

Ocean and climate technology

UNFCCC Technology Mechanism

Climate and Ocean Dialogue 2023

13-14 June 2023 | SB 58



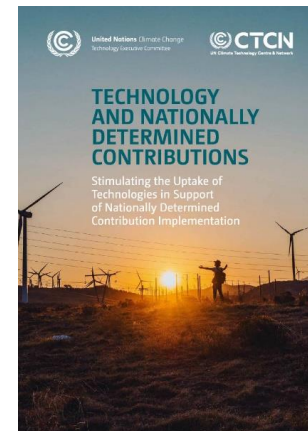
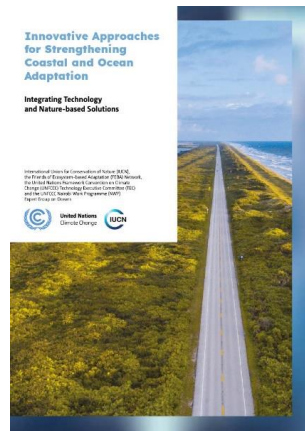
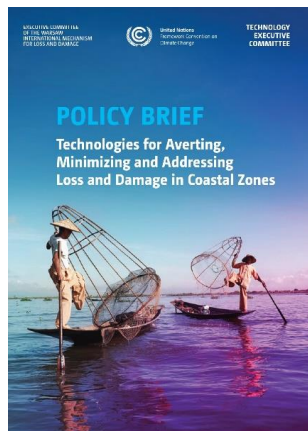
Stephen Minas

Ocean co-lead, Technology Executive Committee (TEC)

Technology Mechanism's work on oceans at a glance

Policy

Policy work of the TEC and joint work of the TEC and CTCN



Implementation

Technical assistance provided by the CTCN

Solomon Islands

Establishment of an Integrated Coastal Zone Management Plan to protect the mangroves through Ecosystem based adaptation solutions



Belize

Groundwater monitoring for mapping aquifers in Belize as a tool for climate change adaptation planning



Uruguay

Development of technology tools for the assessment of impacts, vulnerability and adaptation to climate change in the coastal zones



Future plans

Joint work programme of the Technology Mechanism 2023-2027

TEC rolling workplan on transformative and innovative solutions: Nature and ecosystems | **Innovative Ocean Climate Solutions**



Climate action, ocean and technology

Blue carbon management could reduce emissions and/or increase **carbon uptake and storage**.
- IPCC, 2019 -

Insight from NDCs and UNFCCC instruments

There is an increasing number of Parties (**40 per cent**) **targeting ocean-based climate action**. Some Parties (26 per cent) include an ocean-based climate target, policy or measure in their updated NDC.
- UNFCCC, 2022 -

The **ocean and coastal zones** are addressed in **over 70% of new or revised NAPs**.
- UNFCCC, 2022 -

There is a growing focus on **digital technologies** for improving climate monitoring, data and information systems, including for forecasting and early warning systems in **oceans and coastal zones**.
- UNFCCC, 2022 -

Insight from the policy work of TEC

Countries are increasingly including technology measures in their **NDCs** for the implementation of **national blue economy initiatives, marine spatial plans, fisheries management and aquaculture development** to enhance climate mitigation and adaptations.
- TEC, IUCN, NWP, 2022-

To support the longer-term costs of adaptation actions beyond initial investments and operating costs, financial actors could consider a range of **financing instruments beyond grants, including equity, loans and private sector investments in the blue economy**.
- TEC, IUCN, NWP, 2022-

Most **significant roadblock** preventing widespread implementation and mainstreaming of these technologies, especially in the most vulnerable countries SIDS and LDCs, is **financing gaps**.
- TEC, IUCN, NWP, 2022-



