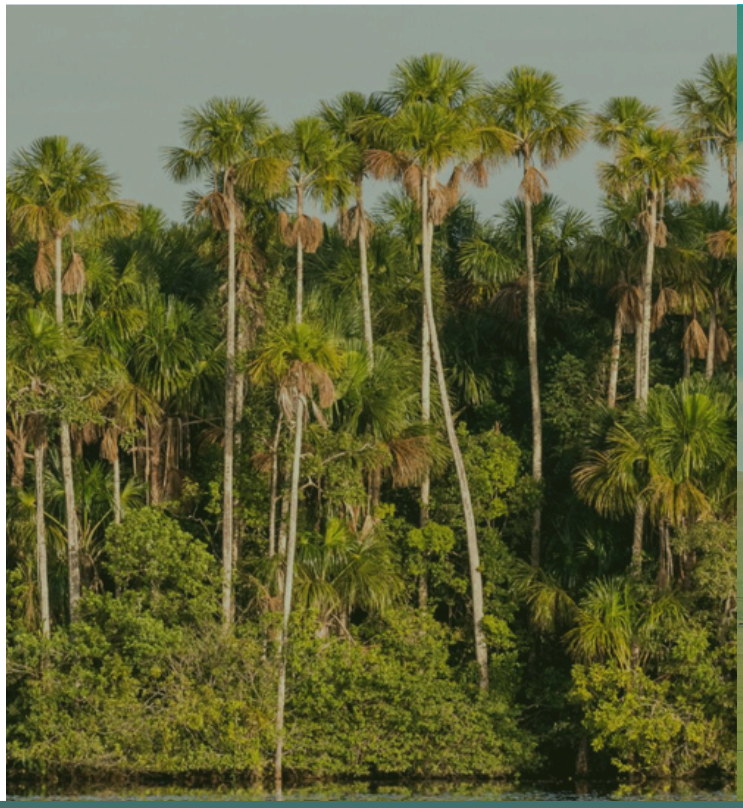

The Peatland Breakthrough

Science-based Framework for Global Peatland Targets & Guiding Principles

Prepared by the Targets & Knowledge Working Group of the Peatland Breakthrough

November 2025

Why this framework?

The science-based framework for Global Peatland Targets and Guiding Principles is the result of an inclusive and consultative process to develop scientifically robust and widely accepted global targets and guiding principles for peatland conservation, restoration, and sustainable, wise use. It contributes to the UNFCCC 2030 Breakthrough Agenda and is aligned with the Paris Agreement goals. It is intended to support coordination and coherence across science, policy, finance, and practice—while complementing existing international and sectoral policies, standards and commitments that already meet or exceed its targets and principles.

This framework has been developed under the auspices of the Peatland Breakthrough to provide a solid, science-based foundation for guiding collective action to conserve, restore, and wisely use the world's peatlands, ensuring they continue to sustain climate goals, biodiversity, and people's livelihoods.

How will the Peatland Breakthrough evolve?

The Peatland Breakthrough involves two key phases:

The Development phase (pre-UNFCCC COP30) focuses on building momentum by establishing a shared vision and enhancing public awareness, **setting scientifically robust and widely accepted global targets** and **guiding principles**, and engaging a wide range of stakeholders through inclusive processes. The targets are grounded in the best available science and knowledge, with the understanding that they must be revisited and recalibrated as new evidence and evolving political and social contexts require.

The Implementation phase (post-UNFCCC COP30) will turn global targets into action across global, regional, national and local levels—supported by finance, policy, and best practices and expand stakeholder engagement to develop regional- and sector-specific pathways and implementation.

Peer-review process

The framework has undergone two rounds of peer review. Between June and September 2025, it was presented in two online consultations and reviewed by 81 experts and practitioners representing diverse geographies, disciplines, and 62 organizations (the composition of experts and practitioners consulted is summarized in Annex V).

All comments from the second review have been addressed and responded to [here]. Feedback from the first review (oral and written) was consolidated, and a selection of the most critical comments was addressed directly in the feedback and responses table [here]. In addition to responding to individual comments, the feedback is addressed as a whole—seeking common ground between different perspectives and balancing what is possible based on the best available science with the shared purpose of this Framework.

This document does not aim to resolve all issues. It reflects what can reasonably be agreed and set now. Many of the challenges raised need to be addressed in detail during the implementation phase—as they go beyond the scope and purpose of this framework.

Contents

1. Vision and scope

A shared vision for peatlands

The Peatland Breakthrough[1] is a collaborative effort to mobilize action to conserve, restore, and enable the sustainable, wise use of the world's peatlands in ways that maintain their essential functions to support climate goals, biodiversity, and people's livelihoods.

Peatlands occur in almost every country. They hold nearly 30% of the planet's soil organic carbon, regulate water and nutrient cycles, support unique biodiversity, and sustain millions of people. Peatlands are important ecosystems. Yet they remain undervalued, face growing pressures from degradation, drainage and conversion, and are increasingly vulnerable due to the impacts of climate change. The Peatland Breakthrough unites governments, Indigenous Peoples, local communities, land managers, landowners, businesses, researchers, investors, and civil society around shared global targets and guiding principles. By connecting diverse scientific expertise, Indigenous knowledge, community experience, and financial innovation, the Breakthrough ensures that decisions based on its recommendations are **evidence-based, inclusive, and viable**.

Guided by clear targets and principles, the Peatland Breakthrough supports:

- **Climate Action:** Conserving and restoring peatlands to reduce emissions, support removals, enhance resilience, and strengthen **pathways aligned with the Paris Agreement goals**. As part of the 2030 Breakthrough Agenda launched at UNFCCC COP26, the Peatland Breakthrough sets clear 2030 goals to accelerate action this decade toward climate-resilient net zero pathways.
- **Water Security:** Protecting and restoring the water regulation, storage, and purification functions of peatlands, contributing to SDG 6 (Clean Water and Sanitation) and enhancing resilience to climate-related hazards under the Sendai Framework for Disaster Risk Reduction.
- **Biodiversity Conservation:** Safeguarding and restoring habitats in line with the Global Biodiversity Framework goals and targets.
- **Sustainable Development:** Enabling livelihoods and economic opportunities and contributing to the Sustainable Development Goals (SDGs) through the sustainable, wise use of peatlands.
- **Equity and Inclusion:** Ensuring meaningful roles of key affected stakeholders, particularly Indigenous Peoples, local communities, smallholders (e.g. farmers, foresters, or other rural land-dependent groups), women, youth and other vulnerable groups in decision-making and benefit-sharing.
- **Transparent Finance and Monitoring:** Mobilizing resources that are transparent, accountable, and accessible to local actors. Tracking outcomes to build trust and accountability.

[1] A "breakthrough" is a moment that marks a significant advance in the transformation of an economic sector or natural system. The Peatland Breakthrough builds on lessons from other breakthroughs under the 2030 Breakthroughs Agenda, aiming to trigger a system-wide shift toward wet peatland landscapes.

Effective peatland stewardship requires not only technical solutions, but also **shared values, strong partnerships, and long-term commitments**. The breakthrough provides a common platform to align investments and strategies, accelerate progress, and create lasting impact.

By working together across regions and sectors, and respecting the rights, knowledge, and agency of communities connected to these landscapes, we can scale up **solutions that support climate stability, ecological and human health, resilience, and environmental and social justice.**

Box 1. Why peatlands are different from forests—and why this matters for targets

Peatlands and forests store and emit greenhouse gases (GHGs) in fundamentally different ways, with critical implications for climate targets.

- **Forests** store most of their carbon in living biomass. When forests are cleared, emissions are released once at the time of disturbance. Therefore, slowing deforestation reduces annual emissions by decreasing the number of trees cut each year.
- **Peatlands**, in contrast, store carbon in deep layers of **peat**—accumulated dead plant material built up over **thousands of years**. Once peatlands are drained, the peat begins to decompose and emit GHGs *continuously*. Slowing the rate of drainage still leads to an increase in emissions, because emissions of newly drained sites add to the persistent emissions of existing drained sites.

To reduce peatland emissions, it is essential **to stop new drainage and actively reduce the total drained area through rewetting and restoration**. This fundamental difference explains why stopping peatland degradation is so urgent, and why setting ambitious 2030 targets for peatland protection and rewetting is essential.

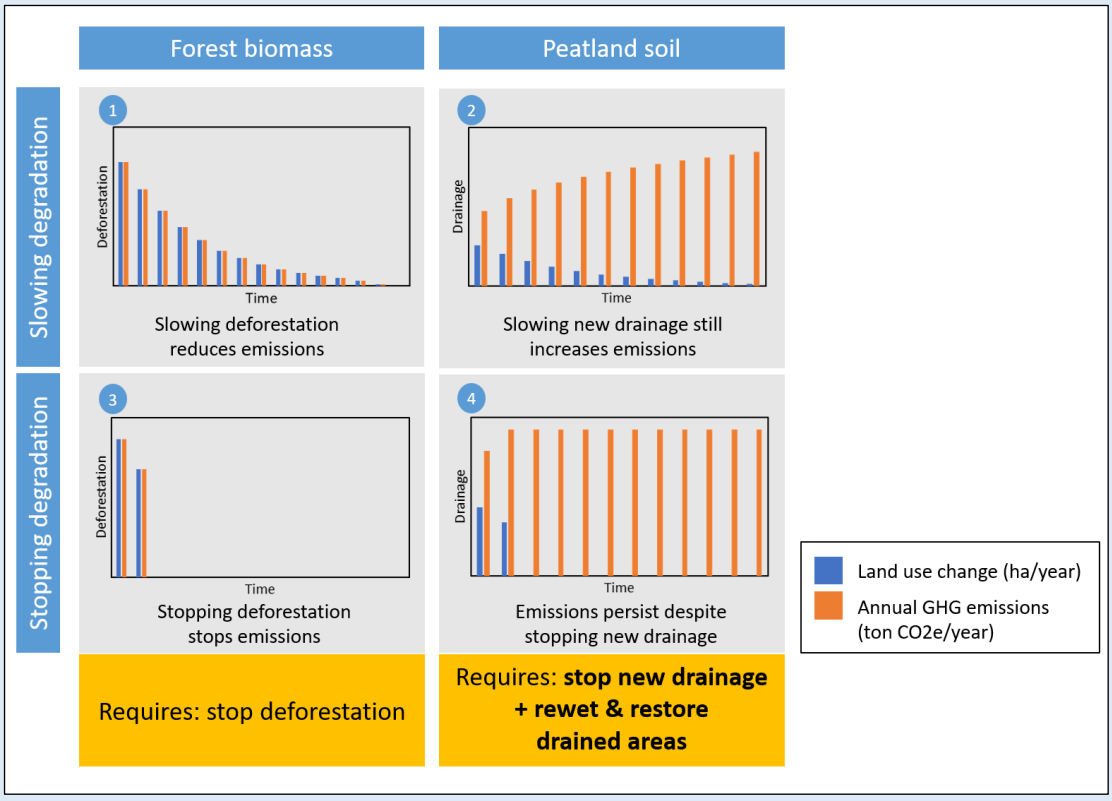

Figure 1. The relation between land use change (blue) and emissions from forests biomass (1 & 3) and peatland soil (2 & 4) (orange). *Source:* Wibisono *et al.* (2011), adapted.

Global targets

Peatlands have been overlooked for too long. While their importance is now better understood, peatlands still lack dedicated global targets and respective implementation to achieve them. The Peatland Breakthrough aims to change that.

The targets we propose are consistent with broader global frameworks and goals, centered on what is necessary to achieve the ambition of the Paris Agreement (see **Annex III for a full overview of international and national frameworks and their relevance to peatlands**).

Scope of the targets and guiding principles

The **global targets and principles** to guide collective ambition and action must be:

- **Relevant to all countries** and applicable to the full range of peatland types and conditions.
- **Cross-sectoral**, applicable across sectors operating on peatlands or having an impact on peatlands.
- **Supportable through key enablers**, such as finance, monitoring, inclusive governance and capacity building.

They should foster coordination across science, policy, finance, and practice—while allowing for flexible, **context-specific implementation**.

The core targets are set for **achievement by 2030**, in line with the 2030 Breakthrough Agenda and the vision of the Global Peatlands Initiative. They are grounded in the best available science and knowledge, with the understanding that they must be revisited and recalibrated as new evidence and evolving political and social contexts require.

2. Global Peatland Targets

All targets relate to an **overarching goal of shaping the interaction of people with peatlands** in such a way that peatlands contribute to climate change mitigation and adaptation, biodiversity conservation, safe and clean water supply, sustainable yields and other ecosystem services.

For each target, the minimum criterion is to have one quantitative indicator, for which a data source for the baseline is available with either an existing monitoring system (e.g. UNFCCC reporting) or feasibility to develop one. A table with key figures used thus far is provided in Annex IV.

We distinguish between**:**

Core targets relating to**:**

1. Conservation (no further loss of undrained peatland)
2. Rewetting and restoration
3. Wise use[2]

Derived target(s) that articulate how achieving the core targets 1-3 contributes to global goals, specifically under the UNFCCC[3]**:**

4. Climate change mitigation and adaptation

Targets on means to implement, achieve and track the core targets**:**

5. Finance
6. Monitoring

While the core targets are expressed in terms of area (hectares), this is not to suggest that all hectares are equivalent in terms of ecological or climate value. Area-based metrics are used as pragmatic, trackable proxies to set ambition and mobilize action at scale. However, the quality and quantity of functional outcomes of these hectares—e.g. emissions reduced, biodiversity restored, livelihoods supported—are equally critical. Therefore, these area targets must be implemented with safeguards, and context-specific strategies to ensure ecological integrity and social value, in line with the Guiding Principles. Where feasible, complementary indicators should be incorporated in national or project-level monitoring systems (Further guidance included under Annex II, Target 6 on Monitoring).

While the global targets are common, they are not meant as universal obligations but as shared goals we collectively work towards. The **implementation pathways that contribute to these targets should reflect national circumstances, capacities and responsibilities**, in line with the principle of common but differentiated responsibilities and respective capabilities under the Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC).

Definitions for the key terms used in this framework are in Annex I. Technical and contextual details for each target—including implementation and monitoring considerations—are provided in Annex II. Below is a summary of the Targets.

[2] International concepts of wise, sustainable use emphasize the same core elements, and the Peatland Breakthrough is consistent with both concepts by the Convention on Wetlands (2007) and UNEA (2019)
[3] Could be also derived for, e.g., CBD or UNCCD, during the implementation phase.

Core target 1 – Conservation

Halt the anthropogenic loss of undrained peatland by 2030.

- Indicator: Area (ha) of peatland remaining undisturbed by drainage, peat removal or other hydrological interventions altering their natural water regime.
- Baseline: ~430 million ha of natural and undrained peatland (UNEP 2022).
- Rationale: Avoids irreversible emissions and loss of sink function.

