



Integrating further the ocean-climate-biodiversity nexus into the Post-2020 Global Biodiversity Framework

***Position Paper: How to further reflect ocean, climate and biodiversity interactions in
Targets 1, 2, 3, 5, 8, 18 and 19 of the first draft of the Post-2020 Global Biodiversity Framework?***

From our coasts to the abyssal depths, the ocean is undoubtedly the **largest living space on the planet**, with just under 280,000 species listed¹. Yet, it is a space that remains **largely unexplored**: it is estimated that it could be home to between 500,000 and over 10 million different species^{2,3}. At the heart of the life supporting package, the ocean and coastal areas provide **essential services** to sustain life on Earth^{4,5,6}, including climate regulation and enhanced climate resilience.

The ocean is at the **crossroads of all major challenges** facing humanity today, and climate change and biodiversity loss are no exception⁷. For that reason, it is necessary to **jointly address** the decline in ocean health, climate change and biodiversity loss to successfully overcome these challenges⁸.

With its mandate covering all life on Earth, the Convention on Biological Diversity (CBD) makes no distinction between land and the ocean. However, ocean-related issues have received little attention within the **negotiations for the Post-2020 Global Biodiversity Framework**⁹, which in turn is reflected in its goals and targets. The ocean is thus mostly **included implicitly** in the provisions of the draft, and the risk is that ocean-specific issues are **overshadowed** by this inclusive approach.

This Post-2020 Global Biodiversity Framework will be a milestone in global environmental governance, and the ocean-climate-biodiversity nexus must be addressed. To that end, this policy brief takes a deep dive on a selection of important post-2020 targets and provides recommended textual edits. In particular, it will focus on spatial **targets 1 ‘Spatial Planning’, 2 ‘Ecosystem Restoration’, 3 ‘Conservation’, 5 ‘Wild Species’, and 8 ‘Climate Change’** — since they are particularly relevant to preserving the integrity of threatened marine ecosystems, and means of implementation with **targets 18 on ‘Harmful incentives’, and 19 ‘Financial resources’** — as the success of the upcoming framework will largely depend on funding.

→ New language proposed is in **bold blue**, while deletions are ~~striketrough~~.

¹OCEAN AND CLIMATE (2019). Scientific Fact Sheets. Ocean, biodiversity and climate. p59.

²Ifremer (2017). Biodiversité marine.

³Secretariat of the Convention on Biological Diversity (2018). The world’s oceans contain a vast amount of interesting species.

⁴IPCC (2019). Special Report on the Ocean and Cryosphere in a Changing climate. Summary for Policymakers.

⁵OCEAN AND CLIMATE (2016). Fact sheets, Second Edition. Marine and Coastal Ecosystem Services. p10.

⁶IPCC (2022). Chapter 3: Oceans and Coastal Ecosystems and their Services. Sixth Assessment Report.

⁷Claudet J (2021). The seven domains of action for a sustainable Ocean.

⁸Picourt, L., et al. (2021), Swimming the talk: How to strengthen collaboration and synergies between the Climate and Biodiversity Conventions?

⁹Schumm R., et al. (2021). Giving greater attention to the ocean in the development and implementation of the Post-2020 Global Biodiversity Framework.

Target 1: Spatial Planning

Ensure that all land and sea areas globally are under integrated biodiversity-inclusive spatial planning addressing land- and sea-use change, **based on the ecosystem approach, including identifying priority ecosystems for restoration and conservation, improving their connectivity**, retaining existing intact and wilderness areas, **and developed under rights-based, just and equitable governance principles**.

