The latest science shows that climate change is pushing ecosystems and communities to their limits. We are faced with an urgent need to accelerate the shift away from fossil fuels and build low-carbon, climate-resilient economies in order to limit global warming to 1.5°C and avoid the most devastating impacts on people and nature. WWF’s overarching expectations for COP28 can be found [here](#).

WWF’s essential Ocean-Climate Outcomes for COP28:

- **WWF calls upon Parties to ensure that all current and new commitments under the Paris Agreement focus on 1.5°C as a matter of extreme global urgency.**

- **The Global Stocktake decision should provide a clear mandate and detailed guidance for Parties to urgently revisit current 2030 climate ambition targets and set new 2035 targets in line with limiting global temperature rise to 1.5°C, while highlighting the importance of the ocean in the global response to climate change.**

- **The outcomes and summary report from the Ocean and Climate Change Dialogue should be presented at COP28, and priority interventions and tangible actions embedded in the COP decision document.** Parties must scale and mainstream ocean-based climate solutions, strengthen ocean-climate action and finance, and include these commitments NDCs, NAPs and long-term strategies and actions by governments to advance nature-based solutions for their ocean and coasts that are nature-positive and can deliver net-zero outcomes.

- **Advance coastal adaptation action and fully operationalize the Loss and Damage Fund, with substantial pledges of new funds.** Ensure that support is provided for slow-onset events and non-economic loss events, like loss and damage of ocean ecosystems and sea level rise, to support coastal communities most affected by climate change.

- **Agree on a comprehensive framework for the Global Goal on Adaptation with the guiding structure agreed at COP27 where the ocean should be included as a key theme of intervention, including ocean-relevant metrics and indicators.**

- **Scale up public finance by developed countries to beyond $100 billion per year to support developing countries, including support for advancing ocean-climate action and resilience.** Indigenous Peoples and local communities that are most vulnerable to climate impacts must have timely and equitable access to ocean-climate adaptation finance, technology transfer and capacity building to scale-up adaptation and resilience actions.

- **Support the Mangroves, Coral Reefs, and Ocean Breakthroughs to help drive the transition toward a net-zero world, including efforts to catalyse ocean action around five sectors:** marine conservation, ocean renewable energy, ocean-based transport, aquatic food, and coastal tourism.

- **A precautionary and inclusive approach must prevail in discussions and decisions related to ocean-based carbon dioxide capture and removal given significant science and governance gaps that must be sufficiently considered and addressed.** The potential of coastal and marine nature-based solutions for harnessing synergies across mitigation, adaptation and resilience efforts, however, should be acknowledged.
Ocean Action is Climate Action

The 2023 IPCC Climate Change Synthesis report highlighted the degree to which climate change has already brought about significant changes in ocean ecosystems and led to widespread losses and damages worldwide. The ocean has been our ally in fighting climate change by absorbing much of the extra atmospheric heat and carbon dioxide, but the consequences of this service, such as marine heatwaves and ocean acidification, are increasingly putting ocean life at risk. Yet, we also know that the ocean holds powerful solutions both for mitigation and adaptation. For this reason, the role of ocean-climate action and solutions is increasingly being recognized and prioritized as a vital aspect of national climate change goals, policies and strategies.

**Context**

The latest science shows that climate change is pushing ecosystems and communities to their limits. We are faced with an urgent need to accelerate the shift away from fossil fuels and build low-carbon, climate-resilient economies in order to limit global warming to 1.5°C and avoid the most devastating impacts on people and nature.

The sense of urgency has prompted advocates to seek new avenues to pressure action to secure 1.5°C. This includes the first climate change case heard by an international tribunal, when the Commission of Small Island States on Climate Change and International Law requested an advisory opinion from the International Tribunal of the Law of the Sea on countries’ climate obligations under the United Nations Convention on the Law of the Sea. WWF provided an ‘amicus’ brief to the tribunal, which argues that those obligations include rapidly reducing GHG emissions while conserving and restoring the marine environment. While the court’s opinion is not expected until early next year, the case demonstrates the growing momentum to accelerate the alignment of ocean-climate action across multilateral regimes.

At COP28, Parties will come together to consider the outputs of the first Global Stocktake (GST), which aim to address the large shortcomings of global efforts to get on track to achieve the goals of the Paris Agreement. Science shows us that the impacts of exceeding 1.5°C, due to the response of the cryosphere, would be catastrophic. This is why 1.5°C must now be considered the uppermost global warming limit otherwise the rates of adaptation will be outpaced by the extent and speed of changes, ultimately resulting in irreversible losses and damages, and human tragedies, to an extent that no financial resources will be sufficient to cover.

