



# The Peatland Breakthrough

*Science-based  
Framework for Global  
Peatland Targets &  
Guiding Principles*

**Information Brief**  
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RACE TO  
RESILIENCE

RACE TO ZERO

Marrakech  
Partnership



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# The Peatland Breakthrough

## Vision

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

The Peatland Breakthrough provides a **science-based framework with global targets and guiding principles** developed through an inclusive and consultative process to ensure they are scientifically robust and widely accepted. The breakthrough aims to upscale and accelerate action to support the conservation and restoration of peatlands, in order to reduce emissions, support removals, enhance resilience, and strengthen pathways **aligned with the goals of the Paris Agreement**. As part of the 2030 Breakthrough Agenda launched at UNFCCC COP26, and a 2030 Climate Solution under the Marrakech Partnership, the Peatland Breakthrough sets clear goals for 2030 to accelerate action in this decade towards climate-resilient net-zero pathways.

The Peatland Breakthrough **unites** governments, Indigenous Peoples, local communities, landmanagers (e.g. farmers, foresters, or other rural land-dependent groups), 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 Peatland Breakthrough ensures that decisions based on its recommendations are **evidence-based, inclusive, and viable**. It enables coordinated, landscape-scale action and complements existing international and sectoral policies, standards and commitments that already meet or exceed its targets and principles.



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### Why Peatlands Matter<sup>1</sup>

Peatlands occur in almost every country and cover 3–4% of the planet's land surface. 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 differ from forests: Peatlands store carbon in deep layers of peat—accumulated dead plant material built up over thousands of years. Once drained, they emit GHG continuously. To reduce peatland emissions, it is essential to 1) stop new drainage and 2) actively reduce the total drained and degraded area through rewetting and restoration.

~50 million hectares of drained and degraded peatlands (~0.4% of the Earth's land area) emit 2 Gigatonnes of CO<sub>2</sub>e annually. That means, peatland rewetting and restoration can cut global emissions by 4–5% by 2050 in only 0.4% of land area.

Each hectare of drained peatland emits 10 to 100 times more CO<sub>2</sub> per year than a hectare of rewetted peatland can absorb over the same time. Peatland conservation by avoiding new drainage and degradation is the most urgent and cost-effective climate action for peatlands.

<sup>1</sup> UNEP. 2022. *Global Peatlands Assessment* – The State of the World's Peatlands: Evidence for action toward the conservation, restoration, and sustainable management of peatlands. Main Report. **Global Peatlands Initiative**. United Nations Environment Programme, Nairobi. <https://www.unep.org/resources/global-peatlands-assessment-2022>

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## Global Peatland Targets

All targets relate to an **overarching goal of shaping the interaction of people with peatland** 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. Global Peatland Targets reflect shared goals we collectively work towards. The implementation pathways that contribute to these targets should reflect national circumstances, capacities, and responsibilities.

<b>Core target 1 Conservation</b>	<b>Halt</b> the anthropogenic loss of undrained peatland by 2030.	~430 million hectares remain natural and undrained. Halting their loss is the most urgent and cost-effective climate action as it avoids irreversible emissions and loss of sink function.
<b>Core target 2 Rewetting and Restoration</b>	By 2030, <b>at least 30 million hectares</b> of degraded peatland are under <b>rewetting and restoration</b> .	Stops continuous emissions (~2 Gigatonnes CO <sub>2</sub> e/yr) and restores water, climate and biodiversity functions.
<b>Core target 3 Wise Use</b>	By 2030, enabling conditions for <b>sustainable, wise use</b> are developed, and by 2050, it is implemented on all peatland.	Sustains peatland functions while contributing to the achievement of the SDGs. It helps prevent degradation, supports sustainable development, and reduces land use conflicts through inclusive stewardship and benefit-sharing.
<b>Derived Target 4 Climate Change Mitigation and Adaptation</b>	By 2050, the global peatland area has reached <b>net zero emissions</b> and preferably is a net GHG sink, supporting climate-resilient pathways. By 2030, clearly on track through core targets 1, 2 & 3.	Peatland action can reduce ~4–5% of global carbon emissions, support carbon removals, reduce vulnerability of people and ecosystems, enhance adaptive capacity, and strengthen resilience.
<b>Target 5 Finance</b>	<b>Mobilize ≥ USD 100 billion</b> by 2030 to operationalize peatland conservation, rewetting/restoration, and sustainable, wise use.	Represents a bare minimum investment to operationalize conservation, restoration, and sustainable, wise use by 2030 to meet Global Peatland Targets - far less than the USD 350 billion annual cost of global climate damage from drained and degraded peatland.
<b>Target 6 Monitoring</b>	By 2030, all countries with significant peatland emissions have <b>national peatland inventories and monitoring systems</b> aligned with international standards.	Enables consistent, transparent tracking of progress and reporting, and enables implementation, learning and adaptive management.