- The **ecosystem approach** is a strategy for the integrated management of biodiversity that promotes conservation and sustainable use in a socially just and equitable way, and tailored to local socio-ecological conditions¹⁰. The ecosystem approach has the potential to protect Indigenous peoples and local communities against the increasingly growing impacts of climate change¹¹. Moving forward, it is essential for spatial planning to be not only biodiversity-inclusive, but also **climate-ready**¹².
- Spatial plans, when supported by robust monitoring and data, can play a role in **prioritizing and planning actions**, ensuring they contribute to the achievement of outcomes as effectively and efficiently as possible. To that end, science-based spatial plans must be **adaptive and flexible**, coordinating responses, at ecologically-relevant levels, could be helpful to ensure integrated management of ecosystems. Local stakeholder engagement¹³ is also critical for successful implementation of spatial plans of all sizes, including locally-led Marine Protected Areas (MPAs).

Target 2: Ecosystem Restoration

Ensure that at least 20% of degraded, **damaged or destroyed** freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them, **securing ecosystem resilience** and focusing on priority ecosystems, **including carbon-rich ecosystems, while mitigating the drivers of ecosystem degradation**.

- Ecosystem restoration encompasses a wide variety of approaches, from active restoration to the removal of the degradation drivers, including through conservation. Restoration as a response to degradation needs to address its underlying causes¹⁴, adopting a holistic approach and enhancing policy coherence.
- The efforts to protect and restore habitats should not only benefit biodiversity and people, but also contribute to **climate mitigation and adaptation**. Priority ecosystems must be identified, including based on their carbon storage and sequestration capacity, and ability to act as buffers against climate impacts.

Target 3: Conservation

Ensure that at least 30% globally of land areas and **at least 30% globally** of sea areas, especially areas of particular importance for biodiversity, **such as carbon-rich ecosystems, and its contributions to people, including Ecologically or Biologically Significant Areas**, are conserved through ~~effectively and equitably managed~~ ecologically representative, well-connected, **equitable and effective networks** systems of protected areas — **with a third of Marine Protected Areas under high and/or full protection** — or other effective area-based conservation measures, and integrated into the wider landscapes and seascapes, **and ensure recognition and protection of Indigenous Peoples', local communities' and traditional resource users' title, tenure, access, and resource rights to land and ocean and prioritises locally-led or collaborative governance and management systems**

¹⁰IUCN (2019). Governance for ecosystem-based adaptation.

¹¹IPCC (2014). Fifth Assessment Report (AR5). p14.

¹²Pinsky, M.L., et al. (2020). Ocean planning for species on the move provides substantial benefits and requires few trade-offs.

¹³Dawson, N. M., et al. (2021). The role of Indigenous peoples and local communities in effective and equitable conservation.

¹⁴UNEP (2021). Becoming #GenerationRestoration: Ecosystem restoration for people, nature and climate.

- Overall, protecting and conserving 30% globally of land and sea areas by 2030 will **not be sufficient** to achieve the 2050 vision^{15,16,17}. In addition, **distribution**, including between land and sea areas, remains **too vague**. Each country may need to prioritize action on the set of outcome-based targets¹⁸, based on local realities and differential capabilities, ensuring that the sum of national targets — **adequately and equitably** disaggregated across scales — meets the global ambition.
- Protection areas are beneficial when effectively-managed and properly sited — this includes fully or highly protected MPAs for the marine environment. To be operational, this target therefore needs more precision on the **level of protection¹⁹ and quality standards** for management¹⁹ and on the **scientific designation process of protected areas to embrace climate change²⁰**.
- Carbon-rich ecosystems, such as “blue carbon ecosystems” (e.g., mangroves, saltmarshes, seagrasses), should be prioritised due to their high carbon storage and capacity^{21,22} for its ability to support the needs of people and nature, including for food security and climate resilience. To that end, to achieve a balanced approach with appropriate level of protection and sustainable use for local communities, it is necessary to complement highly protected areas with managed areas, such as Other Effective Area-based Conservation Measures (OECMs). Ecologically or Biologically Significant Areas (EBSAs) could also be used as a useful tool to identify the areas to protect.

