BLUE MARINE FOUNDATION

OCEAN & CLIMATE PLATFORM

BLUE THREAD:
ALIGNING NATIONAL CLIMATE AND BIODIVERSITY STRATEGIES

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

NDC PARTNERSHIP

Ocean Conservancy

Ørsted

Pew

PML Plymouth Marine Laboratory

rare

The Nature Conservancy

Sustainable Development Reform Hub

EXECUTIVE SUMMARY

National Biodiversity Strategies and Action Plans (NBSAPs) under the Convention on Biological Diversity (CBD) and Nationally Determined Contributions (NDCs) under the Paris Agreement are currently addressed as separate policy processes. However, given their overlapping and complementary nature, it is essential to develop and implement these documents in a holistic and coherent manner. Ocean-based solutions have a key role to play in enhancing such synergies, weaving a "blue thread" across national biodiversity and climate strategies.

This brief outlines three main strategies to achieve this:

Developing a common, long-term strategy to integrate the UN Convention on Biological Diversity (CBD) and the UN Framework Convention on Climate Change (UNFCCC) can enhance policy coherence and alignment between national strategies, and thus, amplify their impact.

- Establish a mandate from the COPs for collaboration at the national level to support integrated policy planning. This could be supported by closer cooperation and communication between the respective convention secretariats.
- Establish a joint programme of work between the two Conventions to identify the best options, including ocean-based, for coordinated biodiversity and climate action, based on science and through respective subsidiary bodies. The programme of work could also provide guidance to align NBSAPs and NDCs, while suggesting ways to better integrate biodiversity in NDCs and climate objectives in NBSAPs.
- Organise a co-sponsored workshop between the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and the Intergovernmental Panel on Climate Change (IPCC) on ocean-based solutions to inform the development of climate-smart and nature-positive national strategies. This could also be used to provide scientific inputs on emerging governance issues, such as marine Carbon Dioxide Removal.

The Ocean Breakthroughs can fast-track solutions articulated around five key sectors: marine conservation, aquatic food, offshore renewable energy, shipping and coastal tourism. By identifying turning points to reach by 2030 in each sector, the Ocean Breakthroughs can act as a powerful catalyst to connect ocean, climate and biodiversity goals.

- Deploy coastal and marine nature-based solutions to maximise co-benefits for climate change mitigation, adaptation, and resilience, while providing biodiversity and socio-economic benefits. The Marine Conservation and Aquatic Food Breakthroughs can showcase effective ways to integrate climate objectives in measures undertaken in their respective sectors, to both preserve the ocean's regulating role in the climate system and respond to the adaptation imperative of the Paris Agreement.
- Avoid and reduce impacts of mitigation measures, minimising potential trade-offs across climate and biodiversity action. The Ocean Renewable Energy and Shipping Breakthroughs should inform the development of decarbonisation pathways that deliver benefits for nature and people, in line with the Global Biodiversity Framework's objective to stop all drivers of biodiversity loss and live in harmony with nature.

Numerous levers can already be activated to strengthen ocean-based solutions in national biodiversity and climate strategies, and support their integrated implementation. In addition to policy coherence, activating these levers can help optimise resources, from financial to human.

- Ensure climate and nature finance architectures are not only compatible but fully integrate the ocean. Finance negotiations at UNFCCC COP29, on the new collective quantified goal, the finalisation of Article 6 of the Paris Agreement and the Fund for Responding to Loss & Damage, should all channel greater funds towards marine and coastal ecosystems.
- Request technical assistance to strengthen ocean-based solutions as part of their national strategies, and ensure alignment between them. This includes assistance from convention bodies and mechanisms, such as the UNFCCC Nairobi Work Programme or the CBD Programme of Work on Marine and Coastal Biodiversity, and initiatives, particularly the NDC Partnership and NBSAP Accelerator Partnership.
- Coordinate monitoring and reporting mechanisms for both national progress, to alleviate the burden of reporting, and collective progress, to ensure that review processes inform one another. This requires adopting common ocean indicators, for instance, between the monitoring framework of the Global Biodiversity Framework and UNFCCC's Global Goal on Adaptation, both under negotiation.

Next year's agenda will favour this alignment given that, for the first time, the two submissions overlap, with NBSAPs due October 2024 and NDCs due February 2025. This convergence provides a singular opportunity to weave the blue thread through national strategies. However, the blue thread does not stop at the Climate and Biodiversity Conventions and should, ultimately, connect all relevant multilateral frameworks and agreements.

INTRODUCTION

The ocean at the heart of climate and biodiversity interactions

The ocean, our life support system, is central to the intricate relationship between climate and biodiversity. Ocean-based solutions have the potential to deliver on both the Global Biodiversity Framework and Paris Agreement, acting as a connector across the Biodiversity and Climate Conventions. However, despite growing calls from the international community for more policy coherence and alignment, synergies between the two regimes have not been realised.

This separation is reflected in national strategies, namely National Biodiversity Strategies and Action Plans (NBSAPs) and Nationally Determined Contributions (NDCs).

As a result, policies are developed in silos, addressing either biodiversity or climate goals, without systematically considering the interconnections between the two. Ocean-based solutions have a key role to play in leveraging these synergies, weaving a "blue thread" between national biodiversity and climate strategies.

This brief will (1) demonstrate that, despite separate mandates, the Biodiversity and Climate Conventions can effectively collaborate and support alignment at the national level. Moreover, it will (2) explore how the Ocean Breakthroughs and the ocean-based solutions they provide can enhance policy coherence, efficiency, and impact across NBSAPs and NDCs. Finally, this brief will (3) consider different levers and opportunities to accelerate and scale these solutions.

1. Leveraging synergies between national biodiversity and climate strategies through ocean-based solutions

1.1 Inherent complementarities and the foundation for cooperation across conventions

The UN Framework Convention on Climate Change (UNFCCC) and the UN Convention on Biological Diversity (CBD) are often referred to as "sister conventions". Both adopted at the 1992 Earth Summit, along with the UN Convention to Combat Desertification, they share compatible structures[1] (Fig. 1). Although their mandates differ, they have complementary objectives to address global environmental issues in pursuit of sustainable development. This lays the foundation for possible alignment and cooperation between the two conventions.

Both conventions address the ocean, albeit in different ways. The UNFCCC recognises the ocean's role in the climate system (UNFCCC Preamble; Article 4), though ocean-related issues were largely overlooked in the climate debate until the adoption of the Paris Agreement (2015). Since then, there has been a concerted effort by leading ocean countries and non-party stakeholders to mainstream the ocean within the different UNFCCC processes and bodies to ensure full consideration[2]. In contrast, the CBD mandate covers all life on Earth, making no distinction between land and ocean. And, while marine and coastal biodiversity has historically received less focus than terrestrial biodiversity, it is integrated throughout the Global Biodiversity Framework (2022) goals and targets[3].

Conventions	**UN Convention on Biological Diversity (CBD)**	**UN Framework Convention on Climate Change (UNFCCC)**
Implementing Agreements	Kunming-Montreal Global Biodiversity Framework	Paris Agreement
National Strategies*	National Biodiversity Strategies and Action Plans (NBSAPs) *Submission due by October 2024*	Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs) *Submission due by February 2025*
Global Review of Collective Progress	Global Review	Global Stocktake
Mechanisms to Report on National Progress	Monitoring framework for the Global Biodiversity Framework	Enhanced Transparency Framework

Fig. 1. The similar structure of the climate and biodiversity regimes

**While NBSAPs, NDCs and NAPs are considered the primary vehicle for implementation, they are complemented by other important planning documents, such as National Biodiversity Finance Plans and Long-Term Low Greenhouse Gas Emission Development Strategies. Therefore, it is essential that these documents are all developed and implemented in an integrated and coherent manner.*

While the recognition of nature and the ocean as a part of the solution is relatively recent, both conventions acknowledged early on the interlinkages between climate and biodiversity. The UNFCCC highlights the impact of climate change on ecosystems and the role of ecosystems as carbon sinks (UNFCCC Article 1), whereas the CBD stresses the need to address the causes of biodiversity loss, which include climate change (CBD Preamble; Articles 7 and 14).

Despite the inherent potential for alignment and cooperation, synergies between the UNFCCC and the CBD are insufficient – especially since the ocean remains mostly absent from these efforts. The two conventions lack a unified vision or long-term strategy for integration. Attempts of alignment "in the spirit of Rio," such as the establishment of a Joint Liaison Group in 2001, had limited impact. As a result, synergies between the conventions have not been realised. This poses a series of limitations, especially when it comes to the ocean given its already fragmented and complex governance.