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## 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. 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 Peatland Breakthrough's shared vision and ensuring that the progress towards achievement of the targets is just and meaningful.

### 1. Safeguard peatland eco-systems and their biodiversity

Prioritize the protection of natural peatlands and prevent further degradation at local, national, and global scales by addressing key drivers of degradation. Where intervention is necessary, apply the ecological restoration continuum guided by [Ramsar guidelines](#) and [SER standards](#). Maintain natural hydrology, ecological functions, and connectivity at the landscape scale while emphasizing functional integrity of peatland, such as peat formation, carbon storage, water regulation, and habitat recovery.



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### 2. Ground action in science, diverse knowledge systems, innovation, and monitoring

Design and implement actions using the best available science, while identifying, respecting, and appropriately incorporating community-based and practice-driven innovations, such as **paludiculture\***. Support multidisciplinary and intercultural approaches, and invest in robust, inclusive, and supported monitoring systems.

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. Promote long-term investment in local capacity, shared learning, knowledge exchange, and “learning through doing,” enabled through continuous monitoring.

#### \* **Paludiculture:**

A farming and forestry system that targets the production of plant or animal based commodities on (wet) 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).

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## 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 recognized safeguards and human rights, including the right to Free, Prior and Informed Consent (FPIC). Design inclusive participation to ensure fairness across the multiple dimensions of equity, and enable early and targeted engagement, identification and transparent navigation of trade-offs, and iterative adaptation over time.



## 4. Foster shared responsibility and inclusive governance

Coordinate across governments, communities, landowners, landmanagers, businesses, investors, researchers, and civil society through co-design, co-management, and deliberation. Build equitable partnerships and strengthen cross-sectoral coordination and policy coherence through clear legal frameworks, aligned incentives, and accessible, targeted financing, tenure rights, and benefit-sharing. Invest in capacity-building and public awareness, and establish mechanisms for transparent coordination, accountability and conflict resolution.

## 5. Mobilize high-integrity, inclusive, and transparent finance

Mobilize diverse financing streams through collaboration across governments, the private sector, civil society, and financial institutions. Ensure that private and public 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, as well as for developing alternative livelihood opportunities such as new paludiculture production. Align finance with ecological limits and ensure it supports multiple peatland values, ensuring high integrity, strong governance, and inclusive stewardship. Strengthen institutions to make finance equitable, just and implementation-ready; align incentives to reward conservation and sustainable, wise use, and discontinue harmful subsidies and practices that drive degradation.



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## 6. Operate in context and across scales using a landscape approach

Adopt catchment-level, context-specific landscape approaches grounded in the ecological, social, cultural and economic conditions of each area, while ensuring long-term water management to sustain core peatland ecosystem services.

Recognize peatlands as part of interconnected cause-and-effect systems shaped by natural dynamics and human activity, including direct and indirect pressures. Support cross-jurisdictional, integrated spatial planning and coordination across land tenures and sectors to enable more resilient, inclusive, and sustainable outcomes, prevent the displacement of pressures to other areas, and align with broader land-use, biodiversity and climate strategies.

## 7. Commit to sustainability and climate resilience

Design long-term strategies with sustained public and private funding, promoting medium to large scale programs that deliver measurable impact on the ground, and embedding them within climate adaptation planning processes.

Strengthen institutions and local ownership, integrate economic assessments of environmental, social and financial benefits of peatland strategies, and build climate resilience and enhance disaster risk reduction through risk assessments and diversified livelihoods. 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.

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 Convention on Wetlands and the Marrakech Partnership.

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

For the full version or more information, scan the QR code or contact:  
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