Target 5: Wild species

Ensure that the **direct and indirect** harvesting, trade and use of wild species, **including wild fisheries and mariculture**, is sustainably managed, legal, **effectively regulated and enforced**, and safe for human health, **while safeguarding the customary sustainable use by Indigenous peoples and local communities**.

- In the 2011-2020 Strategic Plan for Biodiversity and its 20 Aichi Targets²³, Target 6 was specifically dedicated to **sustainable fisheries management**. Global Biodiversity Outlook (GBO-5) clearly indicated that the target **has not been achieved** (*high confidence*), considering, among others, that a third of marine fish stocks globally are overfished²⁴ — a higher proportion than ten years ago; and information is lacking for many others²⁵.
- In addition to the **pressure of intensive legal overfishing²⁶**, fish stocks are also threatened by **illegal, unreported and unregulated (IUU)** fishing, which greatly undermines efforts to conserve and sustainably manage fisheries. A complex network of agreements exist to promote sustainable fisheries management and prevent or eliminate IUU fishing. Yet, many weaknesses and loopholes remain, alongside a clear lack of enforcement. Legislation must therefore be **effectively enforced** on fisheries. In addition, harmful fisheries subsidies must be stopped²⁷.

¹⁵IPCC (2022). Sixth Assessment Report. Climate Change 2022: Impacts, Adaptation and Vulnerability. Chapter 2.

¹⁶Gurney, G.G., et al, (2021). Biodiversity needs every tool in the box: use OECMs.

¹⁷CBD/WG2020/3/3. (2021). First draft of the Post-2020 Global Biodiversity Framework. Note by the Co-Chairs.

¹⁸Visconti, P., et al. (2019). Protected area targets post-2020.

¹⁹Gorud-Colvert, K., et al, (2021). The MPA Guide: A framework to achieve global goals for the ocean.

²⁰Arneth, A., et. al (2020). Post-2020 biodiversity targets need to embrace climate change.

²¹Pörtner, H.O., et al. (2021). IPBES-IPCC co-sponsored workshop report on biodiversity and climate change.

²²Rankovic A, et al.(2021). Protecting the ocean, mitigating climate change? State of the evidence and policy recommendations.

²³Strategic Plan for Biodiversity 2011-2020 and the Aichi Targets. Living in Harmony with Nature.

²⁴Secretariat of the Convention on Biological Diversity (2020) Global Biodiversity Outlook 5.

²⁵Crespo, G.O., et al. (2019). High-seas fish biodiversity is slipping through the governance net.

²⁶FAO (2020). The State of World Fisheries and Aquaculture 2020. Sustainability in action.

²⁷Sumaila, U.R., et al. (2021a). WTO must ban harmful fisheries subsidies.

Target 8: Climate change

Minimize the impacts of climate change **and resulting ocean change** on biodiversity, contribute to mitigation and adaptation through **urgent greenhouse gas emissions reductions, and** ecosystem-based approaches — **including through coastal and marine Nature-based Solutions, such as climate-smart Marine Protected Areas** — contributing at least 10 GtCO₂e per year to global mitigation efforts **and securing ecosystem resilience**, and ensure that all mitigation and adaptation efforts **are biodiversity-positive or, at least, biodiversity-neutral and that the rights of Indigenous peoples and local communities are respected.** ~~avoid negative impacts on biodiversity~~

