

COASTAL BLUE CARBON HABITATS & CLIMATE CHANGE: RECOMMENDATIONS FOR ENHANCED ACTION UNDER THE UNFCCC AT SB 60

Coastal nature-based solutions (NbS),¹ including the conservation, restoration and sustainable management of **blue carbon habitats**² (such as mangroves, salt marshes, and seagrasses), are essential to enhancing coastal resilience, as an alternative or complement to traditional “gray” infrastructure approaches.³ Coastal NbS strengthens coastal resilience and disaster risk reduction by reducing storm surges and erosion, supports biodiversity protection, local livelihoods and food security, and helps to mitigate climate change, including via carbon sequestration and storage.

This policy brief outlines recommendations for opportunities for Parties to advance coastal NbS within ongoing UNFCCC processes and negotiations related to **1) Finance, 2) Ambition, and 3) Adaptation** at SB 60. Parties are also encouraged to identify additional opportunities to strengthen capacity, financing, science, and ambition for coastal NbS within the coastal resilience topic of the June 2024 Ocean and Climate Change Dialogue.

1. FINANCING COASTAL NBS

Numerous financing options can support implementation of coastal NbS, including market and non-market-based approaches, and public and private funding. For example, the Mangrove Breakthrough is an ambitious, multi-stakeholder initiative aiming to unlock USD 4 billion through a variety of financing approaches to secure the future of 15 million hectares of mangrove forests by 2030.⁴ At COP28, the Mangrove Breakthrough released a Financial Roadmap to assess existing financial instruments and offer actionable recommendations to amplify mangrove-positive business models.⁵ Within UNFCCC processes, Parties can help enable and spur robust financing to coastal NbS, including increasing access within existing finance mechanisms and mobilizing new finance flows.

New Collective Quantified Goal on Finance (NCQG)

- **Parties should ensure that the NCQG considers finance needs for the protection, conservation and restoration of nature, including for coastal ecosystems.** NCQG negotiations will set the new benchmark for climate finance across several dimensions (including quantity, quality, and accessibility), and will likely develop separate goals for mitigation and adaptation.

Loss and Damage Fund

- Parties can recommend that the upcoming framework, strategy, and operationalization of the **Loss and Damage Fund considers the pathways to restore coastal biodiversity, halt habitat loss, and improve ecosystem services.**
- **Parties can ensure that the thematic scope of the Fund effectively channels financing to non-economic losses,** ideally through a dedicated funding window, and **includes a strong focus on responses through NbS,** such as coastal habitat and biodiversity restoration, leveraging local ecological knowledge and leadership, and preserving natural cultural heritage.

¹Nature-based solutions are actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience, and biodiversity benefits. (UNEA, March 2022 [UNEP/EA.5/Res.5])

²The term blue carbon refers to vegetated coastal ecosystems, in particular coastal wetlands such as mangroves, tidal salt marshes, and seagrass meadows. The [2013 IPCC Wetlands Supplement](#) provides guidance to countries on including coastal blue carbon habitats in national greenhouse gas inventories.

³ NbS in combination with human engineering is a hybrid approach called green-gray infrastructure (GGI), which offers the potential to be more robust, comprehensive, and cost-effective than either strategy applied alone.

⁴ UNFCCC Climate Champions (2022). [The Mangrove Breakthrough: a call to action for a critical ecosystem.](#)

⁵ Ring, J., Stefanova, M., Roebiono, R., and Stodulka, K. (2023). [The Mangrove Breakthrough Financial Roadmap.](#)

Loss and Damage Fund (continued)

- **Parties can recommend that the Loss and Damage Fund considers supporting and creating new funding arrangements for coastal NbS.** This could enhance funding to solutions that build climate resilience over time, recognizing that nature-based climate action can increase the efficacy of future solutions and be more cost-effective for addressing losses and damage.
- ***Additional Background: Coastal NbS, including mangrove restoration and coastal green-gray infrastructure (GGI) solutions, can support addressing slow-onset climate events such as sea level rise, as well as more acute, immediate, extreme weather events, such as hurricanes and cyclones.*** Coastal NbS also plays a critical role in averting and minimizing loss and damage. The ORRAA Coastal Risk Index has found that USD\$363 billion worth of coastal assets would be at risk of flooding without the protective benefits of coastal ecosystems⁶. The repair and restoration of coastal ecosystems when damaged and the inclusion of coastal ecosystems when recovering from loss and damage are important strategies to support the long-term resilience of coastal communities.

Standing Committee on Finance

- During the 2024 Standing Committee on Finance Forum, which will focus on climate action and resilience through gender-responsive finance for sustainable food systems and agriculture, **Parties are encouraged to integrate the important role of coastal habitats, such as mangroves and seagrasses, for resilient aquatic food systems.** Innovative climate-smart approaches, such as Climate Smart Shrimp⁷ and Restorative Aquaculture,⁸ could also be shared. Additionally, restoration of coastal ecosystems may help maintain agricultural yields on coastal floodplains with storm surges and sea level rise.⁹

2. AMBITION & ACTION TO IMPLEMENT THE OUTCOMES OF THE 2023 GLOBAL STOCKTAKE

Despite growing ambition for coastal conservation and restoration in recent years,¹⁰ numerous opportunities remain to enhance ambition and fully recognize the potential of coastal NbS for mitigation and adaptation. In line with the Global Stocktake (GST) agreement at COP 28 to collaboratively meet the global 1.5-degree goal, including through enhanced ocean and coastal ecosystem-based approaches, Parties can increase ambition in the 2025 Nationally Determined Contribution (NDC) cycle through the inclusion of coastal NbS, including blue carbon ecosystems, using the best available science, mapping, and practices.¹¹

Biennial Transparency Reports

- Parties can use the June 2024 SB 60 session to build capacity and to ensure that their Biennial Transparency Report (BTR) integrates relevant coastal blue carbon ecosystem data into the Land Use Land-Use Change and Forestry (LULUCF) elements, as appropriate.¹²

⁶ [Coastal Risk Index](#).