At COP28, WWF calls upon Parties to ensure that all current and new commitments under the Paris Agreement focus on 1.5°C as a matter of extreme global urgency. COP28 must deliver commitments to ensure a significant acceleration of global greenhouse gas emission reductions by all countries and strengthened adaptation actions. This must include a faster, greener and fairer transformation of the energy system from fossil fuels to renewable energy, including offshore renewables, to help stabilise the climate and keep global warming below the 1.5°C tipping point while achieving a just and resilient development.

WWF will continue to advocate for integrated ocean-climate action and finance as essential to achieving global climate goals.

**WWF Expectations**

Since COP25, the Ocean and Climate Change Dialogue have been instrumental in advancing the case for integrating ocean-based climate action across all relevant aspects of the UNFCCC process, as well as into national climate policies and strategies.

This year’s dialogue, held during the 58th session of the UNFCCC subsidiary bodies, focused on coastal ecosystem restoration, including blue carbon, fisheries and food security. These discussions underscored the critical importance of advancing ocean-related mandates from COP26 and COP27, including in national climate objectives and UNFCCC processes, and aligning with other international conventions and agreements including the Global Biodiversity Framework and the UN High Seas Treaty.

The discussions also highlighted the importance and value of enhancing ocean-focused research and data, bridging knowledge gaps and ensuring effective and inclusive engagement with diverse stakeholders, including Indigenous Peoples, local communities, vulnerable groups, youth, women, and the private sector. Finally, the critical role of capacity building and securing finance was highlighted as critical to advance progress.

The informal summary report from the Ocean and Climate Change Dialogue should be presented at COP28, and priority interventions and tangible actions embedded in the COP decision documents, to further reflect the critical need to advance integrated ocean-climate action.

WWF’s expectations for ocean-climate action at COP28 cover a variety of themes highlighted in the following sections.

**Ocean and Climate Change Dialogue**

- By establishing the annual Ocean and Climate Dialogue in the Glasgow Climate Pact and strengthening its mandate through the Sharm el-Sheikh Implementation Plan, governments have acted on the science assessed by the IPCC, recognizing that the ocean holds powerful solutions both for mitigation and adaptation and prioritizing their coherent and sustainable implementation.

- The outcomes and summary report from the Ocean and Climate Change Dialogue should be presented at COP28, and priority interventions and tangible actions embedded in the COP decision documents. Those documents should reflect the importance of including ocean-based climate solutions in Nationally Determined Contributions, National Adaptation Plans, and long-term strategies and...
actions by governments to advance nature-based solutions for their ocean and coasts that are nature-positive and can deliver net-zero outcomes.

- A roadmap for the Ocean and Climate Dialogue should be defined for the years ahead to progressively address a variety of solutions and continuously take stock of the progress made and remaining gaps to fill. In this way, the recurring Ocean and Climate Change Dialogue can act as a yearly stepping stone to greater ambition and action for ocean-climate action nationally and internationally.

- Participants in the annual Ocean and Climate Dialogue should continue to ensure that the dialogue produces actionable recommendations on how the relevant work programmes and constituted bodies under the UNFCCC, especially those working on finance, technology, adaptation, and capacity building, can continue to integrate and strengthen ocean-based action in their mandates and work plans.

**UNFCCC Processes**

Ocean-specific discussions must take place in all relevant UNFCCC processes to address ocean-climate opportunities and challenges and strengthen recognition of the role of coastal and marine nature-based solutions in slowing climate impacts and addressing climate change. These processes include the Mitigation Work Programme, the Global Stocktake, the Global Goal on Adaptation, and the Loss and Damage Mechanism. Beyond discussion, ocean-climate action plans must be underpinned by robust financing, and a continued push for greater ambition nationally and internationally.

Partners, including WWF, contributed to this options paper, which provides a detailed summary of the key entry points within existing UNFCCC processes and ongoing negotiations where management actions concerning coastal and marine ecosystems can play a productive role in climate action. This importantly includes a call for greater coherence and alignment across international policy processes to leverage synergies, enhance ambition and accelerate implementation of the Paris Agreement, the Global Biodiversity Framework, the Ramsar Convention on Wetlands of International Importance and the 2030 Agenda and the Sustainable Development Goals.