This separation risks inconsistencies in the vision and strategies, undermining effective on-the-ground action and, in some cases, even leading to counterproductive policies. Indeed, some decarbonisation pathways can be harmful to biodiversity, such as certain marine carbon dioxide removal approaches (see box below). In addition, the separation between conventions may increase competition for already limited resources. It may also send contradictory messages to non-state actors about national intentions and priorities, rather than providing them with the necessary direction to mobilise and engage[4]. Instead, integrated approaches can address this separation, without overstepping the scope of each Convention, to build policy coherence at the national level. They are particularly important in the case of the ocean, which can act as a multi-purpose solution.

Marine Carbon Dioxide Removal

Marine carbon dioxide removal (mCDR) refers to the human interventions intended to enhance the ocean's natural ability to capture and store carbon dioxide. The Intergovernmental Panel on Climate Change (IPCC) definition includes both blue carbon measures (the protection and restoration of coastal mangrove, seagrass and salt marsh ecosystems) and geoengineering approaches (technological interventions such as fertilisation and alkalinisation of the ocean)[5] – even if it suggests that coastal nature-based solutions are more sustainable due to multiple co-benefits[6]. According to the IPCC, in addition to improved energy efficiency and a shift from fossil fuels to renewable or non-carbon based energy, carbon removal methods can help to achieve net-zero emissions[7]. However, there are significant uncertainties surrounding geoengineering approaches as a mitigation solution – particularly regarding its efficiency in carbon capture and storage, and potential impact on ecosystems and societies. This highlights the need to align national climate and biodiversity strategies to ensure that the pathways chosen are both climate-smart and nature-positive.

1.2 Recent developments in favour of increased synergies across conventions

A movement has emerged in recent years to leverage synergies across conventions, aiming for a mandate on integrated action.

Nature gained more attention within the UNFCCC around COP26 in 2021. The COP26 final decision recognised the interconnection between climate change and biodiversity loss, and emphasised the importance of ecosystems, including marine, in climate adaptation and mitigation[8]. However, the real shift came in 2023, at COP28, with the Global Stocktake stressing the need to address the two crises of biodiversity loss and climate change as one and the same[9]. It also promoted the use of integrated solutions to both crises, highlighting ecosystem approaches and nature-based solutions and explicitly referencing the Global Biodiversity Framework. The Global Stocktake further emphasised the interlinkages between the ocean and the climate, urging Parties to strengthen ocean-based mitigation and adaptation actions. This opened a much wider door for enhanced cooperation and alignment across the climate and biodiversity regimes.

Under the CBD, the Global Biodiversity Framework reaffirmed nature's role in regulating the global climate system and called on Parties to minimise the impacts of climate change and ocean acidification on biodiversity. Targets (T) 8 and 11 invite countries to use ecosystem-based approaches and nature-based solutions, which encompass coastal and marine measures. Other targets closely relate to climate action, including T1 on *Spatial Planning*, T2 on *Restoration*, T3 on *Conservation*, T5 and T10 on *Fisheries and Aquaculture*, T12 on *Blue Spaces* and T14 on *Mainstreaming*. The CBD has long acknowledged the synergies between biodiversity and climate change in several key decisions[10] and now in the Global Biodiversity Framework. In practice, countries face challenges in effectively maximising these synergies, resulting in national plans that do not fully reflect the potential of nature as a climate solution, or the impacts of climate change on biodiversity.

This growing interest in synergies led to the COP28 Joint Statement on Climate, People, and Nature[11] – which explicitly addresses the ocean. Though non-binding, the Joint Statement sends a powerful message on supporting synergies, particularly since it is spearheaded by the current and upcoming COP Presidencies of the Rio Conventions. The declaration moves beyond theoretical principles, focusing on implementation, including committing to the alignment of national plans and strategies for climate, biodiversity and land restoration. This focus is reinforced by endorsements from chairs of key action-oriented initiatives, such as the NDC Partnership, High Ambition Coalition for Nature and People, and the NBSAP Accelerator Partnership. Additionally, support from the High-level Panel for a Sustainable Ocean Economy (i.e., the Ocean Panel) and the Global Ocean Alliance highlights an appetite to integrate the ocean into climate-biodiversity synergies.

Ultimately, these are meaningful steps forward to integrate action on climate and biodiversity through explicit acknowledgement of the role the ocean has to play in both. Yet, there remains no mandate at the highest levels of these Conventions to collaborate and implement integrated solutions. Until that mandate is made explicit through UN processes, coordination across conventions will remain ad hoc, and the ocean an underutilised solution to both global ambitions.

- The COPs of the two conventions should establish a mandate for collaboration at the national level. This could be supported by closer cooperation and communication between the respective convention secretariats.
- The subsidiary bodies of the two conventions could consider establishing a joint work programme to identify the best options, including ocean-based, for coordinated biodiversity and climate action, based on science and through respective subsidiary bodies. Moreover, the programme of work could also provide guidance to align NBSAPs and NDCs, while suggesting ways to better integrate biodiversity in NDCs and climate objectives in NBSAPs.
- The IPCC and Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) should strengthen their cooperation. In particular, they could organise a co-sponsored workshop on ocean-based solutions to inform the development of climate-smart and nature-positive national strategies. This workshop could also be used to provide scientific inputs on emerging governance issues, such as mCDR.

1.3 An upcoming opportunity for further synergies: the submission of new national strategies

Ensuring policy coherence between national biodiversity and climate strategies will be crucial to pursue this synergy journey. The agenda of the next year will favour further alignment, given that, for the first time, the two submissions overlap – with NBSAPs due in October 2024 and NDCs due February 2025, providing an opportunity for greater coordination across national administrations.

Currently, they are often addressed as separate policy processes and institutional responsibilities at the national level, making coordination and integration particularly challenging. Moreover, the CBD and the Paris Agreement lack a shared mechanism or mandate for countries to explicitly consider co-benefits and trade-offs of their respective strategies. A recent analysis of 18 countries[12] revealed a lack of alignment between targets, policies and measures in current NDCs, NAPs and NBSAPs[13]. Nature-based solutions, although not explicitly referred to as such, have been included in NBSAPs for marine and coastal environments from the start, which was initially not the case for NDCs.

Building on the collective efforts of the ocean community, the ocean is now increasingly recognised as a source of climate solutions, with more than 70% of updated NDCs (i.e., submitted to the UNFCCC between 2020 and 2023) including at least one ocean-based measure[14] – most of which are nature-based solutions[15]. This already represents a positive improvement compared to 2015, when intended NDCs that included the ocean largely focused on associated pressures and risks posed by ocean and climate changes[16]. With the upcoming NDC submission, there is not only an opportunity to strengthen ocean-based climate solutions, but this time around ensure their coherence with commitments made as part of the Global Biodiversity Framework. Given the competition for ocean spaces, it is necessary for NBSAPs to be spatially explicit to effectively support the implementation of climate goals, for instance, through offshore wind deployment.

2. The Ocean Breakthroughs: A collective roadmap for the benefit of Nature, Climate & People

2.1 The Ocean Breakthroughs to power the Global Biodiversity Framework and Paris Agreement

Ocean-based solutions have the potential to deliver on both the Global Biodiversity Framework and Paris Agreement, acting as a connector across the Biodiversity and Climate Conventions. The Ocean Panel[17] advocates that full implementation of these solutions[18] could reduce the emissions gap by up to 35% on a 1.5°C pathway in 2050, while advancing climate change adaptation and resilience, biodiversity conservation and sustainable use, and supporting a thriving economy[19]. Leveraging ocean-based solutions as part of national strategies will thus be fundamental.

The Ocean Breakthroughs can fast-track these solutions in five key sectors – namely marine conservation, ocean renewable energy, shipping, aquatic food systems and coastal tourism[20]. Designed by experts from the ocean sphere, with the support of the UN High-level Climate Champions, they are rooted in the Champions' theory of change, responding to the question "what must we achieve by 2030 to reach a turning point that transforms the way a sector operates?". The Ocean Breakthroughs set positive turning points for ocean sectors to ensure a net zero, resilient and healthy planet by 2050, in line with the Global Biodiversity Framework's vision

to live in harmony with nature. As such, the Ocean Breakthroughs can deliver benefits for Nature, Climate and People, responding to the call for synergies at the implementation level. Each Ocean Breakthrough is underpinned by scientific knowledge, effective governance and management, the inclusion of people impacted by and dependent on the ocean, and adequate resourcing.

The Ocean Breakthroughs can act as a compass for all. For non-state actors, the Ocean Breakthroughs support the achievement of global campaigns led by the Climate Champions, namely the Race to Resilience and Race to Zero, and their respective action agendas: the Sharm-El-Sheikh Adaptation Agenda and the 2030 Breakthroughs. Anchored in the blue ambition loop[21], the Ocean Breakthroughs drive action and investment, complementing government efforts to achieve global goals – they therefore act as a catalyst, not a substitute. For governments, they can be used as an effective tool to strengthen the inclusion of ocean-based measures in national strategies to deliver on climate and nature targets in a holistic, effective and equitable manner.