Undrained peatlands are peat-accumulating wetlands that have a carbon sink function because of persistently water-saturated soil conditions (UNEP 2022; Joosten & Clarke 2002). Conserving peatlands and halting their loss is the most urgent and cost-effective climate action for peatlands.

Box 2. Why immediate action matters

Key message:
Peatland conservation by avoiding new drainage remains the first priority to mitigate climate change. Rewetting is critical to halt ongoing emissions—but it cannot replace the carbon storage and sink capacity of natural peatlands.

Peatlands are among the most carbon-dense ecosystems on Earth. Once drained or degraded, they become major greenhouse gas sources—emitting CO_2 for decades to centuries until they are effectively rewetted, or all the peat is gone. These ballpark figures illustrate the scale:

- ~50 million ha of drained peatlands globally emit around 500 Mt of carbon per year, mainly through microbial oxidation, fire, and erosion.
  → This equals approximately 2 Gt CO_2e per year, or ~4-5% of all global anthropogenic carbon emissions (Leifeld & Menichetti 2018; UNEP 2022).

- The remaining undrained peatlands form a sink of about 100 Mt of carbon per year (Joosten & Couwenberg 2021).
  → Equivalent to ~1% of total global annual anthropogenic emissions.

- The per-hectare emissions from drained and degraded peatlands range from ~1 to 60 t CO_2e/ha/year, depending on region and land use, while rewetted boreal and temperate peatlands can sequester ~0.4 to 1.3 t CO_2/ha/year (IPCC 2014, Günther *et al.* 2020).
  → This means that **each hectare of drained peatland emits 10 to 100 times more CO_2 per year than a hectare of rewetted peatland can absorb over the same time—highlighting the urgency of halting further drainage and degradation to avoid releasing large amounts of irrecoverable carbon into the atmosphere**.

- Through rewetting, the 2 Gt CO_2e per year from drained peatlands can be stopped (Leifeld & Menichetti 2018; Joosten & Couwenberg 2021).

Core target 2 – Rewetting and restoration

By 2030, at least 30 million hectares of degraded peatlands are being rewetted and restored[4].

- Indicator: Area (ha) of peatland under rewetting and restoration.
- Baseline: ~57 million ha of drained and degraded peatland (UNEP 2022).
- Rationale: Reduces emissions and restores water, climate and biodiversity functions.

Degraded peatlands are peatlands that have lost their ability to accumulate peat and are losing peat (UNEP 2022) due to anthropogenic disturbances including direct human activities, indirect pressures, and climate change. The restoration of the climate benefits of peatlands in most cases begins with rewetting—raising the water table to re-establish water-saturated soil conditions and stop the loss of peat (IPCC 2014) (cf. Table 1) accompanied by recovery or restoration of peat-forming vegetation and other measures across the ecological restoration continuum (Convention on Wetlands 2021). The 2030 target focuses on areas 'under rewetting and restoration'— i.e. those where a binding commitment (including plans) is already in place, signalling the start of active efforts even if outcomes are still in progress.

Table 1. Goals of peatland rewetting and restoration and their objectives.
Rewetting and restoration goals are site-specific and vary based on ecological, cultural, climate, and socio-economic priorities. Ecosystem recovery is assessed against clear goals and objectives, using measurable indicators. (Gann *et al*. 2019). The examples below primarily illustrate rewetting goals within the broader ecological restoration continuum.

Goal	Primary Objective	Includes...	Contributes primarily to the objectives of…
1. Rewetting to reduce emissions and fire risk	Halt microbial oxidation, CO_2 release, and fire vulnerability	Water table raised to prevent further degradation	All other goals/aims
2. Rewetting to reinstall carbon sequestration	Restore peat accumulation and carbon removal ('sink function')	Enabling slow but continuous water table rise and adapted vegetation	UNFCCC, Convention on Wetlands
3. Rewetting for sustainable livelihoods	Enable productive land use without drainage	Paludiculture and other wet livelihoods	SDGs, UNCCD, Convention on Wetlands (wise use)
4. Rewetting to support use-dependent biodiversity	Enhance habitats and maintain species diversity, that require regular biomass removal	Mixed goals: emissions, biodiversity, eco-tourism, education, biomass utilisation	CBD, Convention on Wetlands, CMS
5. Rewetting for full biodiversity recovery	Restore natural ecosystem structure and function	Passive ecosystem succession or targeted species reintroduction	CBD (Target 2), Convention on Wetlands, CMS

[4] Informed by the Land Use target of the UN Climate Change High-Level Champions' 2030 Breakthroughs, adapted to align with climate neutral pathways. See Table 3. Overview of international frameworks relevant to peatlands in Annex III for more details.

Core target 3 – Wise use

By 2030, enabling conditions for sustainable, wise use are developed, and by 2050, it is implemented on all peatland.

- Indicator: Area (ha) of peatland under sustainable, wise use. Additional indicators are presented in Table 2. Key parameters for peatland inventory and condition monitoring (Annex II, Target 6 Monitoring).
- Baseline: No global baseline exists; target spans both natural and undrained, and rewetted and restored peatland.
- Rationale: Sustains peatland functions while supporting livelihoods.

In this framework, the concept of sustainable, wise use of peatlands is understood as the use of peatlands in ways that preserve the peat soil, contribute to achieving the SDGs, and provide long-term societal benefits, consistent with the Principles of the Peatland Breakthrough (informed by Convention on Wetlands 2007, UNEA Res. 4/16, Joosten & Clarke 2002, Bonn *et al.* 2016). This includes use for three main groups of services (i.e. provisioning, regulating and cultural services), including all peatland restoration goals (cf. Table 1). A decision-support tree to assess whether a practice is consistent with the sustainable, wise use of peatlands is provided in Annex I.

Box 3. Alignment of concepts of wise, sustainable use

International concepts of wise, sustainable use emphasize the same core elements, and the Peatland Breakthrough is consistent with both concepts used by the Convention on Wetlands (2007) and UNEA (2019). The concept of wise use originates from the Ramsar Convention on Wetlands (1971), which was pioneering in recognising that wetlands can be used sustainably while maintaining their ecological character. Over time, this notion has increasingly been referred to as sustainable use in international environmental law, reflecting the evolution of the term following the emergence of sustainable development. Thus, while wise use remains Ramsar's foundational concept, sustainable use is often used interchangeably in other policy frameworks. Both 'sustainable' and 'wise' share the same core aim: meeting the needs of the present without compromising the ability of future generations to meet their own needs (United Nations 1987).

Derived target (s) – Climate change mitigation and adaptation

By 2050, the global peatland area has reached net zero emissions and preferably is a net GHG sink, supporting climate-resilient pathways. By 2030, be clearly on track through core Targets 1, 2 and 3.

- Indicators: covered under Target 6 on Monitoring (Annex II).
- Baseline: ~2,000 Mt CO_2e/year (UNEP 2022, Leifeld and Menichetti 2018).
- Rationale:
    - Estimated mitigation potential[5]: Approximately 2 Gt CO_2e per year, or ~4-5% of all global anthropogenic carbon emissions reduced by 2050 through peatland rewetting and restoration (Leifeld & Menichetti 2018; Joosten & Couwenberg 2021).
    - Adaptation benefits: reduced vulnerability of people & ecosystems, enhanced adaptive capacity, and strengthened resilience.

Box 4. The cost of business as usual vs. the benefits of conservation, restoration and sustainable, wise use of all peatlands

Peatlands play a critical role in storing carbon, regulating water systems, and supporting livelihoods. Yet when degraded, they release large amounts of greenhouse gases and lose key ecosystem functions, leading to severe socio-economic costs.

The estimated cost to reduce emissions in line with the Paris 1.5°C target is USD 226–385 per tonne of CO_2 at 2024 prices (World Bank 2024). Assuming that the conversion of a natural peatland leads to a net increase of ~40 tCO2eq ha-1 yr-1, this results in a mitigation cost to society in the order of **USD 9,000–15,000 per hectare per year** (Convention on Wetlands 2025). However, current carbon market prices are 3 to 40 times lower than this, severely undervaluing peatland conservation.

Undrained peatlands provide multiple ecosystem services beyond climate regulation—e.g. clean water, flood and water regulation. The **median global value of peatland ecosystem services** is estimated at Int$ 1,864/ha/year, contributing to a **total of Int$ 2.3 trillion globally**. These estimates are based on just 10 of 21 services that peatlands provide, so actual value is likely higher. On the other hand, the **cumulative loss in value due to peatland degradation between 1975 and 2025** is estimated at **Int$ 870 billion.** (Convention on Wetlands 2025).

Conserving natural peatlands is considerably cheaper than restoring degraded ones. Peatland conservation can achieve a similar level of climate mitigation at only a fraction of the cost of restoration. Nevertheless, when accounting for the full range of ecosystem services, **peatland restoration can be highly cost-effective too**. For example, restoring Wicken Fen in the UK yielded a 4.4 benefit–cost ratio**,** more than three times higher than arable farming, with payback in 4.5 years**.**

However, harmful subsidies still support peatland drainage and degradation in some regions. In Germany, drained peatland agriculture causes an estimated annual climate damage of €7.4 billion,

[5]Note: While avoiding degradation of undrained peatlands (Target 1) clearly prevents additional emissions and supports removals, quantifying its global mitigation potential would require counterfactual baseline scenarios that are subject to high uncertainty, and to date no robust global models exist for peatlands. For this reason, a global CO_2e estimate for avoided loss and enhanced sequestration is not included here. These figures can be further developed during the implementation phase as more region-specific data become available.

while receiving €410 million per year in direct payments under the EU Common Agricultural Policy—discriminating against paludiculture, which in many cases is not yet eligible for support (GMC 2019).

The root of the wetland and peatland loss crisis lies in our failure to recognise and capture their true value. Peatland ecosystem services are public goods that markets fail to value appropriately, leading to the dominance of private over public interests, short-term thinking over long-term strategies, chronic underinvestment and ultimately, placing disproportionate burdens on vulnerable communities (Convention on Wetlands 2025).

Setting a realistic finance target that reflects the scale of effort needed to achieve the Global Peatland Targets is essential to align investments with the true societal and economic value of peatland conservation, restoration, and sustainable, wise use.

Mobilizing USD 100 billion will require not just more funding, but a shift from transactional to transformative finance approaches. This includes aligning investments with ecological limits and supporting the full range of peatland values—carbon, water, biodiversity, and cultural heritage. It also involves measures like integrating natural capital accounting, encouraging broader definitions of economic progress beyond GDP (e.g. Genuine Progress Indicator, Kubiszewski *et al.* 2013), and improving disclosure of water, climate, and biodiversity-related risks and dependencies. (IPBES 2024).

Target 5 – Finance

Mobilize at least USD 100 billion by 2030 to operationalize peatland conservation, rewetting and restoration, and sustainable, wise use.

- Indicators: USD mobilised for peatland conservation, rewetting and restoration, and sustainable, wise use, from different public and private sources, including, Official development assistance (ODA), and revenue generated from and finance mobilized through economic instruments, i.a. for the development of paludiculture and other livelihoods linked to wet peatlands.
- Baseline: To be developed.
- Rationale: Reflects the minimum investment required to enable Targets 1–3.

This includes direct costs of restoration and conservation as well as enabling conditions such as governance, monitoring, and safeguards. It does *not* include opportunity costs due to lack of data and their highly context-specific nature: in some regions (e.g. drained peatlands used for global commodities such as palm oil or pulpwood), these costs can be very high, while in others (e.g. degraded pastures or abandoned lands), they may be negligible. Thus, the target should be interpreted **as a bare minimum**. The estimated needs are grounded in data from the Convention on Wetlands (2025).

In comparison: Globally, degraded peatlands emit ~2 Gt CO_2e per year (UNEP 2022). Based on the social cost of carbon estimate of USD 185 per ton CO2 (Rennert *et al.* 2022), this equates to over USD **350 billion per year in global climate damage**—including health impacts, agricultural losses, and climate-related damages. This highlights the disproportionate cost of climate damage from drained and degraded peatlands relative to the modest investment scale required to stop their loss and restore them. **Country case study:** a recent study based on Germany's coal phase-out established a politically justified national peatland rewetting budget of €13.8–16 billion (Sommer *et al.*, 2024). These figures illustrate the urgency and feasibility of targeted peatland investments.

Target 6 – Monitoring

By 2030, all countries with significant peatland-related emissions have established or maintained national peatland inventories and monitoring systems aligned with international standards.

By 2050, a mature, global peatland monitoring architecture is in place.

- Indicators: Number of countries with peatland inventories and monitoring; integration in NDCs/NAPs/NBSAPs; global monitoring platform operational.
- Baseline: To be developed.
- Rationale: Enables consistent, transparent tracking of progress and reporting, and enables implementation, learning and adaptive management.

3. Guiding Principles: How will targets be achieved?

The Guiding Principles for peatland conservation, restoration, and sustainable, wise use are the foundation of the Peatland Breakthrough (PB). They serve as a high-level framework to inspire, align, and guide actions by all stakeholders—across geographies, sectors, and peatland types—toward achieving the PB's shared vision and ensuring that the progress towards achievement of the targets is just and meaningful.

While the targets define *what* we collectively aim to achieve, the guiding principles inform *how* peatland-related actions should be designed and implemented to be **ecologically sound, socially just, and economically viable.** These principles are not intended as rigid rules, but as core values to support implementation in diverse, complex and highly uncertain contexts. They aim to balance the urgency of global targets with the need for inclusive, context-sensitive approaches. In situations where tensions arise, they serve as a shared reference point for navigating trade-offs transparently, while keeping the overall objectives in clear focus. Together, they aim to catalyse the **transformative changes** needed across systems and sectors to halt peatland loss and unlock their full potential for people, climate, water, biodiversity, and sustainable development.

Principle 1: Safeguard peatland ecosystems and their biodiversity

Prioritize the protection of natural peatlands and prevent further degradation at local, national and global scales by identifying and addressing key drivers of degradation. Where intervention is necessary, apply the ecological restoration continuum—ranging from reducing degradation to full ecosystem recovery—guided by the Ramsar guidelines for peatland rewetting and restoration and SER standards. Emphasize maintaining natural hydrology, ecological functions, and connectivity at the landscape scale, while avoiding harm from- and to adjacent ecosystems. Emphasize the functional integrity of peatlands—such as peat formation, habitat recovery, carbon storage, and water regulation—while recognizing that species composition and environmental conditions may vary in future scenarios and should be considered flexibly within restoration goals.

Principle 2: Ground action in science, diverse knowledge systems, innovation and monitoring

Interventions should be designed and implemented using the **best available science**, while identifying, respecting, and appropriately incorporating **community-based** (including Indigenous-led), and **practice-driven innovations**, such as paludiculture. Support **multidisciplinary** and intercultural approaches—including environmental, social, economic, and Indigenous sciences–to recognize and prioritize human-nature interconnectedness and local realities. Identify and assess social dimensions—such as values, norms, institutions, behaviours, and networks—to inform context-sensitive interventions (IPBES 2019 & 2024).