- Halting and ultimately reversing marine biodiversity loss cannot be achieved through conservation and restoration alone. There is a growing body of evidence showing that it will require **transformative change** within societies, supported by behaviour-centered solutions, to **stop all drivers of biodiversity loss**^{28,29}, including climate change which has a particularly long-lasting impact on marine biodiversity. As it stands, the challenges of dealing with increasing climate impacts are **not sufficiently well reflected** in the goals and targets of the framework.
- The Kunming Declaration³⁰, which paves the way for the COP 15 negotiations, highlighted that ecosystem-based approaches do not replace the priority actions needed to **urgently reduce greenhouse gas (GHG) emissions** in a way that is consistent with the goals of the **Paris Agreement**. Limiting global warming to 1.5°C is indeed crucial for attaining any ambitious goals for biodiversity.
- Climate change has a **long lasting effect** on biodiversity, resulting in major **climate debts**. A climate debt is currently building up in the marine environment through ocean acidification, and is predicted to have significant negative impacts on marine life³¹ and human livelihoods including food security (i.e., impacts to fisheries and aquaculture, like shellfish). Yet, environmental and biological changes occur on longer timescales below the ocean, which prolongs the **recovery of marine ecosystems**. As such, it is crucial to mention the need to build **ecosystem resilience**, and especially for marine ecosystems.
- Implementing and scaling-up **marine and coastal Nature-based Solutions**³² can act as a multi-purpose solution for climate mitigation and adaptation, while strengthening ecosystem resilience. Blue carbon ecosystems (i.e, mangroves, seagrasses, and salt marshes found within the territorial seas), with their high carbon sequestration and storage capacity, have the potential to significantly contribute to mitigation efforts^f. They also will greatly contribute to adaptation needs, given that healthy and intact coastal ecosystems can protect coastal communities from increasing climate impacts (i.e. extreme weather events, coastal erosion and sea level rise) and improve local livelihoods, like for small-scale fishers.

²⁸CBD/WG2020/3/INF/11. (2022). Expert input to the Post-2020 Global Biodiversity Framework: Transformative actions on all drivers of biodiversity loss are urgently required to achieve the global goals by 2050.

²⁹IPCC (2022)

³⁰Kunming Declaration (2020). Declaration from the High-Level Segment of the UN Biodiversity Conference 2020 (Part 1) under the theme “Ecological Civilization: Building a Shared Future for All Life on Earth”.

³¹CBD/WG2020/3/INF/11. (2022). Expert input to the Post-2020 Global Biodiversity Framework: Transformative actions on all drivers of biodiversity loss are urgently required to achieve the global goals by 2050.

³²Magnan, A.K. et al. (2018). Ocean-based measures for climate action.

Target 18: Harmful incentives

Redirect, repurpose, reform or eliminate **direct and indirect** incentives **and subsidies** harmful for biodiversity, in a **socially** just and equitable way, reducing them by at least US\$ **640** ~~500~~ billion per year, ~~including all of the most harmful subsidies~~, and ensure that incentives, including public and private economic and regulatory incentives **and subsidies**, are ~~either~~ positive or **at least** neutral for biodiversity.

- Environmental **harmful subsidies** encourage unsustainable production or consumption, harming nature by exhausting natural resources and degrading global ecosystems^{33,34,35}. These subsidies are prevalent in a wide range of sectors³⁶, including fisheries. These sectors account for the **vast majority of GHG emissions and impact ecosystems**³⁷. Tackling jointly climate change and biodiversity loss requires eliminating and/or reforming both direct and indirect subsidies, as well as other forms of incentives.
- A 2022 study showed that the world is spending at least \$1.8 trillion every year, equivalent to 2% of global GDP, on subsidies that are driving the destruction of ecosystems and species extinction³⁸. The study proved that, as of 2021, governments spent **US\$ 640 billion per year** in support for fossil fuels. Phasing out fossil fuel subsidies — which encourage greater fossil fuel production and consumption, and thus increase GHG emissions — could significantly contribute to mitigating climate change³⁹.

Target 19: Financial resources

Increase financial resources from all sources to at least US\$ **967** ~~200~~ billion per year, including new, additional and effective financial resources, increasing by at least US\$ **500** ~~10~~ billion per year international financial flows to developing countries, leveraging private finance, and increasing domestic resource mobilization, taking into account national biodiversity finance planning, and strengthen capacity-building and technology transfer and **technical and** scientific cooperation, to meet the needs for implementation, commensurate with the ambition of the goals and targets of the framework.