In addition, the Ocean Breakthroughs can support coastal governments in developing comprehensive strategies, such as Sustainable Ocean Plans (SOPs) – which translate the Ocean Panel's goal to sustainably manage 100% of the ocean area under their national jurisdictions by 2030 into action. To accelerate this effort, the 100% Alliance was launched, inviting countries to develop SOPs and offering support through a Rapid Assistance Fund. By operationalising the Ocean Breakthroughs, SOPs can better connect national strategies. In line with this, Fiji built its National Ocean Policy around its commitment to 100% sustainable management, and used it as the basis for the joint revision of its NDC and NBSAP. Stressing the policy interlinkage and conservation of carbon sinks and ecosystems, it commits to integrated measures such as climate-smart marine protected areas (MPAs).

CASE STUDY

Guyana's efforts to align national strategies for mangrove conservation and restoration:

Guyana included ambitious targets for mangrove conservation and restoration in national policies, including the Low Carbon Development Strategy 2030 (LCDS 2030). The LCDS 2030 creates the broader policy framework for coastal and marine planning, including mangrove management and valuation. It was developed based on public consultations with national stakeholders, including Indigenous peoples and forest-based communities, and serves as a basis to update Guyana's NDC and NBSAP. As a result, the revised NDC (2023) includes conditional targets to expand mangrove restoration and conservation along the vulnerable coastline for mitigation and adaptation, while developing programs that expand biodiversity conservation and area-based protection[22]. Similarly, Guyana's NBSAP will be updated in 2025, building on both the LCDS 2030 and the NDC, to align with the targets of the Global Biodiversity Framework.

2.2 Maximising co-benefits: Leveraging coastal and marine nature-based solutions

Nature-based solutions are actions to protect, conserve, restore, sustainably use and manage ecosystems, which address social, economic and environmental challenges effectively and adaptively, while providing human well-being and ecosystem services[23]. Often referred to as "low-regret" options[24], these solutions serve multiple purposes. Recognised by both the Global Biodiversity Framework (T8 and T11) and Paris Agreement (Decisions 1/CP.27 and 1/CMA.5)[25], they offer a significant opportunity to connect solutions across climate and biodiversity goals. The Ocean Breakthroughs can guide the deployment of coastal and marine nature-based solutions, specifically through the goals of the Marine Conservation and Aquatic Food Breakthroughs.

Marine Conservation Breakthrough

By 2030, investments of at least USD $72 billion secure the integrity of ocean ecosystems by protecting, restoring, and conserving at least 30% of the ocean for the benefit of people, climate, and nature

The Marine Conservation Breakthrough is a cross-cutting target, aimed at securing the integrity of ocean ecosystems to maintain and enhance climate, biodiversity and socioeconomic benefits. There is currently a funding shortfall of approximately $12 billion every year to achieve this target[26]. To close this gap, the international community will need to mobilise a total of $72 billion over the next six years. The Marine Conservation Breakthrough, and the ecosystem-specific thematic breakthroughs for mangroves and coral reefs, support numerous targets of the Global Biodiversity Framework, including T1 on *Spatial Planning*, T2 on *Restoration*, T3 on *Conservation*, T8 on *Climate Action*, T11 on *Nature's Contribution to People* and T12 on *Blue Spaces*. To achieve these, governments can deploy a range of nature-based solutions including:

- Climate-smart MPAs can boost climate mitigation and adaptation, in addition to traditional conservation benefits[27] by integrating climate change considerations into their design and management. This includes selecting sites based on their potential to serve as climate refuges, protect carbon-rich ecosystems, or serve as corridors for species to migrate in response to changing environmental conditions[28]. For instance, Chile's NDC commits to developing management plans for all MPAs by 2030, including actions for adaptation to climate change.
- The conservation and restoration of coastal blue carbon ecosystems – particularly mangroves, seagrasses, and salt marshes (see the "IPCC Wetlands Supplement" box) – contribute to carbon storage and sequestration capacity while strengthening coastal resilience and enhancing biodiversity. For example, Liberia has included mangrove protection measures within both their 2017-2025 NBSAP and their 2021 NDC for mitigation and adaptation.

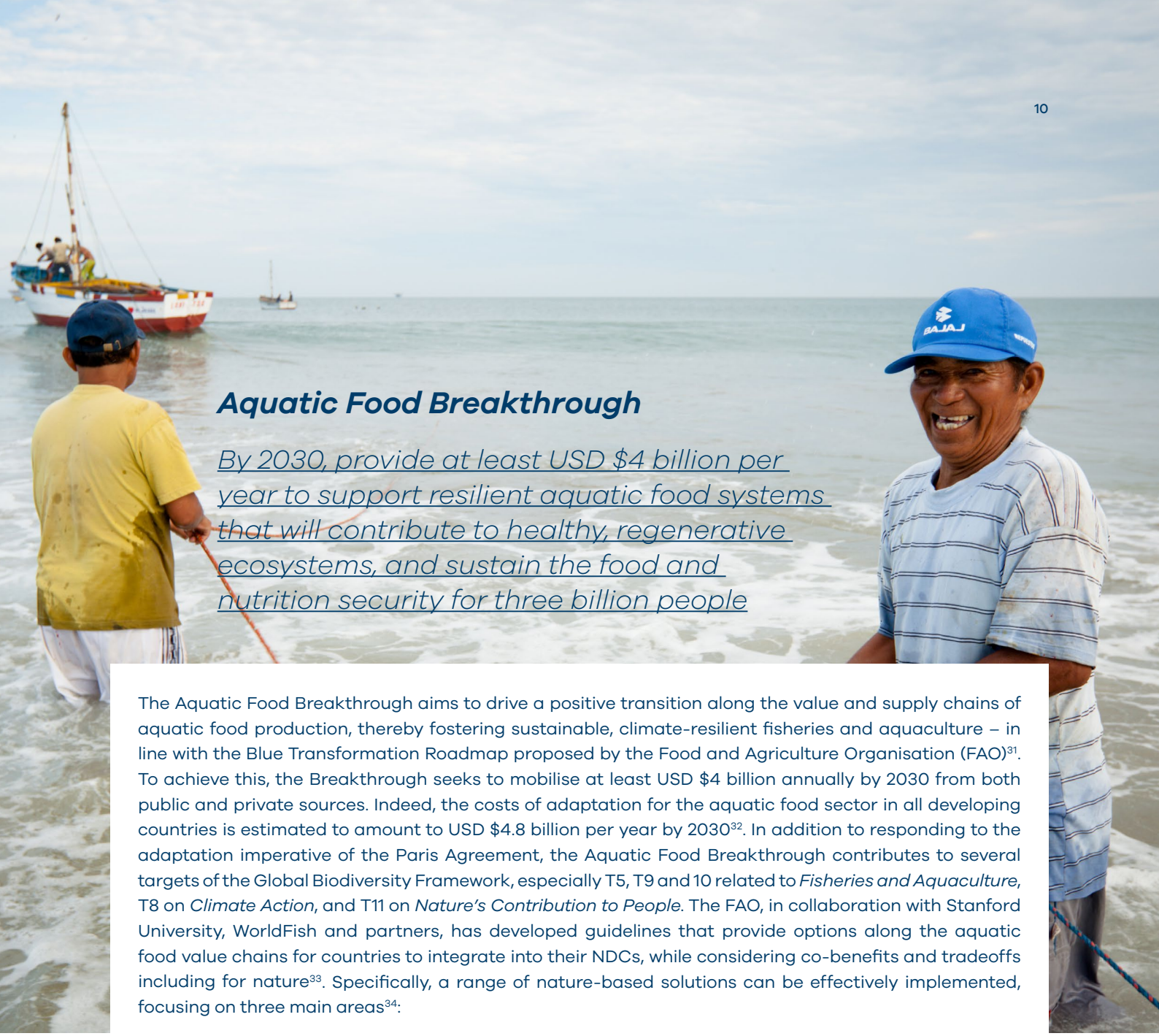
The IPCC Wetlands Supplement:

National greenhouse gas inventories can be used for reporting under the Paris Agreement and the Global Biodiversity Framework (under T8 on *Climate Action*). The 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands (or "Wetlands Supplement") provides detailed guidance to countries on estimating and reporting greenhouse gas emissions and removals from mangroves, tidal marshes, and seagrasses. While the term "blue carbon" is now increasingly extended to other ecosystems, only these three have IPCC-approved guidance, ensuring the recognition and proper accounting of their mitigation potential. Currently, only 18 countries include blue carbon ecosystems in their inventories, despite 151 having at least one of these ecosystems[29]. Moving forward, other coastal countries should use this tool in order to obtain a more accurate understanding of carbon sinks' potential in their national territory, and the critical importance of protecting these ecosystems.