Invest in **robust, inclusive and supported monitoring systems – including community-led ones –**, to track ecological, social, and economic outcomes over time. Action should not be delayed by incomplete knowledge; monitoring should enable adaptive management, and "learning through doing". Where high uncertainty exists, **pilot interventions** using conservative assumptions. Promote open science practices to support repeatability and learning across contexts.

Align data practices with the FAIR (Findable, Accessible, Interoperable, Reusable) and CARE (Collective benefit, Authority to control, Responsibility, Ethics) principles and uphold Indigenous data sovereignty (Indigenous Data Sovereignty & Ethics Resource Hub 2025).

Promote long-term investment in **local capacity, shared learning and knowledge exchange** across countries, communities, and disciplines to sustain progress and foster innovation at scale.

Principle 3: Advance equity and inclusion

Enable the **inclusion and participation** of key affected stakeholders, particularly Indigenous Peoples, local communities, smallholders (e.g. farmers, foresters, or other rural land-dependent groups), women, youth and other vulnerable groups at all levels and through application of internationally recognized safeguards and human rights, including the right to Free, Prior and Informed Consent (FPIC).

Decision-making roles should be differentiated based on the context, scale, and nature of the peatland intervention. Participation should reflect the degree to which groups are impacted by the loss of peatland ecosystem services and **ensure fairness across the multiple dimensions of equity**: e.g. representational, distributional, procedural, and contextual (McDermott *et al.* 2013).

In the context of multiple crises and urgency, inclusive participation should be designed to enable **early and targeted engagement, identification and transparent navigation of trade-offs, and iterative adaptation** over time.

Principle 4: Foster shared responsibility and governance

Peatland conservation, restoration, and wise use require coordinated action across governments, Indigenous Peoples, local communities, landowners, land managers, businesses, investors, researchers, and civil society. **Inclusive governance** means involving diverse actors in co-design, co-management, deliberation, and decision-making processes, recognizing their distinct roles, rights, capacities, and institutional readiness (IPBES 2019).

Build equitable **partnerships** across sectors and levels through open communication, transparency, and differentiated roles and responsibilities.

Strengthen **cross-sectoral coordination and policy coherence** through clear legal frameworks, aligned incentives, and accessible and targeted financing. Secure land and resource tenure rights. Design and implement effective, equitable and transparent **benefit-sharing** mechanisms. Invest in **capacity-building** to ensure equitable participation and leadership in implementation (IPBES 2019).

Strengthen **public awareness and communication** to build broad societal support for peatland action. Establish mechanisms for transparent coordination, accountability, and conflict resolution.

Principle 5: Mobilize high-integrity, inclusive, and transparent finance

Mobilize **diverse financing streams**—including public budgets, private investment, market-based mechanisms, climate and biodiversity finance, philanthropy, and blended finance models—by promoting collaborative action across governments, the private sector, civil society, and financial institutions. Strengthen the enabling role of governments to foster policy coherence and deploy fiscal and regulatory tools (e.g. taxes, subsidies, tradable permits) that redirect capital toward sustainable, wise use practices. Ensure that finance is **transparent, accountable, accessible** to local actors and **delivers impact on the ground**. Ensure finance for research, knowledge generation, education, capacity building and monitoring (IPBES 2019 & 2024).

Private finance has a key role to play, through supply chain investment, sustainable land-use financing, nature bonds, and ESG-aligned capital flows. Align finance with ecological limits and ensure it **supports multiple peatland values**—including **water**, carbon, biodiversity, and cultural

heritage, as well as responds to community needs and priorities. Prioritize high-integrity funding that is paired with strong governance, solid safeguards, and inclusive stewardship (IPBES 2019).

Strengthen the institutional, administrative and governance systems to ensure finance is equitable, just, and implementation-ready—supporting not only the flow of funds but also the readiness of actors to receive and manage them. **Align incentives** to reward conservation and wise use, while discontinuing harmful subsidies and practices that drive degradation. Develop improved **alternative livelihood opportunities** including through new paludiculture production chains and biomass demand. Incentivize positive financial flows, such as payments for ecosystem services, results-based finance, and insurance-linked instruments (IPBES 2019).

Principle 6: Operate in context and across scales using a landscape approach

Adopt a landscape approach at the **catchment level** as the foundation for peatland action. This approach is context-specific and grounded in the ecological, social, cultural, and economic conditions of each area, while ensuring **long-term water management** to sustain core peatland ecosystem services. It promotes **cross-sectoral coordination** and fosters synergies between conservation, livelihoods, and economic development. This approach recognizes peatlands as part of broader interconnected cause-and-effect systems, shaped by both natural dynamics (e.g. hydrology) and human activity – including both direct and indirect pressures. It supports **cross-jurisdictional integrated spatial planning** that accounts for multiple land uses, stakeholders, and ecosystem functions within and around peatlands, and thereby preventing the displacement (leakage) of environmental pressures to other areas. By working across land tenures, sectors, and governance levels, the landscape approach enables more resilient, inclusive, and sustainable outcomes. It also facilitates alignment with broader land-use, biodiversity, and climate strategies.

Principle 7: Commit to sustainability and climate resilience

Design and implement peatland strategies with a long-term perspective, ensuring **sustained public and private funding**, promoting medium- to large-scale programs that deliver measurable impact on the ground, and embedding them within national **climate adaptation planning** processes. Strengthen institutional arrangements, community engagement and local ownership to maintain outcomes. Integrate economic assessments that demonstrate the tangible environmental, social, and financial benefits of peatland strategies, reinforcing investment and long-term commitment.

Build climate resilience and enhance **disaster risk reduction** into all stages of planning and implementation, including through risk assessments and diversified livelihoods. Recognize the varying timescales and lag effects in peatland ecosystem responses. Develop **adaptive management** and monitoring systems with clear indicators, regular feedback loops, and learning mechanisms to enable timely course corrections and remain responsive to policy or governance changes. Frame peatland strategies as part of broader transformative pathways—shifting mindsets, governance models, and development pathways toward **long-term ecological and social resilience** (IPBES 2024).

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Annex I: Definitions

Benefit-sharing	The fair and equitable distribution of monetary and non-monetary benefits derived from the utilization of resources, knowledge, innovations or practices, on mutually agreed terms between the providers and users of those resources, following the provisions of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization. (CBD 2011)
Catchment /Watershed	Area from which all precipitation flows to a single stream or set of streams. Note: The boundary between the watershed is a watershed divide: all the precipitation on opposite sides of a watershed divide will flow into different watersheds. (FAO 2010)
Degraded peatland	A peatland that has lost its ability to accumulate peat and is losing peat (UNEP 2022).
Drained peatland	A peatland where human activities have lowered the soil water table to the extent that the peatland does not comply any longer with the definition of an undrained peatland.
High-integrity finance	Finance, both public and private, that does what it claims to do, benefits both people and nature, and is governed with fairness, accountability, and transparency, while avoiding practices that lead to peatland degradation, greenwashing, or harmful incentives.
Indigenous Peoples	Groups who are the original inhabitants of a particular region or country, having strong ties to their ancestral lands and cultures, which often predate the arrival of other populations. They are often distinct from the dominant cultural or ethnic groups that later established nations in those areas. (Adapted from United Nations 2007).
Natural peatland	A peatland of which the natural character has not been disturbed by human activity.
Nature-based Solution	Actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits. (UNEA Resolution 5/5, 2022)
Paludiculture	A farming and forestry system that targets the production of plant- or animal-based commodities on peatland in ways that preserve the peat soil, maintain or restore core ecosystem functions and services, and ideally re-establishes or continues peat accumulation. (Joosten *et al.* 2016; Convention on Wetlands 2021).
Peat	Peat is a soil substance consisting of partly decomposed (but partly still macroscopically recognizable) plant remains that have accumulated where they have been produced (in situ). Peat is formed when microbial decomposition of dead organic matter is incomplete as a result of anoxic (oxygen-free) conditions caused by near permanent water logging, and/or low temperatures. The definition of peat used is the same as for the Global Peatlands Assessment. Countries may define the minimum percentage of organic matter in peat according to their national circumstances, provided that this definition is used consistently both across the entire national land area and over time.

Peat-accumulating peatland (or 'mire')	A peatland where active peat accumulation is taking place and that therefore functions as a carbon sink. Peat-accumulating peatlands are always wetlands.
Peatland	Land with a naturally accumulated layer of peat at or near the surface. Peatlands include both ecosystems that are actively accumulating peat (also called 'mires'), and degraded peatlands that no longer accumulate and in contrast lose peat. Peatlands occur in almost every country on the globe.This definition is consistent with that of the Convention on Wetlands (COP 8 Resolution VIII.17) (Ramsar Convention on Wetlands 2018). The threshold for the depth of peat that constitutes a peat soil, and thereby the definition of peatland, may differ by country (Intergovernmental Panel on Climate Change [IPCC] 2014).
Peatland rewetting	All deliberate actions that aim to raise the water table of a drained peatland (i.e. its position relative to the surface) to re-establish water-saturated soil conditions and stop the loss of peat. (Adapted from IPCC 2014 and Convention on Wetlands 2021). During the implementation process, rewetting measures can range from partial to full soil saturation to ease the transition of drainage-based use of peatlands to more sustainable land uses. While full rewetting is the long-term goal, partial rewetting that reduces soil emissions and boosts peatland-specific biodiversity is a beneficial transitional step. Rewetting remains the basis and most important method for restoration, even though other measures may be needed in combination depending on the specific context and objectives. (see Convention on Wetlands 2021). Further clarification on the implementation details may be supported, as needed, through the development of regional, national, or sub-national guidelines or roadmaps during the implementation phase of the Peatland Breakthrough.
Peatland under restoration	A peatland is under restoration from the moment when the first binding commitments for restoration (including plans) have been made.
Productive use	The extraction or harvesting of tangible products, such as food, fodder, fibre, fuel, water and other materials.
Recovery	The development of a degraded ecosystem to a former, better state or condition. When this state or condition has been reached, the ecosystem is (spontaneously) 'regenerated', (actively) 'restored' or (in general) 'recovered'.
Restoration	All deliberate actions that contribute to the recovery of a degraded ecosystem. When this goal has been reached, the ecosystem is 'restored'. (Convention on Wetlands, 2021). While restoration may take place on undrained sites (e.g. the restoration of damaged vegetation cover), in the majority of cases peatland restoration will include rewetting (IPCC 2014), accompanied by recovery or restoration of peat-forming vegetation and other measures across the ecological restoration continuum (Convention on Wetlands 2021). Whether a peatland is "restored" thus depends on the goals that have previously been formulated (cf. Table 1).
Rights-holders	Individuals or groups with legal, customary, or traditional rights, including those based on collective or Indigenous tenure, whether or not formally recognized.
Stakeholders	All individuals and groups with an interest in or an influence on the use and management of peatlands.

Undrained peatland	A peatland with a soil that is inundated or saturated by water for all or part of the year to the extent that biota, adapted to anaerobic conditions, particularly soil microbes and rooted plants, control the quality and quantity of the net annual greenhouse gas emissions and removals. (cf. IPCC 2014 Wetland Supplement).
Sustainable, wise use of peatlands	In this framework, the concept of sustainable, wise use is understood as the use of peatlands in ways that preserve the peat soil, contribute to achieving the SDGs, and provide long-term societal benefits, consistent with the Principles of the Peatland Breakthrough (informed by Convention on Wetlands 2007, UNEA Res. 4/16, Joosten & Clarke 2002, Bonn *et al.* 2016). This includes use for three main groups of services – i.e. provisioning, regulating and cultural services (refer to Annex I of Convention on Wetlands, 2021, for a comprehensive list of peatland ecosystem services). For further details on the definition of sustainable, wise use, refer to Figure 2 'Decision-support tree to assess whether a practice is consistent with the sustainable, wise use of peatlands' after this table.

In Annex Figure 2. Decision-support tree to assess whether a practice is consistent with the sustainable, wise use of peatlands

Note: *This decision-support tree summarizes major options and common decision pathways to assess whether a proposed practice is consistent with the concept of 'sustainable, wise use of peatlands'. It is not exhaustive, nor does it prescribe a single correct approach. Rather, it offers a structured way to reflect on key considerations, recognizing that specific decisions must be adapted to local contexts. The Guiding Principles of the Peatland Breakthrough offer additional reference for implementation, monitoring, and continuous improvement.*

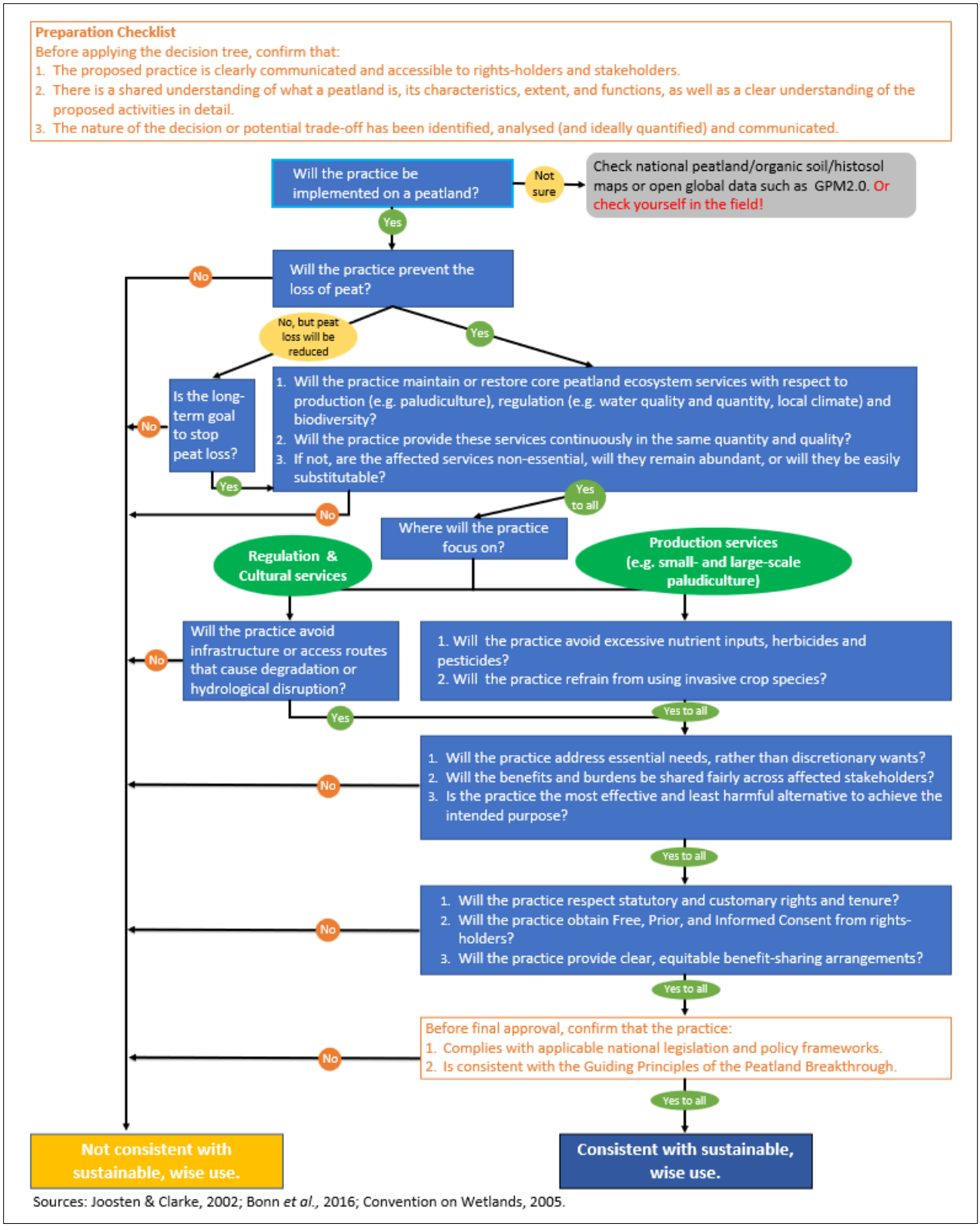


Figure 2. Decision-support tree to assess whether a practice is consistent with the sustainable, wise use of peatlands. *Sources:* Joosten & Clarke 2002, Bonn *et al.* 2016, Convention on Wetlands 2005.

