



Locking Carbon in Wetlands: Enhancing Climate Action by Including Wetlands in NDCs

Nature-based solutions are gaining more recognition as low-regret, high-impact means by which countries can meet the ambitious targets laid out in their NDCs. Wetlands are found across the globe and yet are often overlooked for their important role in the carbon cycle. Clear guidance and good data will help Parties to the UNFCCC properly value wetlands for their capacity to reduce emissions and store carbon, while simultaneously serving as an integral tool in their climate adaptation strategies.

The following recommendations will guide Parties towards effective integration of wetlands into their portfolio of climate actions.

Wetlands as effective tools in NDC delivery

It is recommended that:

- countries implement land-use policies such as active conservation of existing wetlands, rewetting of drained peatlands or restoration of degraded mangroves to avoid or reduce emissions. These policies need to be designed so as to lead to measures that prevent or reduce the impact of drivers of wetland loss such as conversion for agriculture, urbanisation, aquaculture or coastal development.
- wetland management is included consistently as part of a portfolio of measures to reduce atmospheric GHG emissions alongside mitigation measures across sectors outside of land use, such as energy and transport.

Focus on key opportunities

It is recommended that:

- active conservation of intact wetlands, particularly across permafrost and tropical regions, be given priority, recognising that these landscapes hold vast stores of carbon.
- restoration of degraded peatlands be prioritised, as this action can achieve reductions that may make up at least 5% of global anthropogenic CO₂ emissions. It is recommended that countries be encouraged to calculate what contribution these restorations can make to their own GHG footprints.
- policies such as National Adaptation Plans (NAPs), National Biodiversity Strategies and Action Plans (NBSAPs), commitments to the Bonn Challenge, marine spatial planning or hydrological management be cross-referenced and assessed for synergies with NDCs, as they may also help to decrease emissions or enhance sinks from wetlands.

Cost and benefits

It is recommended that:

- wetlands be included in NDCs to enable multiple co-benefits to be realised, such as flood risk management, water quality improvement, biodiversity recovery, securing migratory pathways, food production and sustainable community livelihoods. This contributes to disaster risk reduction and contributes to building long-term resilience. As such, wetlands should be considered in any analysis of cost and benefits.
- cost-benefit analyses of wetland projects take a comprehensive view and incorporate the socio-economic contribution of projects to sustainable livelihoods, food security and community resilience within water catchments and river basins, both upstream and downstream.

Practicalities of including wetlands in NDCs

It is recommended that:

- countries include wetland management targets in their NDC portfolio and develop a Measurement, Reporting and Verification (MRV) methodology for their emissions and carbon stock changes.
- Parties undertake clear reporting with regards to implementation of climate actions involving wetlands and reporting on targets identified in NDCs in line with the Paris Agreement. There are several authoritative methods that can be used:
 - Extensive UNFCCC guidance and Common Reporting Format (CRF) Tables exist to facilitate the reporting in a very sophisticated way.
 - The *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands* provides tiered methods to estimate carbon stock and stock difference with varying levels of sophistication to suit country capacities and contexts.
 - The FAO peatland monitoring guidelines (2020) provide a clear monitoring and assessment framework.
 - This can be supplemented with auditing evidence from carbon credit projects (for example, under the Voluntary Carbon Standard (VCS) mechanism).
- GHG inventories need data such as soil type, climate zone, wetland type, size, vegetation composition and management practices in addition to the GHG budgets. Land cover classes should include information on the land use to claim positive or negative changes to the relevant stakeholders. These knowledge gaps need urgent attention.



Learn More

This issue brief accompanies a report from the Alliance for Global Water Adaptation (AGWA) and Wetlands International entitled *Locking Carbon in Wetlands: Enhancing Climate Action by Including Wetlands in NDCs (2020)*. The full report is available at www.alliance4water.org/locking-carbon-in-wetlands.

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