The Mangrove Breakthrough NDC Taskforce:

As of October 2024, 30 governments have endorsed the Mangrove Breakthrough to secure the future of 15 million hectares of mangroves globally by 2030. Governments must now translate this commitment into action. The NDC Taskforce was launched to harness this opportunity to drive mangrove conservation, restoration, and finance through 2025 NDCs. It brings together policy and mangrove specialists from international and local environmental organisations to provide technical expertise and coordinate knowledge sharing for countries as they translate their mangrove-positive values into 2025 NDCs.

Note: *Numerous opportunities exist to build synergies between the CBD and the Agreement on Marine Biodiversity of Areas beyond National Jurisdiction ("BBNJ Agreement")[30]. However, the latter treaty is outside the scope of this document.*



Aquatic Food Breakthrough

By 2030, provide at least USD $4 billion per year to support resilient aquatic food systems that will contribute to healthy, regenerative ecosystems, and sustain the food and nutrition security for three billion people

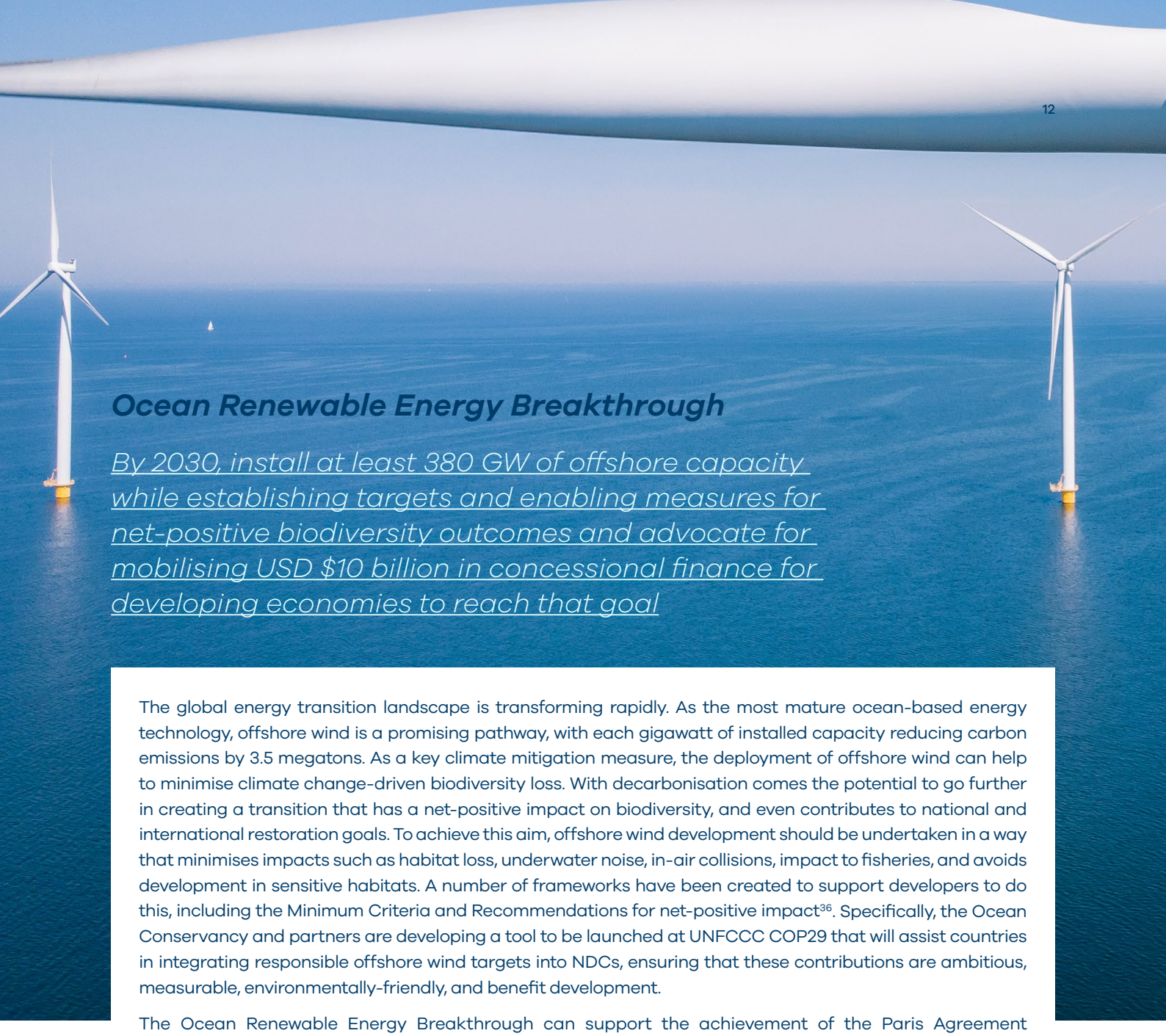
The Aquatic Food Breakthrough aims to drive a positive transition along the value and supply chains of aquatic food production, thereby fostering sustainable, climate-resilient fisheries and aquaculture – in line with the Blue Transformation Roadmap proposed by the Food and Agriculture Organisation (FAO)[31]. To achieve this, the Breakthrough seeks to mobilise at least USD $4 billion annually by 2030 from both public and private sources. Indeed, the costs of adaptation for the aquatic food sector in all developing countries is estimated to amount to USD $4.8 billion per year by 2030[32]. In addition to responding to the adaptation imperative of the Paris Agreement, the Aquatic Food Breakthrough contributes to several targets of the Global Biodiversity Framework, especially T5, T9 and 10 related to *Fisheries and Aquaculture*, T8 on *Climate Action*, and T11 on *Nature's Contribution to People*. The FAO, in collaboration with Stanford University, WorldFish and partners, has developed guidelines that provide options along the aquatic food value chains for countries to integrate into their NDCs, while considering co-benefits and tradeoffs including for nature[33]. Specifically, a range of nature-based solutions can be effectively implemented, focusing on three main areas[34]:

- The conservation and restoration of critical habitats and ecosystems that sustain aquatic resources and production infrastructures for aquatic food. For example, Australia's Coral Reef Resilience Initiative adopts an ecosystem-based approach to coral restoration with the objective to both attract fish and improve the resilience of coral reefs to climate change.
- Climate-informed management of aquatic resources to become more resilient to climate change impacts and minimise impacts of resource use on the environment. An example is the Chita fishery, an important but declining coastal finfish fishery in Peru. The Instituto del Mar, in collaboration with The Nature Conservancy, used the FishPath tool to implement a robust management plan, including an annual closed season to protect spawning of Chita.
- Integrated risk management that reduces future exposure and ecosystem vulnerabilities. For example, The Maldives' NDC aims to diversify the fishery sector to better respond to climate-induced challenges and uncertainties. It develops insurance schemes to enhance the resilience of small-scale fisheries to cover against losses due to extreme events.

2.3 Minimising tradeoffs: Designing nature-positive decarbonisation pathways

Nature-based solutions should complement, not replace, the mitigation measures needed to achieve drastic reduction of greenhouse gas emissions and the rapid phase-out of fossil fuels. Other ocean-based solutions, such as green shipping and responsible offshore renewables, can provide robust decarbonisation opportunities while continuing to deliver benefits for nature and people. Measures can be implemented to avoid, reduce and mitigate anticipated impacts – and minimise unexpected ones. Current discussions on synergies tend to focus on maximising co-benefits, rather than on minimising potential trade-offs.

While the transformation of the shipping and energy sectors is primarily discussed under the UNFCCC[35], their broader impacts fall under the scope of the CBD to address all drivers of biodiversity loss directly. Therefore, identifying synergies is crucial to meet both goals. In that regard, the Ocean Renewable Energy and Shipping Breakthroughs can help inform the responsible development of decarbonisation pathways that are nature and people-positive.



Ocean Renewable Energy Breakthrough

By 2030, install at least 380 GW of offshore capacity while establishing targets and enabling measures for net-positive biodiversity outcomes and advocate for mobilising USD $10 billion in concessional finance for developing economies to reach that goal

The global energy transition landscape is transforming rapidly. As the most mature ocean-based energy technology, offshore wind is a promising pathway, with each gigawatt of installed capacity reducing carbon emissions by 3.5 megatons. As a key climate mitigation measure, the deployment of offshore wind can help to minimise climate change-driven biodiversity loss. With decarbonisation comes the potential to go further in creating a transition that has a net-positive impact on biodiversity, and even contributes to national and international restoration goals. To achieve this aim, offshore wind development should be undertaken in a way that minimises impacts such as habitat loss, underwater noise, in-air collisions, impact to fisheries, and avoids development in sensitive habitats. A number of frameworks have been created to support developers to do this, including the Minimum Criteria and Recommendations for net-positive impact[36]. Specifically, the Ocean Conservancy and partners are developing a tool to be launched at UNFCCC COP29 that will assist countries in integrating responsible offshore wind targets into NDCs, ensuring that these contributions are ambitious, measurable, environmentally-friendly, and benefit development.