- The objective of US\$ 200 billion per year will not be sufficient, since the **biodiversity financing gap** amounts to an average of US\$ 711 billion per year (i.e. between US\$ 598 billion and US\$ 824 billion per year). As of 2019, current spending on biodiversity conservation are estimated between \$124 and \$143 billion per year, against a total **biodiversity protection need** of between \$722 and \$967 billion per year⁴⁰.
- Biodiversity is unevenly distributed around the globe, and developing countries contain most of the world's biodiversity⁴¹. As a result, and aligning with the AVAAZ position, at least half of the financing needs (i.e. approx. US\$ 500) should flow to developing countries, especially the megadiverse ones.

³³Koplow, D., Steenblik, R. (2022). Protecting Nature by Reforming Environmentally Harmful Subsidies: The Role of Business.

³⁴Sumaila, U.R., et al. (2021a).

³⁵Sumaila, U.R (2021b). Financing a sustainable ocean economy. Nature.

³⁶GEF (2021). Fast-tracking action in support of the post-2020 global biodiversity framework.

³⁷Koplow, D., Steenblik, R. (2022). Protecting Nature by Reforming Environmentally Harmful Subsidies: The Role of Business.

³⁸ibid

³⁹Merrill L, et al. (2015). Tackling fossil fuel subsidies and climate change. Levelling the energy playing field.

⁴⁰Deutz, A., et al. (2020). Financing Nature: Closing the global biodiversity financing gap.

⁴¹Adenle, A. A, Stevens, C, and Bridgewater, P. (2014). Global Conservation and Management of Biodiversity in Developing Countries.

Table 1. Alternatives to Targets 1, 2, 3, 5, 8, 18 and 19 of the Post-2020 Global Biodiversity Framework

Targets	Targets in the first draft	Alternatives
Reducing threats — Targets 1 to 8		
Target 1	Ensure that all land and sea areas globally are under integrated biodiversity-inclusive spatial planning addressing land- and sea-use change, retaining existing intact and wilderness areas	Ensure that all land and sea areas globally are under integrated biodiversity-inclusive spatial planning addressing land- and sea-use change, based on the ecosystem approach, including identifying priority ecosystems for restoration and conservation, improving their connectivity , retaining existing intact and wilderness areas, and developed under rights-based, just and equitable governance principles.
Target 2	Ensure that at least 20% of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems.	Ensure that at least 20% of degraded, damaged or destroyed freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them, securing ecosystem resilience and focusing on priority ecosystems, including carbon-rich ecosystems, while mitigating the drivers of ecosystem degradation.
Target 3	Ensure that at least 30% globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	Ensure that at least 30% globally of land areas and at least 30% globally of sea areas, especially areas of particular importance for biodiversity, such as carbon-rich ecosystems, and its contributions to people, including Ecologically or Biologically Significant Areas , are conserved through effectively and equitably managed, ecologically representative, well-connected, equitable and effective networks systems of protected areas — with a third of Marine Protected Areas under high and/or full protection — or other effective area-based conservation measures, and integrated into the wider landscapes and seascapes, and ensure recognition and protection of Indigenous Peoples', local communities' and traditional resource users' title, tenure, access, and resource rights to land and ocean and prioritises locally-led or collaborative governance and management systems.
Target 5	Ensure that the harvesting, trade and use of wild species is sustainable, legal, and safe for human health.	Ensure that the direct and indirect harvesting, trade and use of wild species, including wild fisheries and mariculture , is sustainably managed, legal, effectively regulated and enforced , and safe for human health, while safeguarding the customary sustainable use by Indigenous peoples and local communities.
Target 8	Minimize the impact of climate change on biodiversity, contribute to mitigation and adaptation through ecosystem-based approaches, contributing at least 10 GtCO ₂ e per year to global mitigation efforts, and ensure that all mitigation and adaptation efforts avoid negative impacts on biodiversity.	Minimize the impacts of climate change and resulting ocean change on biodiversity, contribute to mitigation and adaptation through urgent greenhouse gas emissions reductions, and ecosystem-based approaches — including through coastal and marine Nature-based Solutions, such as climate-smart Marine Protected Areas — contributing at least 10 GtCO ₂ e per year to global mitigation efforts and securing ecosystem resilience , and ensure that all mitigation and adaptation efforts are biodiversity-positive or, at least, biodiversity-neutral and that the rights of Indigenous peoples and local communities are respected. avoid negative impacts on biodiversity
Tools and solutions — Targets 14 to 21		
Target 18	Redirect, repurpose, reform or eliminate incentives harmful for biodiversity, in a just and equitable way, reducing them by at least US\$ 500 billion per year, including all of the most harmful subsidies, and ensure that incentives, including public and private economic and regulatory incentives, are either positive or neutral for biodiversity.	Redirect, repurpose, reform or eliminate direct and indirect incentives and subsidies harmful for biodiversity, in a just and equitable way, reducing them by at least US\$ 640 billion per year, and ensure that incentives, including public and private economic and regulatory incentives and subsidies , are positive or at least neutral for biodiversity.
Target 19	Increase financial resources from all sources to at least US\$ 200 billion per year, including new, additional and effective financial resources, increasing by at least US\$ 10 billion per year international financial flows to developing countries, leveraging private finance, and increasing domestic resource mobilization, taking into account national biodiversity finance planning, and strengthen capacity-building and technology transfer and scientific cooperation, to meet the needs for implementation, commensurate with the ambition of the goals and targets of the framework.	Increase financial resources from all sources to at least US\$ 967 billion per year, including new, additional and effective financial resources, increasing by at least US\$ 500 billion per year international financial flows to developing countries, leveraging private finance, and increasing domestic resource mobilization, taking into account national biodiversity finance planning, and strengthen capacity-building and technology transfer and technical and scientific cooperation , to meet the needs for implementation, commensurate with the ambition of the goals and targets of the framework.