⁷ Conservation International (2021). [Climate Smart Shrimp Fact Sheet](#); Wetlands International (2020). [Technical Guidelines 'Associated Mangrove Aquaculture Farms'](#).

⁸ The Nature Conservancy (2021). [Global Principles of Restorative Aquaculture](#).

⁹ [Guimond and Michael \(2021\)](#).

¹⁰ Lecerf, M., Herr D., Elverum, C., Delrieu, E. and Picourt, L. (2023). [Coastal and marine ecosystems as Nature-based Solutions in new or updated Nationally Determined Contributions](#). Ocean & Climate Platform, Conservation International, IUCN, Rare, The Nature Conservancy, Wetlands International and WWF.

¹¹ [Guidelines for Blue Carbon and Nationally Determined Contributions: Edition 2](#) (2023); Global Mangrove Watch [Integrating Mangrove Ecosystems into NDCs](#) (2022) and [Best Practice Guidelines for Mangrove Restoration](#) (2023) are resources available to support countries in their NDC updates.

¹² Decision 18CMA.1 (para 3) states that all Parties are required to submit their first Biennial Transparency Report (instead of the BUR/BR) by the end of 2024. Additionally, when a Party indicates that its adaptation NbS efforts may have a mitigation co-benefit, the co-benefits should be accounted for in the BTR.

GST Dialogue

- At the June 2024 GST Dialogue, Parties should come prepared to share best practices and feedback on how to **use the GST outcome, including ways in which countries can incorporate coastal NbS for mitigation and adaptation actions, to bolster their next NDC**. The GST Dialogue should recognize and build off the outcomes of the Ocean and Climate Change Dialogue.
- In the development of a “Roadmap to Mission 1.5°C” to be taken forward by the UAE, Azerbaijan, and Brazil Presidencies, clear pathways for implementing coastal NbS to meet the 1.5C target should be included.

Nationally Determined Contributions and National Adaptation Plans

- Parties can use the SB 60 session, including discussions within the Ocean and Climate Change Dialogue’s coastal resilience topic, the Work Programme on Just Transition Pathways, and the GST Dialogue, to **build capacity and recognition of the ways in which coastal NbS, including those involving the conservation and restoration¹³ of blue carbon habitats, can be included in new and updated NDCs and National Adaptation Plans (NAPs).**¹⁴

3. THE GLOBAL GOAL ON ADAPTATION & UAE-BELEM WORK PROGRAMME ON THE UAE FRAMEWORK FOR GLOBAL CLIMATE RESILIENCE

Parties should call for **explicit inclusion of coastal and marine NbS as a cross-cutting element of both thematic and dimensional targets** of the GGA framework to increase coastal resilience and enhance livelihoods.

- **Parties can develop holistic indicators** for GGA targets, including both quantitative and qualitative metrics that strengthen and clarify synergies with existing Global Biodiversity Framework (GBF) targets and Sustainable Development Goals (SDGs). Indicators to measure progress should **reflect the necessity of nature, including coastal NbS**, to achieve these targets. Furthermore, indicators should capture the relationships between coastal NbS and metrics such as human health, climate-related mortality, and water access by **tracking how NbS has enabled communities to adapt to climate change.**¹⁵
 - For example, a potential target such as, “damages to infrastructure and human settlements at high risk of climate change are minimized (% reduction compared to baseline)” could be measured with an NbS-centered indicator (e.g., avoided loss).
 - Indicators should be specific and appropriately measure each of the ecosystems outlined in 9d of the GGA (“terrestrial, inland water, mountain, marine and coastal ecosystems”) and Parties should prioritize the local, ecological knowledge and cultural values of coastal communities that depend on nature and are highly vulnerable to climate change impacts.
- Parties should also begin considering how the GGA can inform any necessary guidance changes as it relates to Adaptation Communication elements and experience.¹⁶

¹³ Beeston, M., Cameron, C., Hagger, V., Howard, J., Lovelock, C., Sippo, J., Tonneijk, F., van Bijsterveldt, C. and van Eijk, P. (Editors) 2023. [Best practice guidelines for mangrove restoration](#).

¹⁴ Additional resources to support countries in NDC updates include [Guidance for Including Coastal Green-Gray Infrastructure in NDCs](#), and [Blue Carbon and National Determined Contributions: Second Edition](#).

¹⁵ Also known as Ecosystem Based Adaptation (EbA). [Guidebook for Monitoring and Evaluating Ecosystem-based Adaptation Interventions](#) by Friends of Ecosystem Based Adaptation (FEBA) provides best practices and a clear process for developing monitoring for EbA.

¹⁶ Recall that Parties are invited to submit views on their experience with the current guidance by February 2025 with the intent to understand current implementation needs. This could include being more specific related to coastal NbS actions and needs.

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