The Ocean Renewable Energy Breakthrough can support the achievement of the Paris Agreement temperature goal, including by advancing the Global Stocktake objective of tripling renewable energy capacity. Meanwhile, it can also help advance T1 on *Spatial Planning*, T8 on *Climate Action*, T14 on *Mainstreaming* and T15 on *Businesses* of the Global Biodiversity Framework. To achieve net-positive impact, various policy options are available:

- Governments should create the conditions for the right projects to progress, for instance through designed selection or minimum criteria in tenders. Progress should not only be measured by the number of gigawatts deployed, but also by location and level of quality – which could be reflected in the monitoring framework of the Global Biodiversity Framework[37].
- Specifically, governments should adopt ecosystem-based approaches, including marine spatial planning, to identify low-impact areas and avoid sensitive habitats – in application of the mitigation hierarchy. For instance, the United Kingdom's Energy Bill proposes an industry-financed Marine Recovery Fund which supports compensation, biodiversity efforts and pilot initiatives, such as the network of highly protected marine areas in England.
- Innovations in technology can also play a critical role in advancing net-positive impact. At the construction phase, Ørsted uses state-of-the-art noise abatement and mitigation technologies, such as their own patented low-noise jetting installation technology, double bubble curtains, and hydrosound dampeners, to reduce noise that would otherwise disturb underwater life.

Shipping Breakthrough

By 2030, zero emission fuels make up 5% of international shipping's energy demand. 450,000 seafarers need to be retrained and upskilled. At least 30% of global trade needs to move through climate-adapting ports

The shipping industry must undergo major transformations to decarbonise, in line with the 2023 Strategy on Reduction of Greenhouse Emissions from Ships of the International Maritime Organisation (IMO), as well as the 1.5°C target of the Paris Agreement. Indeed, since 30% of shipping emissions are domestic[38], the issue also falls under the scope of the UNFCCC[39] in addition to the IMO. However, only 23 countries currently include measures to reduce their emissions from the shipping industry in their NDC, and none included a nature component[40]. The sector must also take action to assess, reduce, and avoid its impacts on nature, especially noise pollution, introduction of non-indigenous and invasive species (including through hull fouling and ballast water discharge), chemical pollution, and collision with marine life and habitats.

The Shipping Breakthrough was designed to accelerate this transition, with a triple focus on decarbonisation, adaptation and training of seafarers. A dedicated target and indicators are currently being developed to make sure it also integrates a nature-positive component. As such, the breakthrough is able to contribute to T1 on *Spatial Planning*, T6 on *Invasive Species*, T7 on *Pollution*, T8 on *Climate Action*, T14 on *Mainstreaming* and T15 on *Businesses of the Global Biodiversity Framework*. To achieve this, a series of measures can be implemented:

- The Associated Protective Measures for Particularly Sensitive Sea Areas (PSSA) under the IMO can be used as a spatial shipping tool to complement networks of MPAs and other conservation measures. Designation can be expanded and implementation reformed to ensure significant and lasting protections[41]. For instance, the Philippines designated the region surrounding Tubbataha Reefs Natural Park, in the coral triangle[42] as a PSSA and Area to Be Avoided.
- Placing limits on vessel speeds in migratory paths and breeding grounds can reduce marine mammal strikes[43], noise and disturbance. California's "Protecting Blue Whales and Blue Skies" demonstrates how speed reduction can benefit multiple sectors. By creating seasonal and predictable slow speed zones, this voluntary programme helps companies to protect endangered whales, reduce fuel use, and improve air quality. In 2020, over 24,000 tonnes of greenhouse gas emissions were saved.

3. Ocean-based solutions in national climate and biodiversity strategies: Planning, implementing & monitoring

3.1 Creating the enabling conditions for effective ocean-based action

INSTITUTIONAL COORDINATION

While efforts exist to integrate sectoral strategies, stronger coordination is needed to develop coherent policies that can be translated on-the-ground and ensure optimal allocation of resources.

- Governments can establish coordination processes across government ministries and agencies, both horizontally and vertically, such as inter-ministerial committees and multi-stakeholder platforms, to better align agendas and coordinate actors involved[44]. A joint calendar could also be established to highlight the different timelines for strategies and where they overlap.
- Mapping synergies between existing policies can also help governments to identify overlaps early on to prevent unnecessary duplication of efforts across national administrations[45].

CASE STUDY

Mexico's Sustainable Ocean Plan:
Mexico's plan highlights the value of effective coordination across ministries and harmonising regulations for more compliance. It establishes the "Interministerial Commission for the Sustainable Management of Seas and Coasts" (CIMARES) to oversee and coordinate the actions of government agencies involved in designing and implementing national policies related to the planning and sustainable development of Mexico's coastal and ocean areas, addressing both climate and biodiversity concerns.

CAPACITY-BUILDING

Strategies should outline human, technical and technology capacity gaps and needs for mitigation, adaptation, and biodiversity conservation, and develop actionable plans to address them.

- The CBD's ocean capacity building program, the Sustainable Ocean Initiative, could align effort with UNFCCC capacity building initiatives to make better use of resources and ocean expertise.
- Initiatives, such as the NDC Partnership and the NBSAP Accelerator Partnership, should actively enhance global coherence through targeted technical assistance. For instance, additional resources on ocean-based solutions should be included in the NDC 3.0 Navigator Tool.
- By working closer together, the NDC Partnership and the NBSAP Accelerator Partnership can better identify synergies across national strategies[46]. Countries should request assistance on ocean-based solutions, and opportunities to ensure alignment among them.
- The Climate-Nature Coordination Platform, designed to advance and operationalise the commitments from the COP28 Joint Statement, can serve as a foundation for cooperation among these initiatives, focusing on capacity-building and exchange of good practices.

INTER-INSTITUTIONAL LINKAGES

Specific mechanisms and bodies under each convention could contribute to the alignment of national plans, supporting countries in delivering more synergistic outcomes.

- The UNFCCC Ocean and Climate Change Dialogue became the main entry point for fostering international cooperation on ocean-based solutions and connecting across global frameworks. To enhance its relevance and impact, the dialogue must attract greater engagement from climate negotiators and UNFCCC bodies representatives. UNFCCC Parties should request a five-year roadmap to clearly outline objectives and priorities for collaboration[47].
- Several adaptation-related UNFCCC bodies and workstreams, such as the UAE Framework for Global Climate Resilience – which aims to guide the achievement of the global goal on adaptation – can be used as entry points to strengthen synergies across planning instruments including through updated guidance and sharing of best practices on the use of marine and coastal nature-based solutions.
    - Specifically, by building on the technical brief from the Biodiversity Expert Group[48], the Ocean Expert Group of the Nairobi Work Programme should provide concrete guidance to countries on aligning the NDCs, NAPs and NBSAPs in consultation with the CBD Secretariat.
    - Similarly, the Least Developed Countries Expert Group should provide technical guidance on these synergies in their future NAP guidance, sharing best practices and lessons learned.
- The CBD programme of work on marine and coastal biodiversity, currently under revision, can support further integration of measures able to mitigate and adapt to climate change. The CBD Secretariat identified several gaps in guidance or areas requiring further attention under the Convention, including on blue carbon ecosystems, marine and coastal nature-based solutions, and blue spaces[49]. These gaps should be acknowledged in a COP decision at CBD COP16.

FINANCE

Achieving progress on ocean, climate and biodiversity goals is possible only when finance is channelled to projects that deliver co-benefits and minimise trade-offs for more efficiency.

Historically, the allocation of finance to the ocean has been lagging behind[50], and it is necessary to effectively integrate the ocean into the climate and nature finance architecture.

- Considering that ocean finance is climate finance, the negotiations at UNFCCC COP29 in Baku, Azerbaijan, including on the new collective quantified goal, should channel greater funds towards marine and coastal ecosystems. Specifically, Article 6 of the Paris Agreement should chart a pathway to invest in high-integrity coastal and marine nature-based solutions.
- Other finance-related work programmes should also be utilised, such as the Sharm el-Sheikh dialogue on Article 2, paragraph 1(c), of the Paris Agreement to make financial flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.
- When it comes to the Global Biodiversity Framework, T19 on International Finance presents an immediate opportunity to develop national biodiversity finance plans that align with existing climate finance strategies. Additionally, T18 on Positive Incentives can also support alignment by identifying and reducing harmful incentives, for instance subsidies for fossil fuels which account for $7 trillion per year[51], and scaling-up positive incentives for biodiversity.

To facilitate financial flows and to allocate funds from developed to developing countries, both conventions operate through various international entities, including the Global Environment Facility (GEF), the Adaptation Fund and the Green Climate Fund. While these entities are increasingly taking an integrated approach to their funding strategies, they should further increase collaboration and prioritise multi-purpose projects, mainstreaming climate issues in biodiversity projects and vice versa.