Annex II: Target details and implementation and monitoring considerations

Target 1: Conservation

Target definition

Prevent the further anthropogenic loss of natural and peat-accumulating peatland by halting all direct or indirect anthropogenic degradation of such areas.

Context: The loss of natural and undrained peatland has continued at an order of magnitude of ~0.5 million hectares per year since the Second World War[6], largely due to the absence of effective global policy implementation. Despite growing recognition of their importance, natural peatlands in many regions face increasing pressure from land use change.

Target

Halt the anthropogenic loss of undrained peatland by 2030.

The goal is to stop further loss of natural and undrained peatland by 2030–i.e. reduce the long-term rough average global mire loss from ~0.5 million ha/year to 0 ha/year by 2030 and sustain this level beyond. This is the only climate-consistent path, aligning with the mitigation and adaptation goals of the Paris Agreement, and minimizing the irreversible loss of carbon sink and storage function, future restoration needs, disaster risks (fire, flood, drought), emissions, and associated costs.

If halt by 2030 is not achieved

As long as the loss of natural and undrained peatland is not halted, expanding drainage will result in **increased losses of the peatland carbon sink and storage function, avoidable emissions and loss of other key ecosystem functions**. Every expansion of drainage and degradation adds to the global climate burden and increases the scale and cost of future restoration. **Delaying peatland protection therefore reduces the likelihood that global climate targets are achieved, increases the mitigation burden for other sectors and reduces our collective ability to maintain a functioning planetary carbon balance**. *See Box 2 for ballpark figures illustrating the climate impact of continued peatland drainage.*

[6] The estimate of approximately 0.5 million hectares per year represents a widely accepted, order-of-magnitude approximation of global peatland degradation, as presented in the Global Peatlands Assessment (UNEP, 2022). It builds on aggregated expert estimates and historical data sources, including Immirzi *et al.* (1992) and Joosten & Clarke (2002), and reflects a persistent trend observed since the mid-20th century. Earlier sources, such as Immirzi *et al.* (1992), estimated annual losses of 550 kha, based on country-level data including e.g. 250 kha for Russia, 75 kha for Canada, and 70 kha for Finland for forestry drainage. More recent land-use change data support similar levels; for example, nearly 13 million hectares of peatlands were degraded in Sumatra and Kalimantan alone between 1985 and 2010 (Miettinen & Liew 2010). This is the best available estimate at present and cannot be put more accurately until better peatland monitoring systems and consistent national reporting are in place.

Indicator

Key Performance Indicator to track progress toward this target: Area (ha) of undrained peatland remaining undisturbed by drainage, peat removal or other hydrological interventions altering their natural water regime.

Baseline

Approximately 430 million hectares of natural and undrained peatlands globally (88% of the global peatland extent of ~488 million ha[7], UNEP 2022). This figure serves as the starting point for immediate implementation and tracking.

As the target aims to halt the anthropogenic loss of natural and undrained peatland by 2030, some losses may still occur until then. Therefore, an updated baseline should be established in 2030 to assess target achievement. Continued improvement in peatland inventory will be critical to ensure consistent monitoring.

Co-benefits, Risks, and Implementation Barriers

Co-benefits:

- Biodiversity conservation.
- Freshwater retention & purification, and flood prevention.
- Reduced fire risk and public health benefits (e.g., smoke haze reduction).
- Enhanced ecosystem resilience for local livelihoods.
- Avoided restoration costs and long-term climate damage.
- Reduced land subsidence and risk of productivity loss.

Risks and implementation barriers:

- *Barrier:* Failure to recognise natural and undrained peatlands due to incomplete peatland mapping and monitoring.
    - *Solution:* Raise awareness and support national inventories, encourage nationally-led mapping activities (Principles 2 and 4).
- *Barrier:* Weak enforcement of protection policies.
    - *Solution:* Strengthen legal mandates and institutional capacity for compliance and monitoring consistently across sectors. Identify and address the drivers of change (Principles 1, 6 and 7).

[7] Based on the Global Peatland Map 2.0 (GPM2.0), compiled for the Global Peatlands Assessment, GPA (UNEP 2022). Data years differ by country (2018–2022 for most Annex I countries; older or expert-based where unspecified). GPM2.0 is the most up-to-date data source on peatland location and extent globally. It was compiled by amalgamating country level peatland maps and high-resolution peatland 'proxy' data contained in the Global Peatland Database (GPD) following the 'bottom-up approach' (see § 2.2 and Annex III of the GPA). The map is spatially explicit with differing levels of uncertainty depending on the region (see Table III.3 of Annex III of the GPA). The GPM2.0 served as a basis for the development of regional peatland distribution maps, and of global maps highlighting, for example, land use types, land use changes, peatland protection, human pressure, and biodiversity values by overlaying the peatland data with relevant global thematic data (see Table III.4 of Annex 3 of the GPA).

- *Barrier:* Competing land-use.
    - *Solution:* Integrate natural and undrained peatland into land-use planning and cross-sectoral policy instruments (e.g. spatial plans, NDCs), co-create alternative sustainable, wise use practices (Principle 6).
- *Barrier:* Governance and land tenure challenges.
    - *Solution:* Support inclusive governance, clarify tenure, and develop co-management mechanisms with Indigenous and local communities (Principles 2 and 3).
- *Barrier:* Limited technical and financial capacity in many regions.
    - *Solution:* Mobilize finance for peatlands (Target 5), and support knowledge-sharing through global cooperation and capacity building (Principle 4).
- *Barrier:* Incentives that promote peatland drainage—such as subsidies, lack of disincentives (e.g. taxation), or outdated legal frameworks.
    - *Solution:* Reform fiscal and regulatory frameworks to redirect harmful subsidies and promote peat-conservation-aligned incentives (Principle 5).
- *Risk:* Indirect degradation of peatlands—caused by drainage, roads and other infrastructure, or land-use change in adjacent areas—may go unnoticed in official statistics, yet impair ecosystem function.
    - *Mitigation:* Encourage planning and monitoring at catchment-scale to detect indirect impacts and include buffer zones in protection planning (Principle 6).
- *Risk:* Climate change impacts can disrupt peatland functionality, turning natural peatlands from net carbon sink to net source (IPCC 2022).
    - *Mitigation:* Integrate climate adaptation into peatland conservation and protection strategies by addressing human pressures, applying hydrological buffering, maintaining connectivity with surrounding wetlands, and adaptive management based on continuous monitoring (Principles 2, 6, and 7).
- *Barrier:* Lack of recognition of peatland emissions in national GHG inventories, reducing policy urgency and resource allocation (Principle 2 and 4).
    - *Solution:* Continue awareness raising towards countries responsibility to report under UNFCCC framework if peatland emissions exceed 0.05% of total national emissions or 500 kt CO_2e, with a flexibility threshold of 0.1% or 1,000 kt CO_2e for developing countries (Principle 4).

Overcoming these barriers requires political commitment, increased finance and monitoring, local engagement, and strong policy coordination. The Peatland Breakthrough aims to build momentum for these efforts and to catalyse awareness-raising among countries and partners.

Target 2: Rewetting and restoration

Target definition:

Context: Peatland rewetting and restoration contributes to multiple global goals, including climate change mitigation and adaptation, sustainable development and recovery of mire biodiversity (compared to the drained state).

Peatland rewetting and restoration serves multiple objectives beyond ecological recovery. Depending on the local context, it may focus on reducing emissions, restoring carbon sink function, supporting sustainable livelihoods, or enhancing biodiversity (Table 1). In most cases, recovering optimal conditions for peat conservation and renewed peat accumulation will require active intervention to restore the water table to around the peat surface (i.e. rewetting), accompanied by recovery or restoration of peat-forming vegetation and other measures across the ecological restoration continuum (Convention on Wetlands 2021).

Target

By 2030, at least 30 million hectares of degraded peatlands are being rewetted and restored.

This target addresses at least half of the 57 million hectares of drained and degraded peatlands currently identified (UNEP 2022), and an estimated ~2 million hectares of natural and undrained that may additionally be drained and degraded between 2025 and 2030 if the long-term average rate of loss (-0.1% per year) persists.

Indicators

Key Performance Indicator 1: Area (ha) of peatland under rewetting and restoration
Note: This is the core metric. While no centralized global dataset exists, relevant commitments can be derived from the National Determined Contributions (NDCs) under the UNFCCC Paris Agreement and national strategies and plans such as National Biodiversity Strategies and Action Plans (NBSAPs).

Key Performance Indicator 2 (optional): Area of peatland with drainage infrastructure
Note: A useful proxy for rewetting and restoration needs. Partial datasets are available (e.g. EU, USA Indonesia); mapping is relatively easy, except for tile drainage. Improved mapping will enhance its relevance.

Key Performance Indicator 3 (optional): Area of peatland that has been rewetted and restored.
Note: Requires local or national monitoring. While no centralized global dataset exists, national reporting under the UNFCCC (including Biennial Transparency Reports BTRs and National Inventory Reports NIRs), the Ramsar Convention on Wetlands, the CBD, and the UNCCD (Performance Review and Assessment of Implementation System PRAIS), and project databases could be used for baseline setting and progress tracking, also using frameworks such as the UN Decade's Framework for Ecosystem Restoration Monitoring (FERM) .

Baseline

Approximately 57 million hectares of drained and degraded peatlands that need rewetting and restoration globally (UNEP, 2022).

Co-benefits, Risks, and Implementation Barriers

Co-benefits:

- Climate mitigation through emission reductions and possible renewed carbon sequestration.
- Fire risk reduction and improved resilience to climate extremes, i.e. disaster risk reduction benefits.
- Enhanced water quality, storage, and flood attenuation, i.e. adaptation benefits.
- Recovery of mire biodiversity (especially in goals 4–5).
- Sustainable livelihoods, job creation, and community-based rewetting and restoration opportunities.
- Cultural, recreational, and educational value in many peatland landscapes.
- Increased supply chains and climate risk resilience for businesses and land users.
- Lower long-term public costs for water treatment, disaster response, and carbon liability.

Restoration is increasingly recognized by the private sector and financial institutions as a means to manage operational, climate and reputational risk, meet sustainability standards, enhance supply chain resilience, and reduce long-term liabilities.[8]

Risks and implementation barriers:

- *Barrier:* High upfront costs and limited access to finance in many regions.
    - *Solution:* Mobilize finance, integrate peatlands into national investment plans, and support blended finance models (Principle 5).
- *Barrier:* Land tenure disputes or land use conflicts, especially where productive land is rewetted.
    - *Solution:* Clarify tenure rights, involve Indigenous, local communities and land managers from the beginning through FPIC, and co-develop benefit-sharing agreements with affected communities (Principles 3 and 4).
- *Risk:* Land grabbing both in pristine areas and areas perceived as "abandoned" (Fienitz 2023).
    - *Mitigation:* Clarify tenure rights, promote transparent land governance, and engage local actors in land-use decisions (Principle 3).
- *Risk:* The longer restoration is delayed, the more difficult and costlier it may become due to increased peat degradation, climate extremes, ecological shifts, and reduced temporal restoration windows.
    - *Mitigation:* Prioritize restoration in high-risk areas, integrate peatlands into climate adaptation planning, and secure long-term funding for readiness and early action (Principles 1, 2 and 5).
- *Barrier:* Incomplete peatland mapping and degradation assessment.
    - *Solution:* Raise awareness and support national inventories, encourage nationally-led mapping activities (Principle 2).

[8] Peatland degradation has direct business impacts—including soil instability, water risk, carbon liabilities, and reputational concerns—which companies are now beginning to address through ecosystem restoration. Investment in peatlands also contributes to nature-positive goals and helps companies stay ahead of tightening regulatory and market expectations (LFL 2024).

- *Barrier:* Lack of national inventories and technical capacity for design, hydrological planning, or long-term maintenance.
    - *Solution:* Invest in capacity building, knowledge transfer, and partnerships with technical and research institutions (Principle 2, 6 and 7).
- *Risk:* Local loss of food security and livelihoods if rewetting and restoration of agricultural peatland displaces food production and income generation without offering viable alternatives.
    - *Mitigation:* Support for paludiculture alternatives, such as sago, can help address localised food security concerns. Sago is an underutilized wetland crop with strong potential—its global market is valued at ~USD 400 million and growing at 4.9% annually, with proven relevance for local diets and food industries in countries like Indonesia (Business Research Insights 2024). With targeted investment and market development, paludiculture crops can offer viable alternatives to food production on rewetted peatlands, reducing reliance on drainage-based agriculture (Principle 5).
- *Risk:* While rewetting and restoration can be viable and often rapid emission-reduction measures, full recovery of persistent carbon sequestration capacity, climate cooling, and biodiversity benefits may take decades (IPCC 2022).
    - *Mitigation:* Communicate clearly about rewetting and restoration timelines, and embed long-term monitoring to track progress toward multiple goals and enable adaptive management (Principle 7).
- *Barrier:* Lack of large business support.
    - *Solution:* Engage private sector through public–private partnerships, recognition of co-benefits, clear and consistent legal frameworks and commitments (Principles 4 and 5)
- *Risk:* Displacing land use change to other biomes (also called, leakage).
    - *Mitigation:* Ensure consistent national/sub-national land use planning across sectors. Promote supply chain transparency, international cooperation and standards/certification. (Principles 2, 4 and 6).
- *Risk:* Indirect pressures—such as drainage, mining, infrastructure construction, or land conversion in adjacent areas—can undermine rewetting and restoration outcomes by altering hydrology or reintroducing stressors after restoration.
    - *Mitigation:* Integrated land use planning, spatial prioritization that maintains ecosystem regulating functions, and monitoring to support adaptive management (Principle 2 and 6).