Building the rationale for greater synergies between the climate and biodiversity regimes

Despite great compatibility and strong potential for complementarity from the outset, cooperation mechanisms between the **CBD and its sister convention**, the United Nations Framework Convention on Climate Change (UNFCCC), remain fairly **weak and insufficient**. There is still no common vision or long-term strategy between the climate and biodiversity regimes. However, a movement has emerged over the last couple of years to bridge these gaps and overcome this lingering **tendency to work in silos**.

This mobilisation has resulted in a **greater emphasis on Nature**, including in the outcomes of UNFCCC COP 26 (1-12 November 2021, Glasgow). The **preamble of the COP's final decision**⁴² noted “the importance of ensuring the integrity of all ecosystems”, including the ocean and the cryosphere, and recognised “the interlinked global crises of climate change and biodiversity loss”. It further acknowledged “the critical role of protecting, conserving and restoring nature and ecosystems in delivering benefits for climate adaptation and mitigation, while ensuring social and environmental safeguards”.

Notwithstanding those positive signals, serious challenges remain. **Building synergies** among the climate and biodiversity regimes will be a decisive move towards effective and **holistic environmental governance**, and the ocean, at the heart of the life-supporting system, clearly has a key role to play in this reconciliation.⁴³ Transformational change is necessary to address biodiversity loss and climate change at once, and requires action across all levels from individuals to national governments. As stated in the recent IPCC report⁴⁴, “*The drivers of transformation are multi-dimensional, involving social, cultural, economic, environmental, technical and political processes the combination of which create the potential for abrupt and systemic change, the stability of entrenched and interlocked power structures and the importance of individual beliefs and behaviours.*” The Post-2020 Global Biodiversity Framework, which is intended as a **framework for all**, could be **used as a reference** and mobilised in the various environmental foras.