- The CBD's Global Biodiversity Framework Fund, hosted by the GEF, is currently being operationalised to support T19. Efforts should be strengthened to optimise co-benefits and synergies of finance targeting climate and biodiversity co-benefits and synergies.
- Similarly, a portion of the UNFCCC's Fund for Responding to Loss & Damage should be ring fenced for Small Island Developing States and coastal Least-Developed Countries. The Fund, under operationalisation, should include all relevant ocean issues, including shifting fish stocks and degrading coral reefs which often lack historical data.

To facilitate financial flows and to allocate funds from developed to developing countries, both conventions operate through various international entities, including the Global Environment Facility (GEF), the Adaptation Fund and the Green Climate Fund. While these entities are increasingly taking an integrated approach to their funding strategies, they should further increase collaboration and prioritise multi-purpose projects, mainstreaming climate issues in biodiversity projects and vice versa.

- The CBD's Global Biodiversity Framework Fund, hosted by the GEF, is currently being operationalised to support T19. Efforts should be strengthened to optimise co-benefits and synergies of finance targeting climate and biodiversity co-benefits and synergies.
- Similarly, a portion of the UNFCCC's Fund for Responding to Loss & Damage should be ring fenced for Small Island Developing States and coastal Least-Developed Countries. The Fund, under operationalisation, should include all relevant ocean issues, including shifting fish stocks and degrading coral reefs which often lack historical data.

To facilitate financial flows and to allocate funds from developed to developing countries, both conventions operate through various international entities, including the Global Environment Facility (GEF), the Adaptation Fund and the Green Climate Fund. While these entities are increasingly taking an integrated approach to their funding strategies, they should further increase collaboration and prioritise multi-purpose projects, mainstreaming climate issues in biodiversity projects and vice versa.

- The CBD's Global Biodiversity Framework Fund, hosted by the GEF, is currently being operationalised to support T19. Efforts should be strengthened to optimise co-benefits and synergies of finance targeting climate and biodiversity co-benefits and synergies.
- Similarly, a portion of the UNFCCC's Fund for Responding to Loss & Damage should be ring fenced for Small Island Developing States and coastal Least-Developed Countries. The Fund, under operationalisation, should include all relevant ocean issues, including shifting fish stocks and degrading coral reefs which often lack historical data.

National strategies can be used as roadmaps to guide public funding and attract private investments[52]. By sending clear market signals to the private sector and helping to de-risk investments, these strategies create opportunities to diversify financial resources[53].

- Countries can mobilise a variety of innovative financial instruments and models that can help deploy private capital, while using public funding more efficiently[54]. Market-based instruments, such as blue bonds, carbon and biodiversity markets, climate and nature-based debt swaps and insurance mechanisms, can all be used to advance key sector transitions.
- Governments should also develop and publish investment strategies that are integrated into sectoral and national plans. These should present and promote quantified, bankable mitigation projects supported by robust investment mechanisms.
- The Ocean Breakthroughs can catalyse funding towards the delivery of the Global Biodiversity Framework. For instance, the Mangrove Breakthrough's Finance Roadmap, creates a shared direction for countries, financial institutions, private sector, and other stakeholders, by providing a toolbox of financial instruments and enabling conditions to scale mangrove investments[55].

3.2 Mobilising and empowering non-state actors from the ocean community

Non-state actors, increasingly active and ambitious, are essential to drive transformative action alongside governments, as they are important players for implementing solutions on-the-ground. These actors have a vested interest in alignment across agendas, since it can lead to a clearer path forward. Both the Paris Agreement and the Global Biodiversity Framework recognise their important role and contribution, promoting a whole-of-society approach and stronger cooperation – as emphasised by the Global Stocktake.

- National strategies should be developed and implemented with a wide range of stakeholders to help gain a more accurate picture of the achievable level of ambition, identifying major gaps and policies that can be scaled-up nationally. For instance, cities, with their direct control on spatial planning, natural resources and land management, are ideally positioned.
- The more specific and detailed strategies are, the more easily non-state actors can take action in alignment with national targets. Countries should aim to develop a shared language, used across NDCs and NBSAPs, to facilitate understanding and communication among stakeholders.

CASE STUDY

Seychelles: Inclusive Participation:
The Seychelles' 2021 NDC included strong commitments to protect coastal wetland ecosystems, including mapping the extent of mangrove and seagrass ecosystems, conducting a first-time assessment of their carbon stocks, including them in its national greenhouse gas inventory by 2025, and protecting them by 2030. To support these efforts, the Seychelles Conservation and Climate Adaptation Trust undertook community outreach campaigns. Recognising that there was no unique word for seagrass, it launched a campaign to formalise Seychellois Creole names for different groups of seagrass species. Having locally derived names for seagrass helped Seychellois better understand and appreciate this vital ecosystem.

Special attention should be given to marginalised communities, including coastal Indigenous Peoples, local communities, and small-scale fishers and aquaculture farmers – who are disproportionately impacted by climate change and biodiversity loss. Their unique knowledge, and role as stewards must be taken into consideration to a greater extent.

- Ensuring inclusive and equitable participation, grounded in human rights-based approaches, will help safeguards rights and interests of these communities while preserving the integrity of ecosystems and the services they provide. For instance, guidance is available on the integration of human rights standards into climate action in small-scale fisheries[56].
- The Ocean Breakthroughs include the Ocean Equity Index (currently under publication) as a baseline to evaluate equity in the implementation of measures across the five sectors of the Breakthroughs, and promote justice for marginalised coastal communities[57].

Building stronger connections between the climate and nature communities of non-state actors, including by aligning their respective action agendas, could be a game-changer in the way these actors mobilise and support countries in the implementation of global goals[58].

- The CBD Action Agenda for Nature and People currently operates as an online platform for voluntary commitments. Extending its scope and mandate could enhance the ocean community's ability to coordinate, mobilise, and influence decision-makers[59]. In support of this, COP Presidencies could, for instance, formally appoint and empower a Nature Champion.
- The Marrakech Partnership for Global Climate Action, a dedicated space for non-state actors to engage under the UNFCCC, could help shape and operationalise its biodiversity counterpart – fostering new forms of collaboration between the climate and biodiversity communities. It could be facilitated by the close cooperation of the Nature and Climate Champions.
- The Ocean Breakthroughs campaign has a key role to play in uniting the climate and nature communities of non-state actors. It will be presented at CBD COP16, focusing on Marine Conservation, and building on the success of the Mangrove and Coral Reef Breakthroughs.

3.3 Monitoring and reporting for effective ocean-based action

The development and implementation of national strategies rely on robust mechanisms for monitoring, reporting, and review. These mechanisms provide key insights to guide countries in integrating climate and biodiversity action. Furthermore, while there is a need for bespoke monitoring for the Paris Agreement and Global Biodiversity Framework, there are opportunities to build synergies by coordinating monitoring and reporting mechanisms.

GLOBAL STOCKTAKING PROCESSES

Global stocktaking processes, namely the Global Stocktake of the Paris Agreement and the Global Review of the Global Biodiversity Framework, both aim to assess collective progress and identify ways forward to course correct. Although their timelines are two years apart, they follow similar cycles.

- The Global Stocktake and Global Review should offer insights into how progress on one set of goals can inform the other. This creates an opportunity for the subsidiary bodies of the UNFCCC and CBD to provide scientific and technical advice for a more coordinated approach[60].

- By tracking and aggregating progress made by non-state actors – complementary to, but not a substitute for, government efforts – the Ocean Breakthroughs can help build a more comprehensive assessment of overall progress on ocean-climate-biodiversity action.

MECHANISMS TO REPORT ON NATIONAL PROGRESS

Both the Paris Agreement and the Global Biodiversity Framework establish mechanisms for monitoring, reporting, and reviewing national progress, including national reports, voluntary peer reviews and the collection of information on non-state actor commitments.

- Through their Biennial Transparency Reports Frameworks, countries can highlight progress in implementing coastal and marine nature-based solutions and achieving NDC targets related to the ocean. Likewise, national reports on Global Biodiversity Framework progress can capture climate-related action, while increasing resilience through mitigation and adaptation.
- There are substantial opportunities to leverage insights collected through each of these reporting mechanisms to identify gaps, areas of overlap, and potential opportunities to strengthen synergies at the national level.