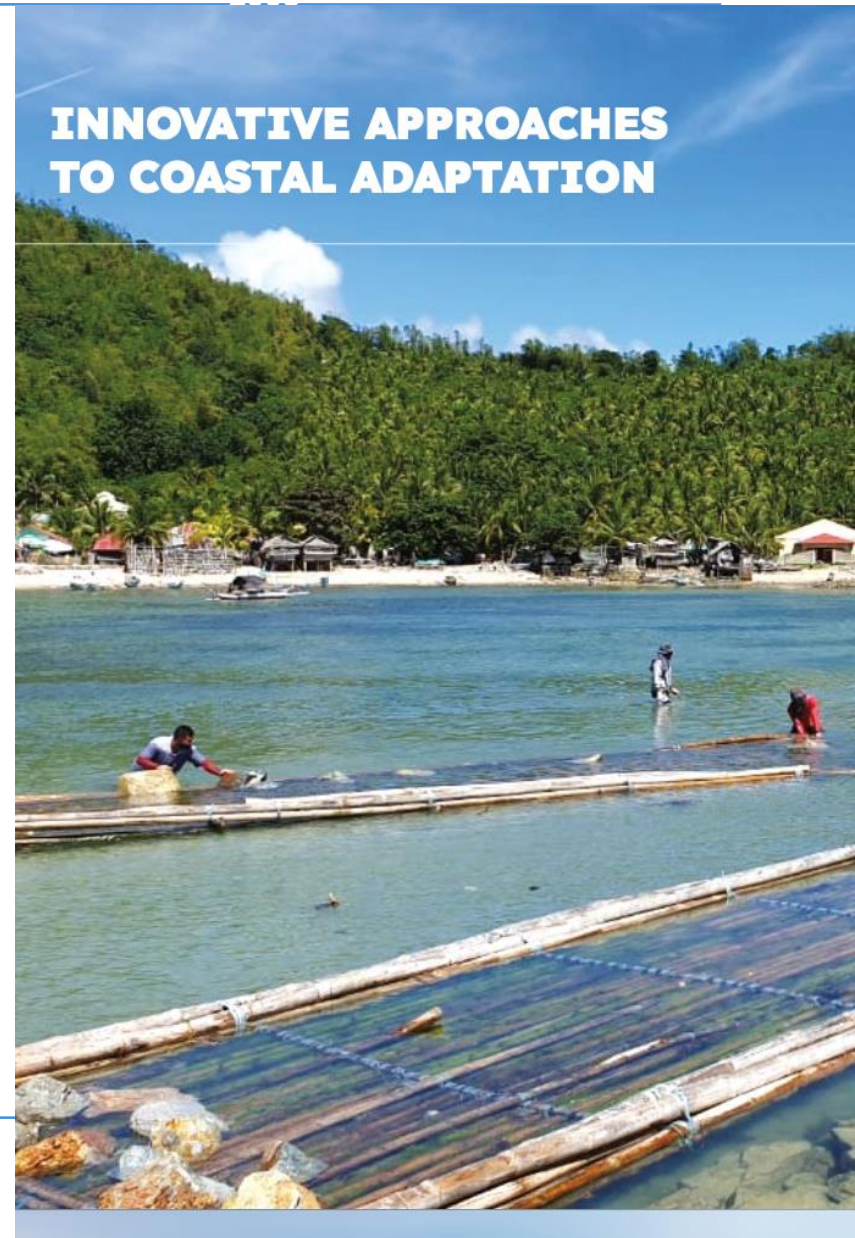
Strengthening recognition of coastal ecosystems as assets & improving processes to protect & restore them

The value of mangrove ecosystems

\$65 billion+ p.a. in flood protection benefits alone

What Parties can do

- Ecosystem-based adaptation (EbA) and Ecosystem-based disaster risk reduction (Eco-DRR) with economic co-benefits
- Green-green infrastructure (e.g. 'living shorelines')
- Combine blue carbon restoration with sustainable aquaculture
- Public finance to produce data, metrics & valuations to build case for integrated adaptation approaches
- Blended finance for crowding in investment
- Integrated coastal zone management (ICZM)



Best practices from CTCN technical assistance

Solomon Islands - establishment of an Integrated Coastal Zone Management (ICZM) Plan to protect the mangroves through Ecosystem based adaptation solutions

Hardware

- Identification of suggested technologies for mangrove management through EbA

Software

- Promotion of sustainable economic development of mangroves through EbA to secure livelihoods of coastal communities
- Development of capacity in research and education and enhancement of stakeholder awareness and participation in sustainable mangroves management

Orgware

- Promotion of integrated planning and coordination of the protection of mangroves across the various sectors
- Establishment of effective institutional and legal frameworks for implementation of the ICZM plan

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Proportion of weekly food & cash income provided to SI coastal communities by mangroves (CGIAR)