Areas where countries may advance integrated ocean-climate efforts include:

**The Global Stocktake**

- The GST decision should state that 1.5°C now must be considered by the Paris Agreement the uppermost global warming limit. The IPCC Special Report on 1.5°C, the 6th Assessment Report, the GST Technical Dialogue Synthesis report and numerous interventions by Parties have demonstrated that due to the response of the climate system and the cryosphere, including tipping points, emerging climate impacts will happen globally and result in irreversible changes to key biomes, including carbon and biodiversity rich land, ocean and freshwater ecosystems and food systems.

- The GST decision must provide a clear mandate and detailed guidance for Parties to urgently revisit current 2030 climate ambition targets and set new 2035 targets within Nationally Determined Contributions (NDCs) and long-term low-emission development strategies in line with limiting global temperature rise to 1.5°C, reflecting the outcomes from the First GST Technical Dialogue. This guidance should include collective timelines and measures for economy-wide and sector/system transformations in line with limiting temperature rise to 1.5°C. This should include ambitious targets for expanding renewable energy, including offshore renewable energy, to advance a just energy transformation and nature-positive future.

- The GST also provides an important opportunity to recognize the irreplaceable role of the ocean in combating climate change, encouraging guidelines to integrate ocean-based measures into updated NDCs, National Adaptation Plans (NAPs) and national strategies under the Paris Agreement. The GST decision should highlight the importance of the ocean in the global response to climate change and call for the mainstreaming of ocean-related mandates into national climate goals.

- This will include a call in support of the recommendations from the IPCC 6th Assessment Report to secure the conservation of 30% to 50% of Earth’s land, freshwater and ocean areas, to protect biodiversity, build ecosystem resilience and ensure essential ecosystem services - including the effective conservation of 30% of landscapes and seascapes by 2030, which is needed to meet the goals of the Paris Agreement and the CBD Global Biodiversity Framework.

**The Global Goal on Adaptation**

- A comprehensive framework for the Global Goal on Adaptation (GGA) must be decided with the guided structured approaches as outlined at COP27, with defined global mid- and long-term global targets (2030, 2040 and 2050), metrics, and indicators. The ocean should be included as a key theme of intervention, including ocean-relevant metrics and indicators. To achieve this overall objective, adequate means of implementation (finance, technology and capacity building) need to be put in place.

- Indigenous Peoples and local communities that are most vulnerable to climate impacts must have timely and equitable access to ocean-climate adaptation finance, technology transfer and capacity building to scale-up adaptation and resilience actions.

- The Glasgow-Sharm el-Sheikh work programme on the GGA should advance metrics and indicators on the ocean adaptation potential, as well as identify capacity-building (including technical assistance) and finance needs to advance it.
Advance coastal adaptation action and the full operationalization of the Loss and Damage Fund

- The loss and damage fund should be fully operationalized and funded and ensure that support is provided for slow-onset events and non-economic losses events like loss and damage of ocean ecosystems and sea level rise to support coastal communities on the front lines of increasing climate change impacts.
- The Santiago Network on Loss and Damage should be fully operationalized by COP28, and the network shall provide technical support to developing countries on assessing, minimizing and addressing ocean-related loss and damage.
- Loss and damage finance needs to be a separate item in the New Collective Quantified Goal.

Article 6 – Market and Non-market Mechanism

- Discussions related to carbon dioxide capture, removal and storage remain areas in need of precaution as well as further focus and guidance, particularly related to ocean ecosystems. The failure of the Article 6.4 Supervisory Body at COP27 to prepare acceptable guidance concerning carbon removals must not be repeated. Both the mitigation as well as the conservation hierarchy need to be clearly respected and referred to with regard to all kinds of removals. Ocean carbon reservoirs involve a specific set of risks and challenges that need to be addressed. There are significant science and governance gaps to be considered, particularly in international waters; thus, a precautionary approach must prevail. This is particularly important given uncertainties related to issues such as additionality, scale, permanence of carbon storage, leakage, and ocean-system feedbacks as the ocean is an open system. There is a material risk of reversals over a relevant time frame in most removal activities and therefore this issue needs proper attention. Ensuring transparent, fair and inclusive approaches will be essential while safeguarding the integrity and resilience of marine ecosystems will be critical.
- However, concerning some site-specific blue carbon activities in well-studied and comprehensively-monitored coastal ecosystems, the science may be robust enough. Coastal blue carbon ecosystems – such as mangroves, seagrasses and tidal marshes – sequester and store globally significant quantities of carbon in their biomass and underlying soils, which can be released if these ecosystems are disturbed by anthropogenic activities. In addition to climate mitigation benefits, these ecosystems provide a multitude of other services including resilience to climate change impacts (e.g., extreme weather events, coastal erosion and sea-level rise), fisheries habitat and biodiversity benefits. Coastal and marine nature-based solutions have a particularly high potential for harnessing synergies across mitigation, adaptation and resilience efforts for coastal communities.
- The full potential of Article 6.8 must be realized, including for funding results-based actions for areas where markets have often proven problematic, such as land-based removals and nature-based solutions, including ocean-based solutions and carbon sequestration.