INDICATORS

Considering the substantial areas of overlap between the two agreements, a common set of indicators can strengthen synergies while easing the reporting burden. There is a particular window of opportunity to build these synergies as countries finalise several monitoring frameworks and reporting arrangements, such as:

- Negotiations on the Global Biodiversity Framework's monitoring framework are well-advanced, and only limited changes to the framework is expected at this stage[61]. Nevertheless, some gaps remain with regards to marine and coastal biodiversity. For instance, the ocean is not considered in the headline indicator of T10 on *Sustainable Management*. It is essential that indicators that are equally relevant to the Paris Agreement remain or are integrated into the framework (e.g., changes in plankton biomass and abundance, ocean acidification or level of erosion).
- The UNFCCC's Global Goal on Adaptation, under finalisation, could draw on the monitoring framework of the Global Biodiversity Framework. Several targets (e.g., T1 on *Spatial Planning*, T2 on *Restoration*, T3 on *Conservation*, T8 on *Climate Action*, T11 on *Nature's Contribution to People*) and associated indicators are relevant to the Goal's ecosystems and biodiversity targets.
- Other tools, such as the Data Reporting Tool for Multilateral Environmental Agreements (DaRT), exist to enhance these synergies. DaRT helps to organise and share information, data, and knowledge across conventions and reporting purposes. As such, it could be used to integrate climate and biodiversity monitoring and reporting tools which can complement one another[62].

Over the past few years, and more recently with the conclusion of the first UNFCCC Global Stocktake, the international community learnt valuable lessons in addressing global challenges, and the need for synergies is one of them. Moving forward, it is now necessary to translate these insights into concrete actions – focusing on implementation and accountability.

CONCLUSION

Building a Blue Thread across and beyond Climate and Biodiversity

Successfully addressing the interconnected climate and biodiversity crisis undoubtedly depends on the health of the ocean. At the crossroads of all challenges facing humanity today, the ocean can no longer be overlooked. From nature-based solutions to decarbonisation pathways, the ocean offers an array of solutions which are climate-smart and nature-positive, and can ensure an equitable and resilient future. However, the ocean is under threat and is reaching its limits to continue providing its vital services to the planet and all its inhabitants.

Strong political will is paramount and a show of strength is needed to course correct and deliver on the global goals the world has agreed upon. A decade after the adoption of the Paris Agreement and the inclusion of the ocean in its Preamble, the year 2025 could mark a new turning point for more integrated ocean-climate-biodiversity governance. Expectations are high with the overlapping revision cycles for national strategies under both the UNFCCC and CBD. Parties to both conventions have a singular opportunity to align their national strategies across biodiversity and climate, with ocean-based measures as a critical piece to connect the dots.

This report has outlined the numerous, but not exhaustive, opportunities that can already be leveraged to strengthen ocean-based solutions in national strategies. However, it is crucial that a formal mandate for collaboration is established, and a common, long-term strategy between the Climate and Biodiversity Conventions developed, for greater policy coherence. Without a definitive mandate from UN processes, coordination among conventions will likely remain inconsistent, resulting in the ocean being underused as a means to achieve global objectives.

As UN Secretary General's Special Envoy for the Ocean, Peter Thomson, urged, it is essential to "Bring it All Together" on the ocean's behalf so that action proceeds with cohesion and pace[63]. The blue thread does not stop at the climate and biodiversity conventions, and, ultimately, will need to spread its web to all relevant frameworks and agreements, including the BBNJ Agreement, IMO, Ramsar Convention, and International Seabed Authority, as well as regional bodies like the Regional Seas Organisations and Regional Fisheries Management Organisations.

With the international agenda filling up with an ever growing number of ocean conferences, the blue thread must also be weaved across these *rendez-vous*, with each one acting as a stepping stone for the next. To that end, the next UN Ocean Conference (9-13 June 2025, Nice, France) will invite the world to take stock of the progress made to deliver on the objectives of Sustainable Development Goal 14, Life below water.

One of the main expectations is for ocean governance to be accelerated[64]. While diplomatic efforts are underway, this will be the time for world leaders to demonstrate how to move from commitments to concrete action, and send a resounding signal that a healthy ocean is central to a sustainable future.

REFERENCES

1 Maljean-Dubois, S., and Wemaere, M., (2017). Climate Change and Biodiversity. Elisa Morgera and Jona Razzaque. Biodiversity and Nature Protection Law, III, Edward Elgar Publishing, 2017, Elgar Encyclopedia of Environmental Law series, 978-1-78347-424-0. Available here.

2 Rochette, J., et al. (2024). Integrating the ocean into the climate regime: Progress report and future prospects. Note, IDDRI. Available here.

3 Hazin, C., and Diz, D. (2024). Less Specific and More Comprehensive? An Analysis of How the Ocean Is Reflected in the Kunming-Montreal Global Biodiversity Framework. *Ocean Yearbook Online*, *38*(1), 323-373. Available here.

4 Northrop, E., et al. (2022). BLUE AMBITION LOOP: Achieving Ambitious 2030 Ocean-Climate Action Non-State Actor Ambition towards Net Zero and a Resilient Ocean Economy. Global Ocean Trust. UN Climate Change High-level Champions. Ocean & Climate Platform. UN Global Compact. World Resources Institute. Available here.

5 IPCC (2023). Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC, Geneva, Switzerland, 184 pp., Available here.

6 Ocean & Climate Platform. (2023) What ocean for tomorrow? Marine ecosystems in a changing climate, Insights from the IPCC's Sixth Assessment Report, 36 pages. Available here.

7 IPCC (2023). Summary for Policymakers. In: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.IPCC, Geneva, Switzerland, pp. 1-34. Available here.

8 UNFCCC. (2021). Decision 1/CP.26. Available here.

9 UNFCCC. (2023). Outcome of the first global stocktake. FCCC/PA/CMA/2023/L.17. Available here.

10 CBD. (2023). Submission of views and information on biodiversity and climate change. Available here.

11 COP28. (2024). Statement on Climate, People, and Nature. Available here.

12 Namely: Argentina, Australia, Bahamas, Barbados, Colombia, China, Dominican Republic, Grenada, Indonesia, Jamaica, Kenya, Mongolia, Myanmar, New Zealand, Papua New Guinea, Singapore, Solomon Islands, Zambia.

13 Northrop, E., et al. (2023). Opportunities to Strengthen Links between National Action on Biodiversity and Climate change. The Nature Conservancy & University of New South Wales Sustainable Development Reform Hub. Available here.

14 Khan, M. et al. (2022). Ocean-based Climate Action in New and Updated Nationally Determined Contributions. Working Paper. Washington, DC: World Resources Institute. Available here.

15 Northrop, E., et al. (2020). Enhancing Nationally Determined Contributions: Opportunities for Ocean-Based Climate Action Working Paper. Washington, DC: World Resources Institute. Available here.

16 Gallo, N. et al. (2017). Ocean commitments under the Paris Agreement. Nature Climate Change. Volume 7, pp. 833-838. Available here.

17 The High Level Panel for a Sustainable Ocean Economy, or "Ocean Panel", is a group of 19 world leaders committed to sustainably managing 100% of their national waters, advancing ocean-based solutions for climate action, biodiversity conservation, and economic growth.

18 This includes the following sectors: Marine-based Conservation and Restoration, Ocean-based Renewable Energy, Offshore Oil and Gas, Ocean-based Transport, Ocean-based Tourism, Ocean-based Food, mCDR and Carbon Capture.

19 Hoegh-Guldberg, O., Northrop, E. et al. (2023). The ocean as a solution to climate change: Updated opportunities for action. Special Report. Washington, DC: World Resources Institute. Available here.

20 Given that the tourism target of the Ocean Breakthroughs will only be released at UNFCCC COP29 (November 2024), the present document excludes this sector from its brief.

21 Northrop, E., et al. (2022). BLUE AMBITION LOOP: Achieving Ambitious 2030 Ocean-Climate Action Non-State Actor Ambition towards Net Zero and a Resilient Ocean Economy. Global Ocean Trust. UN Climate Change High-level Champions. Ocean & Climate Platform. UN Global Compact. World Resources Institute. Available here.

22 Guyana Draft NDC. (2023) pp. 4-7. Available here.

23 IUCN. (2020). Global Standard for Nature-based Solutions. A user-friendly framework for the verification, design and scaling up of NbS. First edition. Gland, Switzerland: IUCN. Available here.

24 Magnan, A.K., et al. (2018). Ocean-based measures for climate action. IDDRI, Policy Brief N°06/18. Available here.

25 UNFCCC. (2022). Sharm el-Sheikh Implementation Plan. Decision 1/CP.27. Available here.
UNFCCC. (2023). Outcome of the first global stocktake. Decision 1/CMA.5. Available here.

26 UNEP. (2022). The State of Finance for Nature. Time to act: Doubling investment by 2025 and eliminating nature-negative finance flows. Nairobi. Available here.

27 Jacquemont, J., et al. (2022). Ocean conservation boosts climate change mitigation and adaptation. One Earth. Volume 5. Issue 10, pp. 1126-1138. October 21, 2022. Available here.