The guiding principles of the Peatland Breakthrough aim to address and minimize these risks and barriers, particularly through robust social and environmental safeguards, including free, prior and informed consent (FPIC) and landscape-scale planning and implementation approaches.

Target 3: Wise use

Context: Sustainable, wise use is a **nature-based solution** that delivers climate mitigation and adaptation, biodiversity conservation, water quality and quantity regulation, and social co-benefits. **It helps prevent degradation, supports sustainable development, and reduces land use conflicts through inclusive stewardship** (i.e. responsible, long-term care and use of the land, often by those who live on or depend on them) **and benefit-sharing**.

This target supports:

- Target 1 by reducing pressure on natural peatlands through sustainable, wise use, peat-conserving uses;
- Target 2 by offering viable alternatives to drainage-based land uses on rewetted peatlands; and,
- Wider sustainability goals, including food systems resilience, SDG-aligned livelihoods, and land-use conflict reduction.

Target

By 2030, enabling conditions for sustainable, wise use are developed, and by 2050, it is implemented on all peatland.

Note on scope: *Annex I includes (1) a definition of sustainable, wise use and (2) a decision-support tree for its implementation. Together with the proposed key performance indicator (KPI 1: Area of peatlands under sustainable, wise use), these components enable national or regional target-setting and implementation consistent with the guiding principles of the Peatland Breakthrough. A global area-based target is not proposed at this stage due to the variety in national contexts and peatland conditions, but may be considered at later stages as more data become available.*

Indicators

Key Performance Indicator 1: Area (ha) of peatlands under sustainable, wise use.
Note: No global baseline currently exists. Progress could be monitored through national land use reporting, project-level data, and targeted mapping initiatives. Additional indicators are presented in Table 2. Key parameters for peatland inventory and condition monitoring (Annex II, Target 6 Monitoring).

Key Performance Indicator 2 (optional): Area of peatlands wisely used with community-led or Indigenous stewardship formally recognized.
Note: Limited baseline data exist globally. Monitoring may be feasible through integration of land tenure, customary use, and community governance datasets. Further work needed to assess relevance and feasibility.

Note: **All KPIs depend on clearly defining what qualifies as "wise use" in practice, based on the local context, peatland type and conditions during implementation. To support this process please refer to the 'sustainable, wise use of peatlands' definition and the decision-support tree included in Annex I.**

Baseline

There is currently no global baseline for the area of peatlands under sustainable, wise use. However, the target applies across two key domains:

- Rewetted and restored peatlands — drawn from the ~57 million hectares of drained and degraded peatlands identified in Target 2. These include areas currently under e.g. drainage-based agriculture and forestry, where rewetting could enable wise productive use such as paludiculture and other wet livelihoods based on income from eco-tourism or payments for ecosystem services (e.g. carbon/biodiversity credits).
- Natural and undrained peatlands — estimated at ~430 million hectares globally (see Target 1). Some are under customary and/or non-productive use (e.g. hunting, gathering, spiritual practices), while in certain contexts, carefully planned wet productive uses such as paludiculture may take place on formerly natural peatlands, provided they are aligned with the wise use principles (see sustainable, wise use definition and decision-support tree in Annex I).

Baseline development will require better mapping and reporting of existing uses, stewardship arrangements, and assessment of rewetting and restoration status to identify where sustainable, wise use is already in practice and where enabling conditions are needed. The Peatland Breakthrough will support this process during the implementation pathways.

Co-benefits, Risks, and Implementation Barriers

Co-benefits:

Sustainable, wise use practices reinforce and sustain the outcomes of Targets 1 and 2 by making wet peatland management viable by:

- Supporting livelihoods resilience, and equitable benefit-sharing.
- Reducing land use conflicts by integrating productive and non-productive uses.
- Providing incentives to maintain wet conditions and avoid re-drainage.
- Recognizing and protecting traditional and Indigenous uses of peatlands.

Risks, implementation barriers and mitigation measures:

- *Risk:* Expansion of monoculture (e.g. industrial paludiculture) in rewetted areas undermining biodiversity.
    - *Mitigation:* Apply spatial planning and ecological safeguards to balance production with conservation goals (e.g., Tanneberger *et al.* 2020). Prioritize paludiculture in deeply drained and highly degraded peatlands, which present the greatest environmental need and offer the largest land potential for such practices (Wichtmann *et al.* 2016), thereby reducing pressure on more biodiverse and pristine areas. (Principles 1, 2, 6 and 7).
- *Risk:* Misuse of the “sustainable use”, “wise use” and “paludiculture” concept to justify unsustainable or peat-degrading practices.
    - *Mitigation:* Develop clear concepts and definitions and context-specific guidance on what qualifies as sustainable, wise use at the regional, national or sub-national levels (Principles 2 and 4).
- *Risk:* Land use conflicts or unclear tenure in areas with overlapping legal and customary rights.

    - *Mitigation:* Ensure recognition of Indigenous and community stewardship through inclusive planning and land tenure support (Principles 2 and 3).
- *Risk:* Continued market demand for products sourced from drained peatlands.
    - *Mitigation:* Promote market transformation through certification, public procurement standards, consumer awareness and (scientific) product development that favour products from rewetted peatlands or peatlands under wise use (Principles 3 and 5).
- *Barrier:* Agricultural and forestry policies (e.g. subsidies such EU Common Agricultural Policy) continue to favour and support drainage-based land use.
    - *Solution:* Realign public incentives and financing mechanisms to support peat-conserving practices and wetland-compatible livelihoods (Principles 3 and 5).
- *Barrier:* Lack of value chains with sufficient demand for paludiculture biomass/products.
    - *Solution:* Invest in product development, research, and industrial applications for paludiculture products (for example, in Europe, the first *Paludi Product Catalogue* has just been published). Triangular knowledge exchange (Principles 2, 4 and 5).

Derived target/Target 4: Climate change mitigation and adaptation

Target definition

Achieving the peatland targets on Conservation (Target 1), Rewetting and restoration (Target 2), and Wise Use (Target 3) is expected to deliver significant climate change mitigation and adaptation outcomes, aligning in many ways with UNFCCC policies.

This derived target 4 reflects the combined climate change mitigation impact of implementing Targets 1–3 (Protection, Rewetting and restoration, Wise Use), directly supporting the UNFCCC Paris Agreement and the goal of Net Zero by 2050. It also contributes to adaptation and ecosystem resilience, especially in climate-vulnerable regions. **Its progress can be monitored by the guidance and indicators outlined under Target 6 on Monitoring**.

As shown in Figure 3 (adapted from Günther *et al.* 2020), only fast and comprehensive rewetting of drained peatlands (scenario "Rewet_All_Now") results in radiative forcing stabilization (meaning: stop adding more warming to the atmosphere) before global temperatures reach their highest point. Scenarios involving partial or delayed rewetting do not prevent continued climate warming, thereby **leading to an overshoot of the 1.5 °C Paris Agreement target**. Under scenarios where the 1.5 °C temperature target is temporarily exceeded, the warming of northern peatlands amplifies peak global temperatures even further (Zhu *et al.* 2025). These models indicate the necessity of a 2030 milestone with at least 50% of degraded peatlands under rewetting and restoration, to allow that the 2050 net-zero target is achievable.

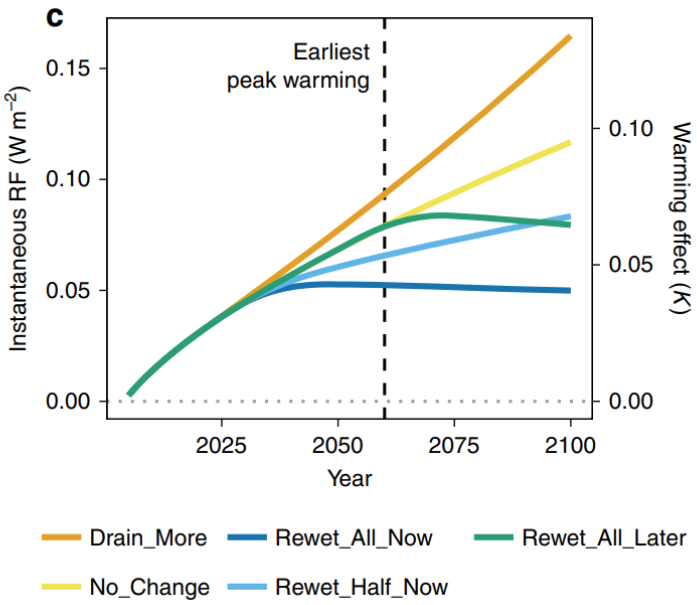


Figure 3. Instantaneous radiative forcing of different global peatland management scenarios. Only the "Rewet_All_Now" scenario stabilizes warming before the projected peak warming. Delaying rewetting significantly increases long-term warming due to ongoing CO_2 accumulation in the atmosphere. Methane emissions from rewetting are short-lived and do not offset the long-term mitigation benefits. (Günther *et al.* 2020).

Targets

By 2050:

By 2050, the global peatland area has reached net zero emissions and preferably is a net GHG sink, supporting climate-resilient pathways.

Estimated mitigation impact: Approximately 2 Gt CO_2e per year, or ~4-5% of all global anthropogenic carbon emissions reduced by 2050 through peatland rewetting and restoration (Leifeld & Menichetti 2018; Joosten & Couwenberg 2021).

Note: While avoiding degradation of undrained peatlands (Target 1) clearly prevents additional emissions and supports removals, quantifying its global mitigation potential would require counterfactual baseline scenarios that are subject to high uncertainty, and to date no robust global models exist for peatlands. For this reason, a global CO_2e estimate for avoided loss and enhanced sequestration is not included here. This figure can be further developed during the implementation phase as more region-specific data become available.

Adaptation benefits: Wise, wet peatland management reduces vulnerability of people and ecosystems, supports adaptive capacity, and strengthens resilience—especially for populations most impacted by climate change and the combined effects of multiple climate hazards. Contributions to adaptation include local cooling through increased evapotranspiration, improved flood buffering and water quality, reduced fire risk, and enhanced ecosystem resilience across rewetted and restored and natural peatlands. These actions directly support the UNFCCC Global Goal on Adaptation by reducing climate-induced water risks (its Target 9a), restoring inland ecosystems (Target 9d), and enabling climate-resilient livelihoods (Target 9f). These actions also support the UN Sendai Framework for Disaster Risk Reduction 2015–2030, particularly by enhancing resilience to climate-related hazards and by risk reduction through ecosystem-based approaches. The adaptation benefits of the target could be monitored through the Global Goal on Adaptation monitoring framework (expected to be decided by the end of 2025), and national monitoring, evaluation and learning systems, reported regularly through the Biennial Transparency Reports (or other means of adaptation reporting chosen by countries).

General rules clarifying the carbon benefits and use of different methodologies, also for the voluntary market and sustainability reporting of private sector companies will increase trust in peatland restoration and conservation activities and facilitate investments for the implementation phase.

Note on scope and further development: *We recognize the importance of addressing both mitigation and adaptation as derived targets. Further work is needed to assess whether it is feasible and appropriate to define derived targets for climate change mitigation and adaptation separately. As this is very context-specific, this area will be further supported during the implementation phase.*

By 2030:

By 2030, be clearly on track through core Targets 1, 2 and 3.

Baseline

Reported emissions from drained peatlands vary depending on the source, scope, and methodology:

- **UNFCCC-directed national inventories (NGHGi)** report an average of **929 Mt CO_2/year** from organic soils between 2000 and 2020, **including emissions from peat fires**. This figure is based on submissions **from only 35 countries**, and includes **CO_2 only**. (Grassi *et al.* 2022).
- **Science-based global assessments** estimate total emissions at **~2,000 Mt CO_2e/year**. These assessments have broader geographic coverage and include all three major greenhouse gases–**CO_2, CH_4 (methane), and N_2O (nitrous oxide)**–but exclude emissions from peat fires (UNEP 2022, Leifeld and Menichetti 2018).

These differences are primarily due to:

- The limited number of countries currently reporting peatland emissions.
- Underreporting within those inventories—such as incomplete coverage of peatland area, using outdated emission factors, or omission of non-CO_2 gases.[9]
- Variety in emission factors, land use data (activity data), and monitoring methods.
- The in- or exclusion of fire emissions.

Box 5. Rewetting and methane: What we know

- Methane generation in natural wet peat soils is an inevitable collateral effect of peat carbon conservation and sequestration: you cannot have the latter without the other.
- CH_4 has a much shorter atmospheric lifetime (~12 years, IPCC 2021) compared to CO_2 and NO, which accumulate in the atmosphere and drive long-term warming. In the long term, the climate effect of long-lived CO_2 is always stronger than that of short-lived CH_4 (Günther *et al.* 2020).
- Rewetting drained peatlands may lead to an additional short-term methane (CH_4) emission peak in the first years after rewetting by anaerobic decomposition of dying-off dryland biomass.
- Scientific modelling (Günther *et al.* 2020) shows that also even peak CH_4 emissions do not offset the long-term climate benefits of halting CO_2 emissions.
- **Conclusion: The long-term climate benefit of rewetting clearly outweighs the temporary increase of methane emissions.**

Source: GMC 2022; Evans & Gauci 2023.

[9] As of 2014, the IPCC Wetlands Supplement provides updated emission factors and improved guidance for reporting emissions from organic soils. However, many EU countries still rely on the older 2006 IPCC Guidelines in their National Inventory Submissions (NISs), omitting more recent scientific advances. Kütz (2025) shows that full implementation of the Wetlands Supplement would raise reported EU-wide emissions from agriculture on organic soils from 119 Mt to 154 Mt CO_2e/year. Another 42 Mt would be caused by improved area assessment. Another recent study (van Giersbergen *et al.* in revision) reveals even an amount of 232 ±56 Mt CO2e from drained peatland in the EU, which is twice the 119 Mt CO2e reported by the EU to UNFCCC.

Target 5: Finance

Target definition

Mobilize sufficient financial resources to support the implementation of the Peatland Breakthrough—across conservation, rewetting and restoration, and sustainable, wise use.

The global financing need is roughly estimated at least USD 100 billion[10], based on investment requirements for halting the ongoing anthropogenic loss of natural and undrained peatlands of ~0.5 million hectares annually, restoring 30 million hectares, and enabling wise peatland use and stewardship through 2030.

Target

Mobilize at least USD 100 billion by 2030 to operationalize peatland conservation, rewetting and restoration, and sustainable, wise use.

This figure reflects a minimum level of current cost estimates (excluding opportunity costs) and includes:

- Target 1 Costs for conservation (Total: ~5 billion): USD 610/ha/yr (Convention on Wetlands 2025) × 2.5 Mha (0.5Mha/year over 5 years).
- Target 2 Restoration costs (one-off expenditure) (Total: ~32 billion): USD 1,094/ha[11] (Convention on Wetlands 2025) × 30 Mha.
- Target 2 Restoration maintenance (Total: ~24 billion): 10–15% of restoration costs over 5 years.
- Targets 1–3 Enabling costs (monitoring, governance, safeguards, etc) (Total: ~39 billion): overhead cost as proxy, 10-15% applied to total area for conservation and restoration.

