Biodiversity and climate change are inextricably linked. UNFCCC COP26 recognized the importance of protecting, conserving and restoring ecosystems to achieve the long-term global goal of the Convention. COP27 recognized the critical role of ecosystems in delivering climate adaptation benefits and co-benefits.

There is a rapidly narrowing window to limit warming to 1.5 °C above pre-industrial levels. The global stocktake Synthesis report published in the leadup to COP28, which analysed collective progress in the implementation of the Paris Agreement, found that urgent action and support are needed to ramp up implementation of mitigation measures across all sectors and systems, including reduced conversion of natural ecosystems. Restoring and protecting natural ecosystems will result in large-scale CO2 absorption and co-benefits; and preventing the degradation of natural ecosystems is a relatively low-cost mitigation option.

Wetlands are critical ecosystems in climate change mitigation and adaptation. In addition to their ability to store large amounts of carbon, wetlands support water quality and water security, livelihoods and food security. They have an essential role in regulating the global climate, while also maintaining local climate and water cycles, moderating temperature extremes, and supporting disaster risk reduction.
Scaling up wetland protection and restoring converted or degraded wetlands is imperative to meet global climate and biodiversity targets. Around 50 million hectares of peatlands are currently drained globally. To enable global warming to remain below 1.5°C at least half of drained peatlands should be restored by 2030, and further peatland loss should be prevented. The UN Decade on Ecosystem Restoration provides impetus to rapidly scale up restoration activities. The Freshwater Challenge initiative launched at the UN Water Conference in 2023 aims to catalyze the restoration of 300,000 km of rivers and 350 million hectares of wetlands by 2030.

Updating of NDCs should incorporate further wetland targets and actions. While peatlands cover only three per cent of the planet’s land surface, they store 30 per cent of land-based soil carbon, twice as much as all of the world’s forests combined. However less than 15% of Parties known to have peatlands include peatland targets or actions in their NDCs. Blue carbon ecosystems (mangrove, seagrass and intertidal marshes) store large amounts of carbon in biomass and soil, but only 58 out of 113 countries added new coastal and marine nature-based solutions for either mitigation or adaptation purposes in their second NDC submission.

More focus is needed on drivers of wetland loss, through sectoral policy and other interventions. On average, from 1.5 to 2 per cent of coastal blue carbon ecosystems are being lost per year. Agricultural development is a primary cause of inland wetland loss through drainage and infilling. Consideration of wetlands in urban planning can help create liveable, climate resilient cities.

Investing in wetland-based mitigation and adaptation is cost effective, with many co-benefits. Wetland protection, restoration and sustainable use simultaneously contribute to the achievement of the Paris Agreement, the Kunming-Montreal Global Biodiversity Framework, and the Sustainable Development Goals. Increasing finance for adaptation is of particular importance to reduce climate risk and improve equity and climate justice.

Wetlands and their ecosystem services are vulnerable to climate change. Further detailed analysis is needed of the impact of the multiple current and projected impacts of climate change on ecosystem health, function, distribution and ecosystem service provision, and their implications for the role of ecosystems in climate regulation and in the hydrological cycle.

Commitments and efforts under the Convention on Wetlands can be leveraged to deliver climate action

Resolution XIV.6 encourages Parties to the Convention on Wetlands that are also parties to UNFCCC to consider the relevance of their actions to conserve, restore, sustainably manage and use wetlands in addressing climate change, while simultaneously providing biodiversity and human wellbeing benefits.

Resolution XIV.17 encourages Parties to deploy wetland-focused nature-based solutions to address climate change, phase out or modify policies that contribute to wetlands loss and degradation, and pursue policies and projects to conserve and restore wetlands to enhance climate change mitigation and adaptation.

Resolution XIV.17 recognizes the need for financing to support wetland ecosystem protection, conservation, restoration, sustainable use and management to address climate change. Resolution XII.13 encourages Contracting Parties to incorporate financial and other resources for wetland conservation, restoration and management activities related to disaster risk reduction into long-term investment programming.
Wetlands in national greenhouse gas inventories: Resolution XII.11 and Resolution XIII.14, among others, call on Parties to update National Wetland Inventories (NWIs) in order to estimate carbon storage and fluxes, including emissions from organic soils and the emission reductions from restoration, and to update national greenhouse gas inventories, using the Intergovernmental Panel on Climate Change (IPCC) 2013 Wetlands Supplement. NWIs are also the basis for reporting on change in the extent of water-related ecosystems over time (SDG indicator 6.6.1, of which the Convention on Wetlands is co-custodian).

Wetlands in national climate change strategies and plans: Resolution XIII.13, Resolution XIII.14 and Resolution XIV.16 call for the incorporation of peatland and blue carbon ecosystem protection and restoration in NDCs. The Convention’s Strategic Plan 2016–2024 includes Target 12 on restoration of degraded wetlands with priority to wetlands that are relevant for biodiversity conservation, disaster risk reduction, livelihoods and/or climate change mitigation and adaptation. Guidance on identifying peatlands as Wetlands of International Importance for global climate change regulation as an additional argument to existing criteria was adopted in Resolution XIII.12. Resolution XIII.20 encourages Parties to include coastal ecosystems, including relevant Wetlands of International Importance, in national policies and strategies for climate change mitigation as well as adaptation, and to promote the role of coastal ecosystems in ecosystem-based adaptation; and encourages Parties to urgently designate intertidal wetlands and ecologically associated habitats of international importance.

Wetlands in disaster risk reduction: Resolution XII.13 and Resolution XIII.13 call for the integration of wetland-based climate change adaptation and disaster risk reduction into national strategic plans, and all relevant policies, planning, and environmental and water management at all levels of government.

Tools and knowledge products: A range of publications on wetlands and climate change have been prepared by the Scientific and Technical Review Panel (STRP) of the Convention. The Panel is also preparing tools that support integration of wetlands in climate change planning frameworks, including tools for wetland mapping and inventory to catalyse greater use of available methodologies for wetland carbon assessments, and compilation and review of data and models on carbon stock and fluxes in wetlands.