Mitigation Work Programme (MWP)

- The MWP should have a sectoral focus and also look at the role of ecosystems, as highlighted in the Glasgow Climate Pact. The ocean mitigation potential of coastal blue carbon habitats, such as mangroves, saltmarshes, and seagrass meadows, provide essential ecosystem services for humanity to both mitigate climate change and adapt to it. The protection, restoration, and stewardship of these habitats are essential nature-based solutions that deliver outcomes for people, nature, and climate and should be considered.

Finance for Ocean Solutions

- Science shows that nature can provide at least 30% of the mitigation needed by 2030, but nature only receives about 3% of global climate finance. A recent study highlighted that less than 2% of support from the Green Climate Fund (GCF) and only 0.7% of Global Environmental Facility (GEF) funding went towards ocean-action projects. Yet the gap between ocean conservation requirements and funding available—around US$149bn—is equivalent to just 3% of the estimated US$53trn spent globally on fossil-fuel subsidies every year.
- The Ocean and Climate Change Dialogue has noted that unlocking finance and addressing this immense climate financing gap is critical to support developing countries in addressing ocean-climate action and building climate resilience, particularly for small island states and least developed countries.
- The Standing Committee on Finance should prepare an Information Note exploring coastal and marine nature-based solutions, climate finance flows, gaps and opportunities and include this in its annual reports presented to the COP, which are used to inform the COP guidance or the Green Climate Fund and Global Environment Facility.
- Clear mechanisms, incentives and guidance are needed for how nature-based solutions linked to coasts and ocean, including blue carbon, can be practically implemented, financed and reported upon. Clear pathways, enabling conditions and mechanisms must be put in place to enable Indigenous Peoples and communities that are most vulnerable to climate impacts to have timely and equitable access to ocean-climate adaptation finance, technology transfer and capacity building to scale-up adaptation and resilience actions.

Government / Parties

The ocean holds powerful solutions both for mitigation and adaptation if implemented coherently and sustainably, and these should be prioritized. Parties should make the ocean a
vital aspect of national climate change goals, policies, and strategies, and take action to strengthen the mitigation, adaptation and resilience potential of the ocean, for the benefit of people, climate and nature. Parties should:

- **Revise their NDCs and NAPs with increased ambition**, and in doing so make sure they fully take into account the potential of their ocean and coastal areas for mitigation, adaptation and resilience-building. This should include advancing the designation and effective management of climate-smart (dynamic/adaptive) marine protected area networks and other effective area-based conservation measures to address biodiversity protection and climate mitigation, adaptation and resilience. This also should include management measures to protect and conserve blue carbon ecosystems and the conservation and restoration of coastal and marine ecosystems including coral reefs, mangroves, tidal marshes, and seagrass beds to strengthen adaptation and resilience. Finally, given the importance of healthy ocean ecosystems for the climate system, Parties should ensure a precautionary approach for preserving ecosystems by eliminating additional risks, including bottom trawling, deep seabed mining and mangrove deforestation.

- **Request the IPCC to develop a supplement to its 2006 guidelines** for national inventories of anthropogenic emissions by sources and removals by sinks for other blue carbon ecosystems beyond those covered under the 2013 IPCC Wetlands Supplement. The guidelines should include blue carbon ecosystems such as macroalgae (e.g., kelp forests), biogenic reefs and different types of sediments, among others. This would promote the inclusion of such ecosystems into NDCs and NAPs, as well as ensure consistency and comparability among the information provided through the Enhanced Transparency Framework, which is also in need of updating.

- **Mobilize capacity building and adequate resources** for the identification and development of ocean-climate measures (including with respect to the use of verifiable standardized metrics for planning, monitoring and reporting purposes) and clearly communicate the short- and long-term financial support, capacity building and technology transfer needs for ocean-climate actions via NDCs and other relevant communications to the UNFCCC.