Opportunity costs are not included in the core financial estimates due to limited data availability and their highly context-specific nature: in some regions (e.g. drained peatlands used for global commodities such as palm oil, pulpwood or Gouda cheese), these costs can be very high, while in others (e.g. degraded pastures or abandoned lands), they may be negligible (Convention on Wetlands 2025). If applied uniformly at USD 1,000/ha/year for both conservation and restoration target areas over the 2025–2030 period, opportunity costs alone would raise the total financing needs by an additional USD 100 billion—bringing the total requirement to around USD 200 billion. Thus, the current USD 100 billion target should be interpreted as a bare minimum for global peatland action through 2030. During the implementation phase, large-scale implementation of alternative livelihoods – such as paludicultures – will lower the opportunity costs, whereas regional, national or sub-national investment strategies should be developed aligned with the principles of the breakthrough.

[10]USD 100 billion represents approximately 0.1% of global GDP (USD 104 trillion in 2023), while degraded peatlands contribute an estimated ~5% of global GHG emissions. This highlights the disproportionate climate impact relative to the scale of investment. For example, a recent study based on Germany's coal phase-out established a politically justified budget of €13.8–16 billion for national peatland rewetting (Sommer *et al.*, 2024). These figures are illustrative for the purpose of justifying the investment; the PB Working Group on Resource Mobilization will refine investment needs based on regional context, emission reduction and adaptation potentials, and co-benefits.

[11] This average includes the direct costs of technical rewetting and restoration–planning and construction–, which are heavily influenced by location, size, design, accessibility and distance to material sources.

As an example, at carbon prices of USD 100/t CO_2e or below, **peatland protection and restoration can avoid up to 0.9 Gt CO_2e/year (2020–2050), consistent with global cost-effective mitigation pathways**[12] (IPCC AR6, 2022). At lower carbon prices (e.g. USD 20–50), only a portion of this potential (0.2–0.6 Gt CO_2e/year) is economically viable, underscoring the **need for adequate pricing, public incentives** and the **development of livelihoods** to unlock the full climate value of peatlands[13].

Indicator

Key Performance Indicator 1: USD mobilized for peatland protection, rewetting and restoration, and sustainable, wise use.
Note: No standardized global baseline exists. Progress could be monitored through reporting by governments, multilaterals, and project finance mechanisms.

Key Performance Indicator 2: Official development assistance (ODA), and revenue generated from and finance mobilized through economic instruments, i.a. for the development of paludiculture and other livelihoods linked to wet peatlands.
Note: Aligned with SDG 15 (Life on land) indicator 15.a.1. This indicator complements Target 3 on wise use by specifically tracking finance that contributes to lower the opportunity costs of peatland conservation, rewetting and restoration and sustainable, wise use. No standardized global baseline exists. Progress could be monitored through reporting by governments, multilaterals, and project finance mechanisms.

Baseline

There is currently no centralized global finance tracking system for peatland action. Despite finance for nature-based solutions is rising, the current funding for peatlands remains a small fraction of the estimated need[14].

Co-benefits, risks and implementation barriers:

Co-benefits

Investing in peatland protection, rewetting and restoration, and sustainable, wise use generates multiple returns:

[12] This is comparable in scale to other land-based options, such as afforestation (0.5–3.0 Gt CO_2e/year) and agroforestry (0.4–1.1 Gt CO_2e/year).
[13] *Disclaimer:* These figures provide useful benchmarks for what is currently considered economically feasible in carbon markets. They illustrate how peatland restoration and protection can be a highly cost-effective climate solution. At the same time, they reflect only part of the broader value of peatlands—whose ecological, cultural, and hydrological benefits contribute significantly to planetary health and human well-being, beyond what can be measured in monetary terms.
[14] The State of Finance for Nature Report (UNEP 2024) estimates that annual investment needs for peatland restoration could reach up to USD 44 billion per year to fully unlock the potential of peatland ecosystems within the AFOLU sector and meet global restoration targets. The Investing in Peatlands report (LFL 2024) estimates a global need of USD 320 billion by 2050 for peatland restoration alone. These estimates confirm that the Finance Target in this framework is of the same order of magnitude (i.e. tens of billion annually) and underscore that it represents a bare minimum global investment requirement.

- Avoided costs from fire, haze, and flooding (e.g. the six largest peat fire events in Indonesia between 2004 and 2015 causing a total of US$ 93.9 billion in economic losses. Kiely *et al.* 2021).
- Highly cost-effective Nature-based Solution (Tanneberger *et al.* 2021; IPCC 2022).
- Sustainable rural livelihoods, green job creation, and community stewardship
- Biodiversity conservation.
- Improved water quality, reducing the cost of removing suspended matter.

Risks, implementation barriers and mitigation measures:

- *Barrier*: Underestimation of true costs due to undervaluing opportunity costs and monitoring needs.
    - *Solution*: Use full-cost accounting and include social safeguards during implementation. Develop improved alternative livelihood opportunities by new paludiculture production chains and biomass demand (Principles 2 and 5).
- *Risk:* Fragmented finance channels with limited access by local actors.
    - *Mitigation*: Prioritize equity-based instruments, pooled finance platforms (Principles 3 and 5).
- *Barrier:* Low investor confidence in peatland finance readiness.
    - *Solution:* Develop robust investment frameworks and MRV systems, and use blended finance mechanisms to de-risk private capital and catalyse public-private partnerships (Principles 2, 5 and 7).
- *Barrier:* Competition from other land uses with higher short-term returns.
    - *Solution:* Align subsidies (e.g. EU CAP) and land policies to support peat-conserving options (Principles 4 and 5).

Target 6: Monitoring

Target definition

By 2030, all countries with known peatland areas and significant emissions[15] have established or are actively updating national peatland inventories, and contribute data to a transparent, interoperable global database and monitoring platform. This global data system supports consistent monitoring of peatland extent, condition, and land use impacts—enabling accountability and evidence-based policy implementation.

This target acknowledges the fundamental role of national monitoring —owned and led by countries—while also recognizing the mutual benefits of contributing to and drawing from a global monitoring system. A global platform for peatland data management should also include a monitoring dashboard to transparently communicate progress towards the targets and goals of the Peatland Breakthrough.

Means of Implementation

To achieve this target, implementation may be supported by:

- National peatland inventories and assessments grounded in field data and remote sensing, including land use and cover, GHG emissions and biodiversity indicators.

- Offering technical assistance, facilitating data acquisition and improving data quality and availability for regional and national actors, leading to accurate, re-tractable, credible and trusted basic information.
- A global operational platform (e.g. Global Peatland Watch) to aggregate and share spatial data with sufficient temporal resolution **to track progress toward peatland targets.**
- A Peatland Knowledge Database providing validated methodologies, emission factors, biodiversity monitoring protocols, and harmonized data standards.
- Peatlands being included in international commitments (e.g. NDCs, NAPs, NBSAPs, etc.) and progress towards these commitments included in international reporting processes.
- An active community of practice to support technical capacity, peer learning, and continuous improvement.
- The design of inventories, databases, and monitoring systems should be guided by international best practices, such as the FAIR (Findable, Accessible, Interoperable, Reusable) (Wilkinson *et al.*, 2016) and CARE (Collective Benefit, Authority to Control, Responsibility, Ethics) Principles—ensuring data systems are not only accessible and interoperable, but also support equitable benefit-sharing, responsible governance, and the protection of Indigenous rights and interests in Indigenous data (including traditional knowledge). (Carroll *et al.,* 2020).

These tools can be mutually reinforcing. The global platform should not replace national efforts but complement them—enhancing transparency, promoting standardization, and facilitating international comparisons and cooperation.

[15] We define significant peatland-related emissions in line with the Enhanced Transparency Framework of the Paris Agreement, as exceeding 0.05% of national emissions or 500 kt CO_2e/year (or 1,000 kt CO_2e/year for developing countries). (UNFCCC 2019)

Target

By 2030, all countries with significant peatland-related emissions[15] have established or maintained national peatland inventories and monitoring systems aligned with international standards.

By 2050: A mature, global peatland monitoring architecture is in place, underpinned by robust national systems, peatland inventories and assessments, supporting tracking of peatland targets and climate commitments.

Indicators

- **Key Performance Indicator 1:** Number of countries with national peatland inventories (Table 2) and/or regularly updated high-resolution peatland map (extent & condition).

Table 2. Key parameters for peatland inventory and condition monitoring
This table outlines key variables to support the establishment of a national peatland inventory and the monitoring of peatland condition over time. These indicators represent a recommended core set that can inform target tracking, emissions reporting, and assessment of alignment with both the Guiding Principles of the Peatland Breakthrough and the criteria of sustainable, wise use. **Final selection of indicators and the pace of implementation should be adapted to national context and capacity, and draw on international guidance**, such as the IPCC Wetlands Supplement (IPCC, 2014), Ramsar's Briefing Note on Tropical Peatland Inventories (Ramsar Convention Secretariat, 2018), and FAO the Peatland Mapping and Monitoring report (FAO, 2020) and the general guidance for national reporting under the various Multilateral Environmental Agreements.

Theme	Peatland inventory (baseline)	Monitoring indicators (change over time)
Extent	Mapped peatland area (ha), spatial boundaries, altitude, slope	Change in peatland extent (i.e. due to peat depletion)
Local climate	Climatic zone, mean annual rainfall, seasonal rainfall pattern	Trends in rainfall, frequency of extreme droughts
Soil / Peat	Peat presence, depth, soil organic matter content, carbon stock	Change in peat depth /subsidence
Land Use / Cover	land use / cover (e.g. forest land, cropland, grassland)	Change in land use / cover and attribution to key drivers, indicators for restoration progress
Water / Hydrology	Drained peatland area, water table depth, drainage infrastructure (ditches, canals, pumps), ecohydrological integrity	Change in drainage infrastructure and drained peatland area, water level trends, rewetted area and recovery of natural hydrological regime, change in water quality parameters
Vegetation / Biodiversity	Vegetation type, cover and appearance. Indicator species	Changes is vegetation type, cover and appearance, and in the occurrence of indicator species
GHG Emissions	Emission factor assignment (by land use/cover classes)	Change in emissions by direct or indirect measurements
Fire	Fire risk, fire history	Change in fire risk, area of burnt peat, frequency of fires
Governance / Tenure	Land ownership, management type	Institutional capacity, recognition of community stewardship
Indirect pressures	Proximity to nearby drainage infrastructure, roads, logging tracks, mining, or other land conversion	Hydrological or ecological changes due to off-site pressures

- **Key Performance Indicator 2:** Number/percentage of countries reporting peatlands in NDCs, NAPs, NBSAPs, and national GHG inventories.
- **Key Performance Indicator 3:** Global peatland data management system and monitoring platform funded, developed and operational.
- **Key Performance Indicator 4**: Number and coverage of regional, national or sub-national peatland datasets in global peatland monitoring platform (e.g. Global Peatland Watch or Global Peatland Assessment updates).

- **Additional indicators for derived and context-specific targets:**

Recognising that some aspects of peatland condition—such as biodiversity status, adaptation benefits and permafrost dynamics—are still very hard to standardize at the global scale or are not applicable to all countries, countries are encouraged to include additional indicators based on their specific context and data availability. This is particularly relevant for derived targets and indicators related to:

  - **Climate adaptation**, e.g. reduced fire risk, reduced health impacts, reduced poverty, improved water quality, flood prevention, coastal protection, groundwater recharge, increased evaporative cooling, fewer people affected by extreme weather events or preserving Indigenous and local cultural heritage and wise use practices. These may also contribute to the objectives of the Global Goal on Adaptation (UNFCCC, 2023).
  - **Biodiversity,** e.g. increased natural peatland (i.e. mire) typical biodiversity. While this is a direct biodiversity indicator, biodiversity is also intrinsically linked to the core targets on conservation, restoration and wise use, as well as the derived targets on climate adaptation. As such, additional biodiversity outcomes may be captured indirectly through other targets and indicators, contributing to the implementation of the Kunming-Montreal Global Biodiversity Framework (CBD, 2022).
  - **Permafrost**, e.g. presence and extent, permafrost temperature trends, and active layer thickness where peatlands occur in permafrost regions (GTN-P, 2025). Monitoring may also include thaw-related subsidence and land-use pressures (e.g. roads, other infrastructure, or afforestation). Tracking permafrost change remains critical for climate risk, carbon loss, and land-use planning.

These elements should be treated as learning targets: while global monitoring standards and data are still emerging, their inclusion in national systems can stimulate innovation, encourage the development of new monitoring methods, and inform future refinements of this framework.

Baseline:

To be developed. Countries with significant peatland-related emissions are those exceeding 0.05% of national emissions or 500 kt CO_2e/year (or for developing countries: 0.1% or 1,000 kt CO_2e/year) (UNFCCC 2019). This figure provides a practical proxy for identifying countries with significant peatland emissions that should prioritize establishing or enhancing monitoring systems for peatlands.

Note: In countries where emissions from drained peatlands represent a smaller share of national emissions, their importance for climate change mitigation may be lower, while their biodiversity and other values may be higher.

Annex III: Global and national peatland-related targets and reporting

Alignment with international frameworks

We conducted a comprehensive stocktake of existing international frameworks, agreements, and scientific assessments, including the Global Peatlands Assessment. Table 3 below summarizes key global initiatives and policy instruments that reference or support peatland-related goals, either explicitly or within broader ecosystem categories (e.g. wetlands, inland waters, land use). The calculation and definition of the targets take into account the UN Climate Change High-Level Champions' 2030 Breakthroughs, particularly the Land Use target under Nature-based Solutions for Mitigation. This alignment ensures that the Peatland Breakthrough's targets are coherent with and supportive of global climate, biodiversity, and sustainable development agendas.

A peatland-relevant framework refers to any international agreement, policy initiative, resolution, or scientific assessment that supports the protection, sustainable management, or restoration of peatlands. This includes legally binding treaties (e.g. UNFCCC, CBD, UNCCD), voluntary initiatives (e.g. UN Decade on Ecosystem Restoration), intergovernmental scientific assessments (e.g. IPCC Assessment Reports), and multilateral environmental resolutions or targets that recognize peatlands' role in climate regulation, biodiversity conservation, water security, and achieving Land Degradation Neutrality (LDN).

