces harm, improves monitoring, supports resilience, or restores ocean health

What is accelerating?

ADB



Aquaculture and
seafood production



Offshore
renewable energy



Smart ports and
maritime transport



Coastal and
marine tourism



Marine spatial
planning, Digital
monitoring/
enforcement, Ocean
data platforms



Blue finance
and investment
pipelines.

Why technology matters?

6

it

It allows better monitoring of large ocean areas.

It can reduce waste, emissions, and operational costs.

It supports traceability and transparency.

It helps governments make evidence-based planning decisions.

It can make blue economy projects more bankable.

It can support enforcement against illegal fishing and pollution.

Implemented technologies which are making an impact

ADB

TOP 10

1. Satellite monitoring
and vessel tracking



2. AI-enabled fisheries
management



3. Electronic catch
documentation



4. Remote sensing for
coastal and marine
ecosystems



5. Digital tourism
management tools



6. Blue finance
MRV



7. Drones for monitoring reefs,
mangroves, and coastlines

8. Ocean data platforms and
decision-support tools

9. Smart aquaculture sensors

10. Marine renewable energy
technologies



Rank the technology most
important to you

ADB



*Which technology area has the
greatest potential for your country
over the next 5 years?*

Opportunities from technology-driven blue economy growth



What is missing or is a barrier?

ADB



What is the single biggest barrier preventing your country from scaling blue economy technologies?

Support DMCs to move from pilots to scalable projects.

Provide technical assistance, policy support, and capacity building.

Help prepare bankable blue economy investments.

Support safeguards and climate-risk screening.

Mobilize financing and partnerships.

Strengthen regional cooperation for shared ocean challenges.

Help countries connect technology, governance, and finance.

Why these workshop sectors matter?

ADB

Focuses on sustainable tourism, renewable energy, governance, and blue finance

These sectors are relevant because they link economic growth with decarbonization, resilience, environmental protection, and investment

They also connect to earlier workshop themes: fisheries, marine pollution, connectivity, transport, and regional cooperation.

An aerial photograph of a solar farm. The solar panels are arranged in neat, parallel rows on the right side of the image. The ground between the panels is covered with a variety of plants, including several large, blue-green, fan-shaped plants with intricate vein patterns, and some smaller, darker green plants. The overall scene suggests a sustainable agricultural approach to solar energy production.

OVER TO YOU!

TABLES 1, 4 AND 7

EXPERIENCE

Current experience

Where is technology being used in your country's blue economy sectors (eg. monitoring, planning, service delivery, enforcement, financing)?

TABLES 2 AND 5

REFLECTION

Value add and/or challenges

What benefits have these technologies delivered?

What challenges have been encountered (eg cost, skills, data gaps, governance, coordination)?

TABLES 3 AND 6

APPLICATION

Enabling conditions

What would help your country scale up?

What would help your country better integrate technology in blue economy sectors?

WAVES OF CHANGE

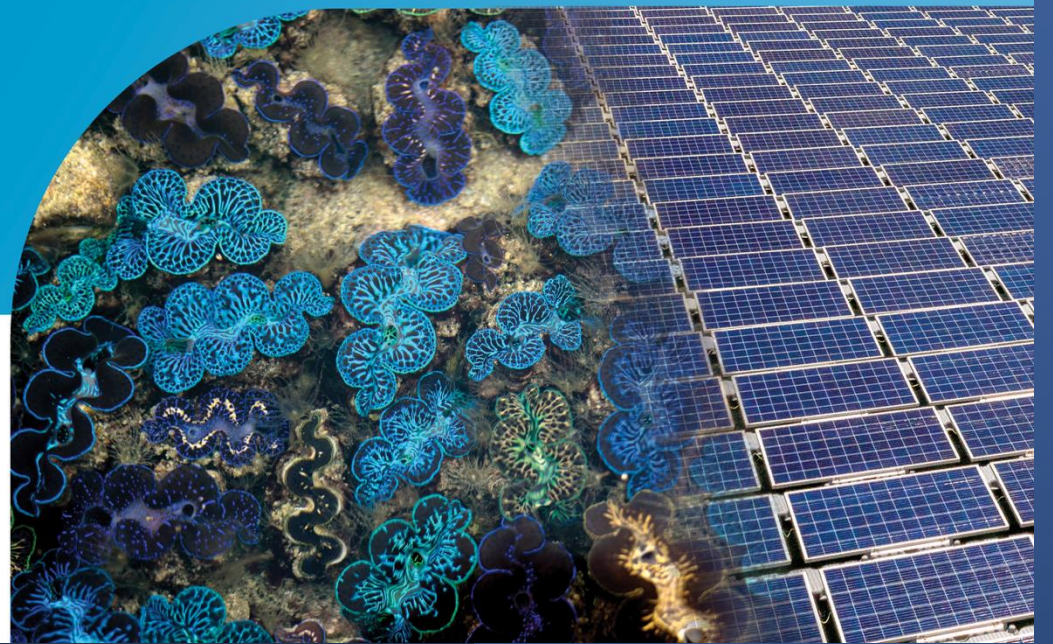
Harnessing Technology to Power the Sustainable Blue Economy

Workshop Two

25–28 May 2026 • Busan, Republic of Korea



Ministry of Oceans
and Fisheries



An aerial photograph of a solar farm. The solar panels are arranged in neat, parallel rows on the right side of the image. The ground between the panels is covered with various types of vegetation, including several large, blue-green plants with intricate, lace-like patterns, smaller green plants, and some dark purple or blue plants. The overall scene suggests a combination of solar energy production and agriculture.

Thank you!