- **Advance nature-based solutions** and measures for their ocean and coasts that are nature-positive and can deliver net-zero outcomes to strengthen the mitigation potential, adaptation, and resilience of ocean and coastal ecosystems and dependent communities and economies. There is also an important opportunity to support synergies and greater coherence and alignment across international policy processes and accelerate implementation of the Paris Agreement, the Global Biodiversity Framework and the 2030 Agenda and the Sustainable Development Goals among other frameworks.

- **Significantly increase finance for ocean-climate action and solutions.** At least half of global public climate finance should be invested in climate adaptation, and include a dedicated focus on coastal and marine solutions. Developed countries must immediately meet the $100bn/annum climate finance commitment and public sector finance should also be leveraged to encourage private sector capital to further support nature-based solutions and restorative actions.

- **Ensure meaningful engagement of Indigenous Peoples and local communities** at COP28 and that they are appropriately supported within a rights-based approach to protect, govern and manage their traditional lands and waters, enhance their traditional knowledge systems and sustain their livelihoods, as well as their contributions to address climate change and biodiversity loss. Indigenous Peoples and local communities should be integrally involved in the planning, design and implementation of climate actions including ocean-climate actions and solutions.

### Ocean Breakthroughs

The ocean community, united under the Marrakech Partnership for Global Climate Action on Ocean & Coastal Zones, has designed a set of ocean pathways to drive the transition toward a net zero world, and further anchor the ocean in climate and biodiversity negotiations. This set of pathways – known as the “Ocean Breakthroughs” – shall be understood as milestones to be reached by 2030, in order to deliver on the 2050 vision of the ocean designed by the Ocean for Climate Declaration.

To catalyze action, the Ocean Breakthroughs address five sectors: marine conservation, ocean renewable energy, ocean-based transport, aquatic food, and coastal tourism, aiming to deliver on a fair, nature-positive and net-zero future. The effective deployment of this vision relies on the cumulative action and close collaboration of stakeholders across sectors, a cross-cutting approach and key enablers (i.e., science, finance, governance, and inclusivity) to define objectives and quantifiable targets.

The Ocean Breakthroughs seek to support multilateral efforts, such as of the Paris Agreement, the Kunming-Montreal Global Biodiversity Framework and the Sustainable Development Goals, and contribute to the achievement of existing global targets, including “30×30” (at least 30% of marine and coastal areas effectively conserved and managed by 2030). Launched ahead of COP28, the Ocean Breakthroughs aim at feeding into the conclusions of the Global Stocktake, and ultimately to inspire ocean-climate action for the coming years. WWF urges countries, public and private sector institutions and non-state actors to support these breakthroughs to accelerate actions to deliver on a fair, nature-positive and net-zero future.

WWF is furthermore supporting the complementary Mangrove and Coral Reef Breakthrough initiatives as highlighted below.
Mangrove Breakthrough

WWF is contributing to the Mangrove Breakthrough, a joint initiative of the UN Climate Change High Level Champions, the Global Mangrove Alliance (co-founded by WWF) and other partners. The Mangrove Breakthrough aims to mobilise US$4 billion to secure the future of 15 million hectares of mangroves globally by 2030 by catalysing action to halt mangrove loss, restore half of recent losses, double protection of mangroves globally, and ensure sustainable long-term finance for all existing mangroves. The Breakthrough provides a framework for coordinating and accelerating action by diverse stakeholders including governments, financial institutions, corporates, philanthropy, NGOs, scientists, and local communities to achieve these ambitious goals. We urge countries to support this initiative and to accelerate actions to protect and restore these critical ecosystems.

Coral Reef Breakthrough

WWF is also contributing to the Coral Reef Breakthrough, which has been co-developed by the UN Climate Change High-level Champions, International Coral Reef Initiative – a network including 45 countries who represent over 75% of the world’s coral reefs – and the Global Fund for Coral Reefs. The Coral Reef Breakthrough aims to secure the future of at least 125,000 km2 of shallow-water tropical coral reefs with investments of at least US$12 billion to support the resilience of more than half a billion people globally by 2030.

WWF urges countries and public and private sector institutions to support these initiatives and to accelerate actions to protect and restore these critical ecosystems in a holistic manner through integrated landscape and seascape approaches.
Our mission is to stop the degradation of the planet’s natural environment and to build a future in which humans live in harmony with nature.