Table 3. Overview of international frameworks relevant to peatlands

Framework / Initiative	Relevance to Peatlands
Sustainable Development Goals	**SDG 2** – Zero Hunger: In order to enable sustainable food production and resilience on peatlands, peatlands under agriculture could shift to paludiculture. **SDG 6** – Clean Water and Sanitation: Peatlands are essential wetland ecosystems that regulate water flows, purify water, and reduce flood risks. **SDG 12** – Responsible Consumption and Production: Promotes supply chain transformation, e.g. reducing peat degradation linked to commodities like palm oil and pulp **SDG 13** – Climate Action: Peatland conservation and restoration is widely recognized as a critical climate strategy **SDG 15** – Life on Land: Peatlands are inland freshwater ecosystems supporting unique and endemic biodiversity
UN Framework Convention on Climate Change (UNFCCC) – Paris Agreement	Peatlands are widely recognized (e.g. by IPCC, Ramsar, UNEA) as key terrestrial carbon stocks and sinks within terrestrial ecosystems, and thus key to enable global warming to remain below 1.5 to 2.0 °C. In naturally-forested peatland in tropical regions, peatlands also fall within the scope of REDD+ under the UNFCCC (Paris Agreement, Article 5).
UN Climate Change High-Level Champions 2030 Breakthroughs. Land-use target - Nature-based Solutions for Mitigation	The global target of "More than 10Gt CO2e mitigated per year through nature-based solutions by 2030", includes: 1) Annual rate of peatland degradation globally declines to 0 Mha/yr by 2030, with no additional degradation from 2030 to 2050, relative to 2018; and 2) In 2023, the original Land Use target was reviewed and revised downward to 15 Mha by 2030 and 20–29 Mha by 2050. The initial target from 2022 had set more ambitious goals of 22 Mha of peatlands restored by 2030 and 46 Mha by 2050, relative to 2018 levels.
CBD – Kunming-Montreal Global Biodiversity Framework (GBF) 2050 Goals (Goal A–D)	Promote ecosystem integrity, restoration, sustainable use, equitable benefit-sharing, and increased financial and technical resources across all ecosystems, including peatlands.
CBD GBF 2030 Targets (e.g. 2, 3, 8, 10, 11)	Target 1: Plan and Manage all Areas to Reduce Biodiversity Loss Target 2: Restore 30% of all Degraded Ecosystems; Target 3: Conserve 30% of Land, Waters and Seas; Target 8: Minimize the Impacts of Climate Change on Biodiversity and Build Resilience; Target 10: Enhance Biodiversity and Sustainability in Agriculture, Aquaculture,

	Fisheries, and Forestry; Target 11: Restore, Maintain and Enhance Nature's Contributions to People
UN Convention to Combat Desertification (UNCCD)	Degradation of peatlands leads to the loss of vital ecosystem functions—such as soil productivity, erosion control, and land stability—resulting in land loss and subsidence from drainage, directly undermining the goal of achieving **Land Degradation Neutrality (LDN)**.
Convention on the Conservation of Migratory Species of Wild Animals (CMS) & Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)	Aims to conserve terrestrial, marine, and avian migratory species throughout their range by protecting habitats, mitigating obstacles to migration, and controlling other threats. Safeguarding natural peatland habitats is essential to migratory species, particularly waterbirds and other wetland fauna.
UN Declaration on Rights of Indigenous Peoples (UNDRIP)	UNDRIP provides a legal and ethical foundation to: ● Respect Indigenous rights and land tenure, ● Secure FPIC before any intervention, and, ● Recognize Indigenous Peoples as rights-holders, leaders, and knowledge holders.
UNEA 2019 Resolution on Peatlands (4/16. Conservation and sustainable management of peatlands)	Calls on countries to prioritize their conservation, restoration, and sustainable use—supported by international cooperation, capacity-building, and innovative livelihood models such as paludiculture and eco-tourism.
Ramsar Resolutions XI.11, XIII.13	Promote wise use, restoration, and international cooperation on peatlands. Calls upon Parties to **include peatland-related data and monitoring** in National Wetland Inventories, NBSAPs, reporting under the UNFCCC and other conventions.
Ramsar Resolution VIII.17	Provides a global action framework specifically for peatlands.
Ramsar Policy Brief. Restoring drained peatlands: A necessary step to achieve global climate goals	Call for: **Protection of all remaining intact peatlands** and **rapid restoration of almost all drained peatlands**; and **At least 50 percent (25 million ha) of the currently degraded peatland area should be restored by 2030** to enable global warming to remain below 1.5 to 2.0 °C
Ramsar Technical Report 11. Global guidelines for peatland rewetting and restoration	**Gives practical rewetting guidance and restoration thresholds for peatlands.**
UN Decade on Ecosystem Restoration	Lists peatlands as priority ecosystems for global restoration.
Sendai Framework for Disaster Risk Reduction (2015–2030)	Peatland protection and restoration contribute to the Sendai Framework's Priority 3 (Investing in disaster risk reduction for resilience) and Priority 4 (Enhancing disaster preparedness for effective response and to "Build Back Better"). It helps reduce disaster risks linked to climate-related hazards such as floods, droughts, and fires.
Brazzaville Declaration, 2018	Joint declaration of Republic of the Congo, Democratic Republic of the Congo, and Indonesia defining 11 priority actions for the coordinated management and protection of Congo Basin peatlands and enhanced South-South exchange, with additional support from Peru.
Freshwater Challenge	Aims to restore 350 million hectares of degraded wetlands by 2030 (including peatlands) as well as securing the protection of freshwater ecosystems important for biodiversity and ecosystem services.
IPCC Reports (esp. AR6 2022, 1.5°C Report, 2014 Wetlands Supplement)	Detail the urgent climate mitigation potential of peatland conservation and restoration, as well as co-benefits and implementation risks and uncertainties. The Wetlands Supplement provides methodological guidance for GHG reporting to UNFCCC from drained organic soils (incl. peatlands).
Global Peatlands Assessment, 2022	A foundational evidence base on the state, trends, and values of peatlands globally, including degradation rates, restoration needs, and emission profiles—key data used for setting the targets of the Peatland Breakthrough.
IPBES Global Assessment, 2019	Provides a global diagnosis of biodiversity loss and the need for transformative change in managing ecosystems. It highlights peatlands as critical ecosystems at risk, underscoring the importance to implement conservation and wise use of peatlands based on local, indigenous and scientific knowledge, paired with inclusive governance and nature-positive finance.
Global Wetland Outlook, 2025	Provides updated figures on the rate of wetland loss, estimates the value of ecosystem services of wetlands (including peatlands), pathways for conservation and

	wise use of wetlands, and investment needs. It underpins cost and benefit estimates used in the finance target.
IPBES Transformative Change Assessment, 2024	Outlines pathways to overcome indirect drivers of biodiversity loss, emphasizing systemic change across economies and institutions.

Stocktake of regional and national peatland-relevant goals and targets

Only 8% of countries known to have peatlands include them in their Nationally Determined Contributions (NDCs) for mitigation, and only 5% for adaptation (as of 1 January 2024). In comparison, when looking at all countries' NDCs, 29% mention any type of wetland under mitigation, and 52% under adaptation (Crumpler *et al.* 2025). Figure 4 refers only to adaptation.

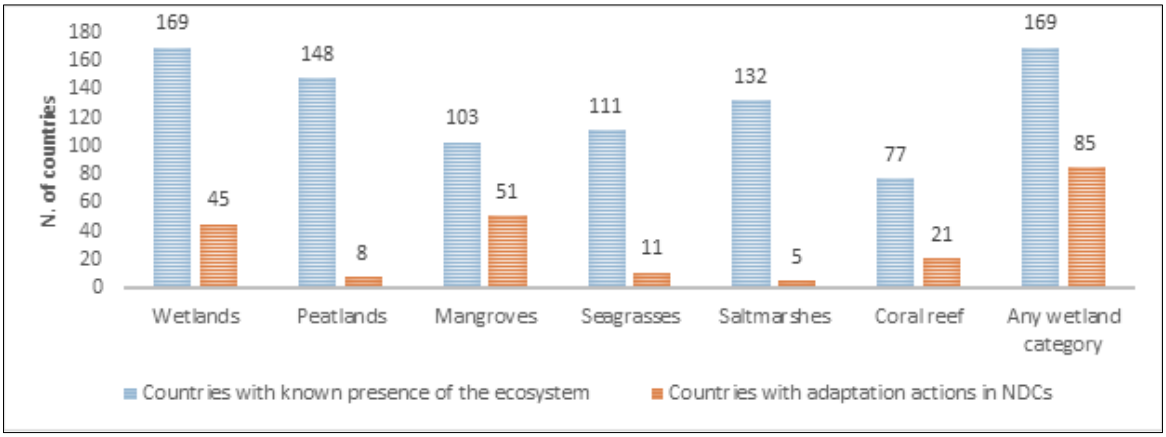


Figure 4. Number of parties that have different wetland types in their adaptation contributions

Peatland GHG emissions reporting under the Paris Agreement

Similarly, reporting GHG from peatlands remains limited—**only 35 countries currently report emissions from organic soils (including drained peatlands and peat fires) in their GHG inventories**, according to the NGHGI database by Grassi *et al.* (2022). Both Annex I and non-Annex I countries are required to report all significant sources under the Enhanced Transparency Framework of the Paris Agreement. **Emissions from peatlands should be reported if they exceed 0.05% of total national emissions or 500 kt CO_2e, with a flexibility threshold of 0.1% or 1,000 kt CO_2e for developing countries.** Moreover, once a country has started reporting a given category (e.g. peatland emissions), it must continue to report it in subsequent years' inventories. These thresholds aim to ensure completeness and consistency in national inventories. Increased support, capacity-building, and awareness are needed to close these gaps and integrate peatlands into national monitoring and reporting frameworks.

Examples of regional and national commitments

The outcomes of the questionnaire on existing national peatland-related targets and goals provided within the preparation of the Peatland Breakthrough confirmed:

- There is no one-size-fits-all approach to peatland conservation. Countries and regions apply a wide range of instruments – ranging from legal frameworks and national strategies to specific action plans and financial mechanisms.
- These instruments differ not only in their legal bindingness, but also in their scope, level of ambition, and degree of implementation.
- Some countries have adopted dedicated peatland strategies with clear targets, timelines, and funding commitments (e.g., Germany, Ireland, UK), while others address peatlands more broadly within climate or biodiversity strategies (e.g. Chile, Costa Rica, Democratic Republic of the Congo).

The examples are summarized in Table 4 (EU and other regional frameworks) and Table 5 (national and sub-national examples).

Table 4. Overview of EU and other regional frameworks relevant to peatlands

Framework	Relevance to Peatlands
Habitats Directive	Provides legal protection to at least 13 specific peatland habitat types listed in Annex I. Requires maintenance and restoration of favorable conservation status, including criteria that can be also applied for peatland species and habitats.
EU Biodiversity Strategy for 2030	Calls for strict protection of carbon-rich ecosystems, explicitly including peatlands. Forms part of the EU's 30x30 biodiversity commitment.
EU Nature Restoration Regulation (NRR)	Sets binding peatland-specific restoration targets: ● Art. 4: Improve degraded habitat types: restoration measures on 30% of degraded area by 2030, 60% by 2040, and 90% by 2050. ● Art. 11: Restore drained peatland under agricultural use (also peat extraction sites & other land use e.g. forest land, to a limited extent): 30% by 2030, 40% by 2040, and 50% by 2050. Promotes rewetting, depoldering, and paludiculture.
EU Climate Law & LULUCF Regulation	EU Climate Law aims to achieve climate neutrality by 2050, i.e. net zero GHG emissions for EU countries, mainly by cutting emissions, investing in green technologies and protecting the natural environment. LULUCF regulation sets binding targets for each Member State which can be only fulfilled with increased ambition on peatland restoration in the peatland-rich countries. Requires transparent GHG accounting from land-use sectors, including emissions from drained peatlands and other organic soils.
Water Framework Directive (WFD) & Floods Directive	While not explicitly mentioning peatlands, the WFD aims to protect wetlands and terrestrial ecosystems that depend on aquatic ecosystems, which include peatlands. It indirectly supports peatland protection where hydrological restoration or conservation improves water quality and flood regulation.
EU Common Agricultural Policy (CAP) 2023–2027	Allows MS to support rewetting of peatlands through eco-schemes, though uptake has been limited. Good agricultural and environmental conditions (GAEC) standards aim to support the protection of peat soils in agricultural use.
Revised EU Renewable Energy Directive	Restricts sourcing of biomass for energy from peatlands.
ASEAN Agreement on Transboundary Haze Pollution and ASEAN Peatland Management Strategy (2023-2030)	The ASEAN Agreement on Transboundary Haze Pollution (2002) commits member states to prevent, monitor, and manage haze from land, forest, and peat fires. The ASEAN Peatland Management Strategy 2023–2030 and Second Haze-Free Roadmap 2023–2030 provide a coordinated framework to manage peatlands, reduce haze, and support fire prevention, sustainable land use, community involvement, and enforcement.

Table 5. Overview of national and sub-national frameworks relevant to peatlands

Note: This is a non-exhaustive list of examples based on the results of the questionnaire. Reviewers are encouraged to suggest additional relevant frameworks for inclusion.

Country / Region	Framework / Law / Policy	Relevance to Peatlands
Austria	National Peatland Strategy	Establishes a framework for the protection, conservation, and sustainable development of mires and peat soils. Key measures include reducing domestic peat extraction and imports, promoting peat-free products in horticulture, raising public awareness, and expanding expertise. Further, the framework includes detailed peatland action plans at both the national and federal state levels.
Canada	Nature Smart Climate Solutions Fund	The Fund provides $631 million from 2021-32 to support conservation, restoration, and enhancement of wetlands, peatlands, and grasslands for carbon storage.
- Manitoba	The Peatlands Stewardship Act	The Peatlands Stewardship Act allows for the designation of provincially significant peatlands, by regulation. Peatlands designated as such are added to the province's protected areas network. The Peatlands Stewardship Act requires that peatlands be recovered after peat harvesting has ceased.
Chile	NDC	"By 2025, peatland areas and any other types of wetland will be identified under a national inventory. [...] By 2030, standardized metrics will be developed to evaluate the capacity of wetlands (especially peatlands) for climate change adaptation or mitigation."
	National Law on the Protection of Peatlands	The purpose of this law is to protect peatlands in order to preserve and conserve them as strategic reserves for the mitigation and adaptation to climate change, the balance and regulation of water, the conservation of biodiversity, and the multiple ecosystem services they provide.
	Roadmap of Peatland Conservation Chile	The roadmap outlines 11 strategies to address threats to peatlands, grouped into four main areas: Research and Monitoring, Institutional and Legal Strengthening , Improving Productive Practices, Education and Outreach.
Costa Rica	NDC	"By the year 2030, Costa Rica will have managed actions [...], that will allow it to maintain or increase the capacity for carbon capture and/or emission reduction from terrestrial ecosystems such as forest ecosystems, agroforestry systems, and peatlands, among others. By the year 2030, Costa Rica will have maintained and improved the Payment for Ecosystem Services program, including other services and ecosystems not covered so far, prioritizing soils, peatlands, and other ecosystems with high carbon sequestration potential."
Democratic Republic of the Congo	NDC	Plans to legally protect peatlands, address overlapping land uses, integrate peatlands into forest policy and REDD+ investments, implement international commitments through a National Peatland Strategy, strengthen institutional and technical capacities for peatland management, align peatland efforts with territorial reforms and international initiatives, develop targeted communication and education strategies.
Finland	Government Resolution on the Sustainable and Responsible Use and Protection of Mires	Improving the condition of mires in protected areas, promoting the protection and restoration of mire nature, directing peat use in a sustainable direction.