28 Arafeh-Dalmau, N., et al. (2023). Integrating climate adaptation and transboundary management: Guidelines for designing climate-smart marine protected areas, *One Earth*, 6(11), pp. 1523–1541. Available here.

29 Lecerf, M., et al. (2023). Coastal and marine ecosystems as Nature-based Solutions in new or updated Nationally Determined Contributions. Available here.

30 Rochette, J., Cook, T., Janon, M., Sévin, M.-A. (2024). Charting the course: Elements of a roadmap for achieving the 30x30 target in the Ocean. Issue Brief N°05/24, IDDRI. Available here.

31 The Blue Transformation Roadmap is charting the path to a climate-resilient future for aquatic foods, anchored in three measurable climate-resilient objectives: (1) sustainably intensifying and expanding aquaculture as an essential mechanism to adapt to climate change; (2) effectively managing 100% of the fished resources in oceans, seas, rivers and lakes; and (3) developing and upgrading aquatic food value chains benefiting from circular economy principles. *Please see* FAO. (2022). Blue Transformation - Roadmap 2022–2030: A vision for FAO's work on aquatic food systems. Rome. Available here.

32 FAO. (2024) The fisheries and aquaculture adaptation finance gap. Available here.

33 Stanford Center for Ocean Solutions, WorldFish, FAO, Beijer Institute of Ecological Economics, CARE, and Environmental Defense Fund. (2024). Integrating blue foods into national climate strategies: Enhancing nationally determined contributions and strengthening climate action. Stanford Center for Ocean Solutions. Available here.

34 FAO. (underway) Policy brief on increasing climate resilience of the aquatic food sector through nature-based solutions.
35 The International Maritime Organisation is also responsible for shipping, since it addresses the safety and security of shipping and the prevention of marine and atmospheric pollution by ships.
36 UN Global Compact. (2024) Net-Positive Biodiversity in Offshore Renewable Energy. Minimum Criteria and Recommendations for Action. Ocean Stewardship Coalition. Available here.
37 Orsted. (2023). Uniting action on climate and biodiversity. How the green energy transition can address both crises. Available here.
38 IMO. (2020). Fourth Greenhouse Gas Study 2020. Available here.
39 Domestic shipping occurs in national waters and therefore contributes to greenhouse gas emissions within a country's borders. As such, it should be accounted for in the country's national inventories and regulated under its NDC.
40 Ocean Conservancy (2023). Ocean-based Climate Solutions in Nationally Determined Contributions. June 2023 Update. Available here.
41 Shipping Pact for Nature and People (2023). Navigating the Future: Bridging Shipping, Biodiversity and Decarbonisation. Available here.
42 IMO. (2017). Resolution of the Marine Environment Protection Committee. Designation of the Tubbataha Reefs Natural Park as a Particularly Sensitive Sea Area. MEPC 71/17.Add.1. Available here.
43 EandT Engineering. (2022). AI system that keeps ships from hitting whales launches off California. Available here.
44 Bakhtary, H., et al. (2023). WWF. Breaking Silos. Enhancing synergies across NDCs and NBSAPs. Available here.
45 Picourt, L., et al. (2021), Swimming the talk: How to strengthen collaboration and synergies between the Climate and Biodiversity Conventions?, Policy brief, May 2021, Ocean & Climate Platform, p.1-14. Available here.
46 Bakhtary, H., et al. (2023).
47 Rochette, J., et al. (2024).
48 Nairobi Work Programme (2022).
49 CBD Secretariat (2024). Strategic review and analysis of the programme of work on marine and coastal biodiversity in the context of the Kunming-Montreal Global Biodiversity Framework. CBD/SBSTTA/26/INF/9/Rev.1. Available here.
50 OECD (2020). A Comprehensive Overview of Global Biodiversity Finance. Final report. Available here.
51 Black, S., et al. (2023). Fossil Fuel Subsidies Surged to Record $7 Trillion. International Monetary Fund. Available here.
52 Northrop, E., et al. (2020). Enhancing Nationally Determined Contributions: Opportunities for Ocean-Based Climate Action Working Paper. Washington, DC: World Resources Institute. Available here.
53 Nairobi Work Programme (2022).
54 OECD (2020). Reframing Financing and Investment for a Sustainable Ocean Economy. OECD Environment Policy Papers, No. 22, OECD Publishing, Paris. Available here.
55 The Mangrove Breakthrough Financial Roadmap (2023). Available here.
56 Cook, K., Rosenbaum, K. L. and Poulain, F. (2021). Building resilience to climate change and disaster risks for small-scale fisheries communities. A human-rights-based approach to the implementation of Chapter 9 of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication. Rome, FAO. Available here.
57 Claudet, J., Blythe, J., Gill, D.A. *et al.* Advancing ocean equity at the nexus of development, climate and conservation policy. *Nat Ecol Evol* 8, 1205–1208 (2024). Available here.
58 Picourt, L., et al. (2021).
59 *ibid*
60 Bakhtary, H., et al. (2023).
61 CBD (2024). Monitoring framework for the Kunming-Montreal Global Biodiversity Framework. Draft recommendation submitted by the Chair. CBD/SBSTTA/26/L.10. Available here.
62 Bakhtary, H., et al. (2023).
63 Friends of Ocean Action (2024). Bring it All Together for the Ocean. Available here.
64 Ocean & Climate Platform, The Varda Group. (2023). A Call to all the Voices of the Ocean: Synthesis Report, 24 pages. Available here.

BBNJ	**Biodiversity Beyond National Jurisdiction**
CBD	**Convention on Biological Diversity**
COP	**Conference of the Parties**
DaRT	**Data Reporting Tool for Multilateral Environmental Agreements**
FAO	**Food and Agriculture Organisation**
GCF	**Green Climate Fund**
GEF	**Global Environment Facility**
GW	**Gigawatt**
IMO	**International Maritime Organisation**
IPBES	**Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services**
IPCC	**Intergovernmental Panel on Climate Change**
mCDR	**Marine Carbon Dioxide Removal**
LCDS	**Low Carbon Development Strategy (Guyana's)**
MPA	**Marine Protected Area**
NAP	**National Adaptation Plan**
NBSAP	**National Biodiversity Strategy and Action Plan**
NDC	**Nationally Determined Contributions**
PSSA	**Particularly Sensitive Sea Area**
SOP	**Sustainable Ocean Plans**
T	**Target**
UNFCCC	**United Nations Framework Convention on Climate Change**
UNOC	**United Nations Oceans Conference**

ACKNOWLEDGMENTS

This report was co-authored by Marine Lecerf, Loreley Picourt (Ocean & Climate Platform) and Maddie Millington-Drake (Blue Marine Foundation).

We express our deepest thanks to the experts who supported the writing team and contributed to the analysis, particularly: Dorothee Herr, Hanna Ulatowski (GIZ), Anete Berzina-Rodrigo, Heidi Weiskel (International Union for the Conservation of Nature), Carole Martinez (MedPAN), Nathan Mesnildrey, Sarah Hertel (NDC Partnership), Anna-Marie Laura, Whitney Berry (Ocean Conservancy), Rennie Meyers (Ørsted), Anelise Zimmer, Thomas Hickey (Pew Charitable Trust), Matthew Frost (Plymouth Marine Laboratory), Emily Goodwin, Lisa Schindler-Murray (Rare), Angélique Pouponneau, Eliza Northrop (Sustainable Development Reform Hub of the University of New South Wales), Andreas Hansen, Emily Langley, Luz Gil, Ximena Apestegui (The Nature Conservancy), Julika Tribukait, Pauli Merriman, Shirley Matheson (WWF).

The co-authors would also like to thank the following experts for their external review, expert opinion and valuable contributions: Carly Siege, Jill Hamilton, Madeleine Fry, Preeya Rampersaud (Conservation International), Katharine Palmer (Climate Champions Team), Xuechan Ma (Food and Agriculture Organization of the United Nations), Julien Rochette (IDDRI), Daniela Diz (Lyell Centre – Heriot-Watt University UK), Simon Walmsley (United Nations Foundation), Tom Pickerell (World Resources Institute).

Disclaimer: The opinions and suggestions provided in this report are solely those of the authors and do not necessarily reflect the views and policies of the organisations involved.

Photo credits

Cover Photo: Samuel Chan
Illustration: Lygie Harmand and Nathalie Techer
Other photos: istock, AIIB, Kim Cuong Nguyen Trange

Recommended Citation

Lecerf, M., Millington-Drake, M., and Picourt, L., (2024),
Blue Thread: Aligning National Climate and Biodiversity Strategies,
p1-13. Ocean & Climate Platform, Blue Marine Foundation.

The publication of this document was made possible through the generous support of: the French Agency for Development (AFD), the French Office for Biodiversity (OFB), the Flotilla Foundation, the French Ministry of Ecological Transition, Energy, Climate and Risk Prevention (MTE), and the Ocean Resilience & Climate Alliance (ORCA).