The monitoring framework and indicators

Greater consideration of marine issues could also be sought at the level of the implementation, through the **monitoring framework**⁴⁵. Even to this day, the monitoring of marine species and ecosystems is under represented, and marine data continues to lag compared to terrestrial areas, resulting in major data gaps⁴⁶. However, despite these gaps and limitations, **suitable indicators** and **reporting mechanisms** exist to monitor the state of marine biodiversity, measuring marine progress. They are already used in the context of other ocean-related conventions and processes, and could be further included in the monitoring framework.

The negotiations should seek synergies between these different existing processes in line with the “**collect one use many times**” approach, bringing together the different reporting exercises and thus limiting the burden of reporting. The monitoring framework could **complement these exercises** to avoid overlapping and duplication. Identifying agreed indicators and data sources supporting the targets of the framework will ensure the development of data products to effectively **support the decision making process**.

Linking these indicators to those already identified by other processes at the national level have the potential to greatly enhance **synergies among conventions** at the global level. As such, specifically mentioning ocean-related conventions in Section J “Responsibility and transparency” of the post-2020 Global Biodiversity Framework could also enhance synergies with other multilateral processes on the ocean.

⁴²UNFCCC/Decision 1/CP.26. (2021).

⁴³Picourt, L., et al (2021)

⁴⁴IPCC (2022)

⁴⁵CBD/WG2020/3/INF/4. (2021). Marine Input to Headline Indicators of the draft post-2020 Global Biodiversity Framework.

⁴⁶Miloslavich, P., et al. (2018). Essential ocean variables for global sustained observations of biodiversity and ecosystem changes.