	and Peatlands	
Germany	National Peatland Strategy	Aims to reduce annual GHG emissions from drained peat soils by 5 Mt CO2eq by 2030 and phase out peat extraction.
Indonesia	NDC FOLU Net Sink 2030 & National Commitment to Greenhouse Gas Emissions Reduction	"Restore 2 million hectares of peatlands through rewetting and revegetation by 2030. Improve water management on peatlands under productive use" "The area that is expected to implement a good water management system until 2030 in order to achieve the net sink target is estimated to be 0.95 million hectares. To achieve the sink set target, the area for peat restoration until 2030 should reach 2.72 million hectares."
Ireland	Climate Action Plan 2024 Ireland National Peatland Strategy 2015–2025 National Raised Bog Special Areas of Conservation Management Plan	The restoration of peatland sites; reducing emissions from peat soils on permanent grassland; cessation of commercial peat extraction as a feedstock for power generation; generating employment for former peat communities by investing in the diversification of the local economy; supporting the rehabilitation and restoration of degraded peatlands and regeneration and repurposing of industrial heritage assets; providing former peat communities with smart and sustainable mobility options to enable them to benefit directly from the green transition; peatland rehabilitation; redesigning peatland forests to improve the carbon balance. By 2025: 33,000 ha of peatlands rehabilitated, by 2030: 35,900 ha of peatlands rehabilitated, additional 30,000 ha exploited peat rehabilitated. "This Strategy aims to provide a long-term framework within which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental and economic contribution to the well-being of this and future generations". The national conservation objective is to restore the favourable conservation status of active raised bogs in Ireland, the area shall increase not less than 3,600 ha.
Peru	Law for the protection, conservation, and sustainable use of wetlands in the national territory	The competent authorities shall adopt special measures for the conservation, recovery, and sustainable use of peatlands due to the ecosystem services they provide, especially in the context of climate change adaptation and mitigation and due to their socioeconomic importance. The extraction of peat for commercial purposes is prohibited, as is the removal of vegetation cover and changes in land use.
Uganda	NDC	Prioritizes conservation, sustainable management, restoration, and rewetting of peatlands to increase carbon storage as part of adaptation and mitigation.
UK - England - Scotland	NDC UK Peatland Strategy 2018-2040 England Peat Action Plan Scotland's National	"We will restore hundreds of thousands of hectares of peatland and are developing long term delivery mechanisms for peatland restoration." "Two million hectares of peatland in good condition, under restoration or being sustainably managed by 2040." Restore, sustainably manage and protect England's peatlands by investing over £50 million in peatland restoration as part of the Nature for Climate Fund and restoring at least 35,000 ha of peatland by 2025. In February 2020, the Scottish Government announced its commitment to invest

	Peatland Plan	£250 million over ten years to restore 250,000 hectares of degraded peatland by 2030. "By 2030 we want to see peatlands in a healthy state and widely regarded as resilient. 2050 and beyond the rewards of restoration effort undertaken in previous decades should now be evident. Our principal aim is to: Protect, manage and restore peatlands to maintain their natural functions, biodiversity and benefits. Success will be measured by bringing 150,000 hectares of peatland under restoration/sustainable management by 2050."
- Wales	Wales Peatland Action Programme 2020–2025	Six priorities: Peatland erosion, Peatland drainage, Sustainable management of blanket peats, Sustainable management of lowland peats, The restoration of afforested peatlands, The gradual restoration of our highest carbon-peatlands, Restoration targets of 600-800 hectares of public and private land every year.
- Northern Ireland	Northern Ireland Peatland Strategy 2021–2040	"By 2040, Northern Ireland's peatland habitats are conserved and restored to optimise their Natural Capital value."
United States - Minnesota	Peatland Playbook for Minnesota Peatlands	Protect large standing carbon stocks, re-wet partially drained peatlands, and restore fully drained peat wetlands for multiple benefits.

Annex IV. Key figures underpinning target development

Table 6. Key figures underpinning target development

Indicator	Value	Units	Year(s)	Original source
Total global peatland area	487,754,199*	hectares	2018–2022**	Global Peatland Map 2.0
Drained and degraded peatlands	11.7% (≈57 million hectares degraded)	% and million hectares	Derived from above	Global Peatland Map 2.0
Natural and undrained peatlands	88.3 % (~430 million hectares undegraded)	% and million hectares	Derived from above	Global Peatland Map 2.0
Rate of mire loss (Peat-accumulating peatlands lost annually, human driven)	0.5 million hectares/year (0.1% annual decrease)	million hectares/year	Long-term order of magnitude over the last 60-70 years	UNEP 2022, Immirzi *et al.* 1992, Joosten & Clarke 2002, Miettinen & Liew 2010
Cost of restoration (Establishment, one-off expenditure)	1,094	2023 Int$/ha/yr	2023	Convention on Wetlands 2025
Cost of protection	610	2023 Int$/ha/yr	2023	Convention on Wetlands 2025

*≈500 million ha; 3.8% of global land surface
**2018–2022 for most Annex I countries; older or expert-based where unspecified

Annex V: Composition of experts and practitioners consulted

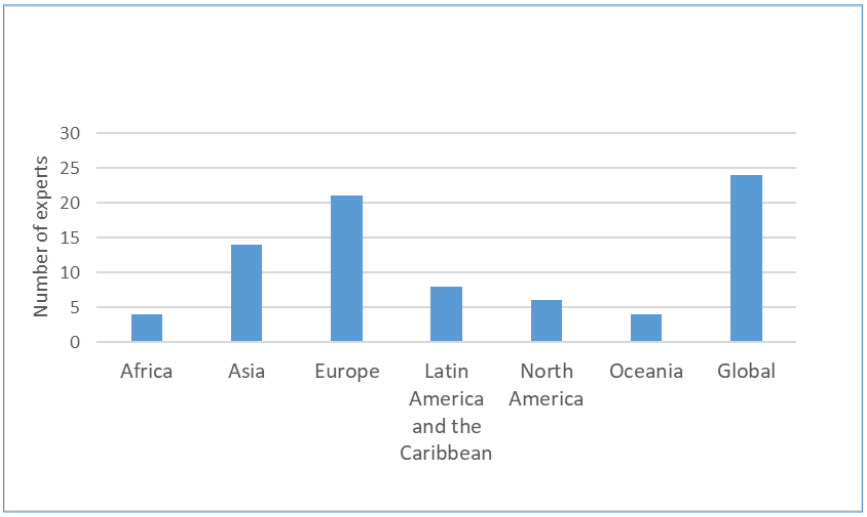
Affiliations represented

1. aeco GmbH
2. Borneo Nature Foundation
3. Care for Ecosystems UG
4. Centro de Ornitología y Biodiversidad (CORBIDI), Peru
5. Charles University
6. Colorado State University
7. Conservation International
8. ECOAN and Accion Andina
9. European Investment Bank
10. Food and Agriculture Organization of the United Nations (FAO)
11. Global Environment Centre
12. Greifswald Mire Centre
13. Hofer & Pautz GbR
14. Humboldt-Universität zu Berlin
15. Industrieverband Garten (IVG) e.V.
16. International Peatland Society
17. Jacobs
18. Landscape Finance Lab
19. Latvian National Peatland Society / Lake and Peatland Research Center
20. McGill University
21. Michael Succow Foundation
22. Michigan Technological University
23. Ministry of Environment/Environmental Management Agency, Indonesia
24. Ministry of Water and Environment, Uganda
25. National Parks & Wildlife Service (Department of Housing, Local Government and Heritage), Republic of Ireland
26. Natural Resources Institute Finland
27. NatureScot
28. Norwegian Institute for Nature Research/STRP focal point for Norway to Convention on Wetlands
29. Peatland Finance Ireland
30. Radboud University
31. Ramsar Convention on Wetlands
32. Riau University, Sumatra
33. Roundtable on Sustainable Palm Oil
34. SLU Species Information Centre
35. Tao Foundation for Culture and Arts
36. The INCLEN Trust International, New Delhi, India
37. The James Hutton Institute
38. The Nature Conservancy
39. The Wild Bird Trust and The National Geographic Okavango Wilderness Project
40. Trinity College Dublin
41. Tropenbos

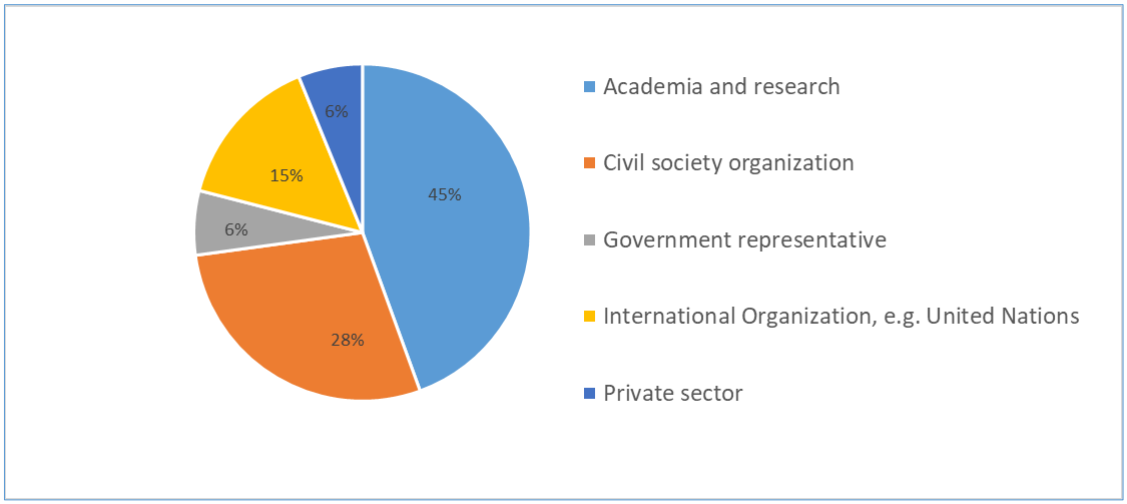
42 Tver State Technical University
43 UNEP
44 Universidad Nacional de Tierra del Fuego
45 Université Laval
46 University of Exeter
47 University of Minnesota
48 University of Nevada, Reno
49 University of Otago
50 University of St Andrews
51 University of Waikato
52 University of Waterloo
53 Verra
54 Wageningen University
55 Waikato Regional Council
56 WCS Canada
57 WCS-Chile
58 Wetlands International
59 Wetlands International China
60 Wetlands International Indonesia
61 Wildlife Conservation Society
62 World Farmers' Organisation

Summary of participation (as of 8 September 2025)

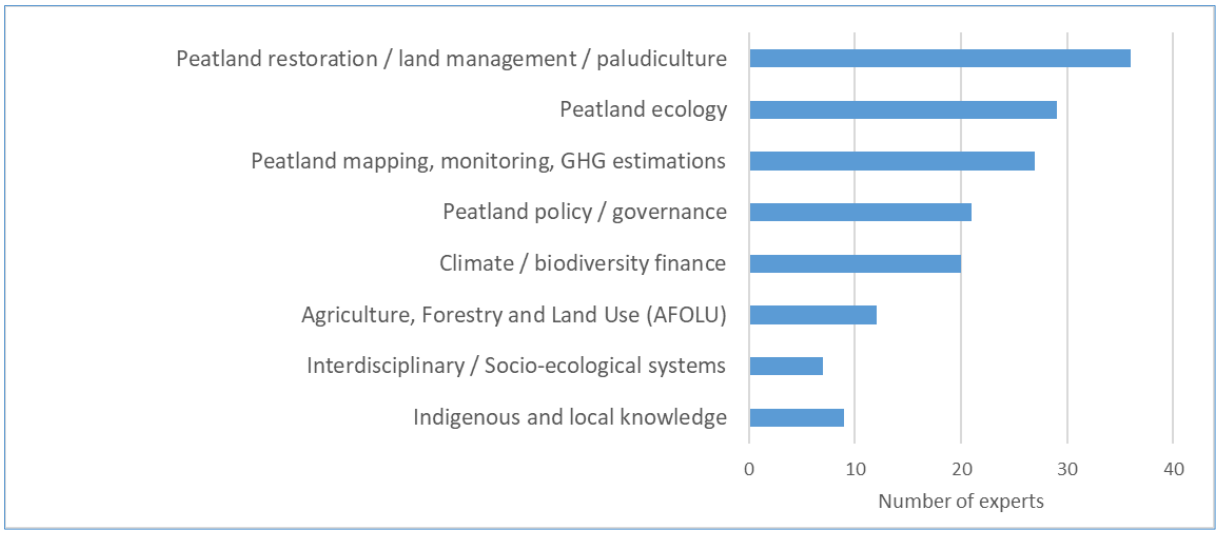
Gender balance: 43% female
Geographic expertise:

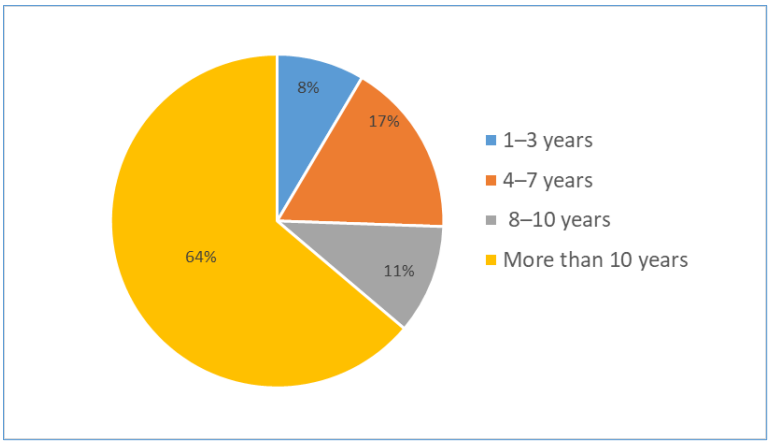


Type of organization



Area and years of expertise





The Peatland Breakthrough

The Peatland Breakthrough is a global call to action led by Wetlands International, the United Nations Environment Programme, the Food and Agriculture Organization of the United Nations, the Greifswald Mire Centre, developed in close alignment with the Global Peatlands Initiative, and in collaboration with the High-Level Climate Champions Team and the Convention on Wetlands.

Our growing list of partners includes: Landscape Finance Lab, the Global Environment Centre, RE-PEAT, and The Nature Conservancy

For more information, scan the QR code or contact:
info-peatland-breakthrough@googlegroups.com

Wetlands International

Food and Agriculture Organization of the United Nations

Greifswald Mire Centre

Global Peatlands Initiative

Convention on Wetlands
Convention sur les zones humides
Convención sobre los Humedales
Ramsar

Global Environment Centre

Landscape Finance Lab

RE-PEAT

The Nature Conservancy