References

- Adenle, A. A, Stevens, C and Bridgewater, P. (2014). Global Conservation and Management of Biodiversity in Developing Countries: An Opportunity for a New Approach. *Environmental Science & Policy* 45: 104–108. Available [here](#).
- Arnth, A., et al (2020). Post-2020 biodiversity targets need to embrace climate change. *Proc. Natl. Acad. Sci. U. S. A.* 117.. Available [here](#).
- CBD/WG2020/3/3. (2021). First draft of the Post-2020 Global Biodiversity Framework. Note by the Co-Chairs. Secretariat of the Convention on Biological Diversity. Available [here](#).
- CBD/WG2020/3/3/Add.1. (2021). Proposed headline indicators of the monitoring framework for the Post-2020 Global Biodiversity Framework. Note by the Executive Secretary. Secretariat of the Convention on Biological Diversity. Available [here](#)
- CBD/WG2020/3/6. (2021). Reflections by the co-chairs following the first session of the third meeting of the working group on the Post-2020 Global Biodiversity Framework. Secretariat of the Convention on Biological Diversity. Available [here](#).
- CBD/WG2020/3/CG/2/Report. (2021). Report by the co-leads of Contact Group 2. Targets 1 to 8. Available [here](#).
- CBD/WG2020/3/INF/4. (2021). Marine Input to Headline Indicators of the draft post-2020 Global Biodiversity Framework. Note by the Executive Secretary. Secretariat of the Convention on Biological Diversity. Available [here](#).
- CBD/WG2020/3/INF/11. (2022). Expert input to the Post-2020 Global Biodiversity Framework: Transformative actions on all drivers of biodiversity loss are urgently required to achieve the global goals by 2050. Available [here](#).
- Crespo, G.O., et al. (2019). High-seas fish biodiversity is slipping through the governance net. *Nat. Ecol. Evol.* 3, 1273–1276. Available [here](#).
- Dawson, N. M., et al. (2021). The role of Indigenous peoples and local communities in effective and equitable conservation. *Ecology and Society* 26(3):19. Available [here](#).
- Deutz, A., et al. (2020). Financing Nature: Closing the global biodiversity financing gap. The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability. Available [here](#).
- FAO. (2020). The State of World Fisheries and Aquaculture 2020. Sustainability in action. Rome. Available [here](#).
- GEF (2021). Fast-tracking action in support of the post-2020 global biodiversity framework. Available [here](#).
- Grorud-Colvert, K., et al, (2021). The MPA Guide: A framework to achieve global goals for the ocean. *Science* (80-). 373. Available [here](#).
- Gurney, G.G., et al, (2021). Biodiversity needs every tool in the box: use OECMs. *Nature* 595, 646–649. Available [here](#).
- Ifremer (2017). Biodiversité marine. Available [here](#).
- IPBES (2019). Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES secretariat, Bonn, Germany. Available [here](#).
- IPCC (2014). Fifth Assessment Report (AR5). p14. Available [here](#).
- IPCC (2019). Summary for Policymakers. In: IPCC Special Report on the Ocean and Cryosphere in a Changing Climate. In press. Available [here](#).
- IPCC (2022). Sixth Assessment Report. Climate Change 2022: Impacts, Adaptation and Vulnerability. Chapter 2. Available [here](#).
- IUCN (2019) Governance for ecosystem-based adaptation. IUCN Environmental Policy and Law Paper No. 89. Published by: IUCN, Gland, Switzerland Available [here](#).
- Koplow, D., Steenblik, R. (2022). Protecting Nature by Reforming Environmentally Harmful Subsidies: The Role of Business. Available [here](#).
- Kunming Declaration (2021). Declaration from the High-Level Segment of the UN Biodiversity Conference 2020 (Part 1) under the theme “Ecological Civilization: Building a Shared Future for All Life on Earth”. Available [here](#).
- Merrill L, et al. (2015). Tackling fossil fuel subsidies and climate change. Levelling the energy playing field. Global Subsidies Initiative. International Institute for Sustainable Development; Available [here](#).
- Miloslavich, P., et al. (2018). Essential ocean variables for global sustained observations of biodiversity and ecosystem changes. *Global Change Biology* 105(6332):10456–18. Available [here](#).
- OCEAN AND CLIMATE (2016). Fact sheets, Second Edition. Marine and Coastal Ecosystem Services. p10. Available [here](#).
- OCEAN AND CLIMATE (2019). Scientific Fact Sheets. Ocean, biodiversity and climate. p59. Available [here](#).
- 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](#).
- Pinsky, M.L., et al. (2020). Ocean planning for species on the move provides substantial benefits and requires few trade-offs. *Sci. Adv.* 6, eabb8428. Available [here](#).
- Pörtner, H.O., et al. (2021) IPBES-IPCC co-sponsored workshop report on biodiversity and climate change. IPBES and IPCC. Available [here](#).
- Rankovic A, et al.(2021). Protecting the ocean, mitigating climate change? State of the evidence and policy recommendations. Policy Brief. Ocean & Climate Platform. p1-6. Available [here](#).
- Secretariat of the Convention on Biological Diversity (2020). Global Biodiversity Outlook 5. Montreal. Available [here](#).
- Secretariat of the Convention on Biological Diversity (2018). The world’s oceans contain a vast amount of interesting species. Available [here](#).
- Schumm R., et al. (2021). Giving greater attention to the ocean in the development and implementation of the Post-2020 Global Biodiversity Framework. IDDRI, Study N°04/21. Available [here](#).
- Strategic Plan for Biodiversity 2011-2020 and the Aichi Targets. Living in Harmony with Nature. Available [here](#).
- Sumaila, U.R (2021). Financing a sustainable ocean economy. *Nature*. Available [here](#).
- Sumaila, U.R., et al. (2021). WTO must ban harmful fisheries subsidies. *Science* (80-). 374, 544. Available [here](#).
- UNEP (2021). Becoming #GenerationRestoration: Ecosystem restoration for people, nature and climate. Nairobi. Available [here](#).
- UNFCCC/Decision 1/CP.26. (2021). Available [here](#).
- Visconti, P., et al. (2019). Protected area targets post-2020. *Science* (80-). 364, 239–241. Available [here](#).

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