Key policy actions for the sustainable management of Ireland's peatlands

Peatlands matter for biodiversity, climate, water and communities

Peatlands are valuable ecosystems that are highly significant for global efforts to combat biodiversity loss and climate change, as well as contributing to achieving the United Nations Sustainable Development Goals (SDG) and other international and EU commitments. Reversing centuries of unsustainable peatland management will demand significant effort from government, academia and civil society. This policy brief provides key policy actions and recommendations based on the latest evidence to ensure the protection and management of Ireland's peatlands and sustain the diverse range of ecological, social and economic values associated with them.

Sustainable peatland management involves societal responsibility to optimise the social, cultural, environmental and economic contributions that peatlands make to the health and well-being of current and future generations.

Key messages

- **Peatlands for climate and biodiversity action:** Peatlands can help solve many challenges that people face now and in the future. Peatlands store carbon, regulate and filter water, provide habitats for unique biodiversity, and hold essential socio-cultural values. Peatlands must be wet to provide these functions.
- **A stronger and more urgent public policy response:** This is needed to address the significant ongoing losses of peatland biodiversity and ecosystem services. Ireland must provide more coherent and effective implementation of global and national policies to drive action for peatlands.
- **Collaboration across government and society:** Sustainable peatland management requires collaboration across all sectors and levels of government, across research disciplines and across communities and civil society.
- **Integrated management and diverse policy instruments:** Peatlands must be managed in an integrated, multi-stakeholder way using a landscape approach with a combination of policy instruments (regulatory, incentive and educational) to ensure success.

Time is running out to protect Ireland's peatlands

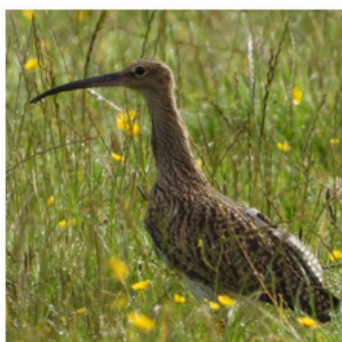## Peatland Trends: Declining biodiversity, escalating climate risk, water quality challenges

- **Biodiversity - a mirror of global decline:** A continuing downward trend on all fronts (habitats, birds, invertebrates) reflecting global trends. Activities such as peat cutting and drainage are having an ongoing impact on peatland habitats.
- **Climate - carbon sink to carbon source:** Peatlands are likely to be severely affected by climate change, leading to a loss of carbon stored, increased fire risk and bog slides.
- **Water - the lifeblood of ecosystems and communities:** The widespread degradation of peatlands has led to a significant reduction in water quality with organic matter from peatland runoff posing challenges to the treatment of water.

Working together, we can reverse these trends and halt the loss of biodiversity and wildlife on Ireland's peatlands, while improving water quality, reducing emissions and enhancing cultural heritage. Now is the time to take action to protect peatlands for present and future generations.

Photo: Community Wetlands Forum

Community-based projects and innovation support values and activities that enable local stewardship and sustainable peatland management.

Photos L-R: Owen Murphy, Florence Renou-Wilson, Kate Flood

Peatlands: a priority for action

Peatlands are now high on the political agenda. Research and policy across Europe highlights the need for protection of undrained peatlands, rewetting of drained peatlands and restoration of degraded peatlands. This is essential to reach global and EU goals in climate, soil health, water and biodiversity policy.

Healthy peatlands provide a range of benefits for human health and wellbeing including improved air and water quality, lower emissions and access to natural and cultural heritage.

Research has shown the negative impact that degraded peatlands have on water quality, air quality, rare flora and fauna, flood risk and the global climate (through greenhouse gas (GHG) emissions), as well as the impacts on cultural heritage and the communities that live and work in these landscapes.

The environmental damage caused by peatland drainage is at the core of these national and international environmental issues. This should be addressed by understanding and managing the societal, financial and institutional barriers to changing this damaging behaviour towards more sustainable win-win solutions.
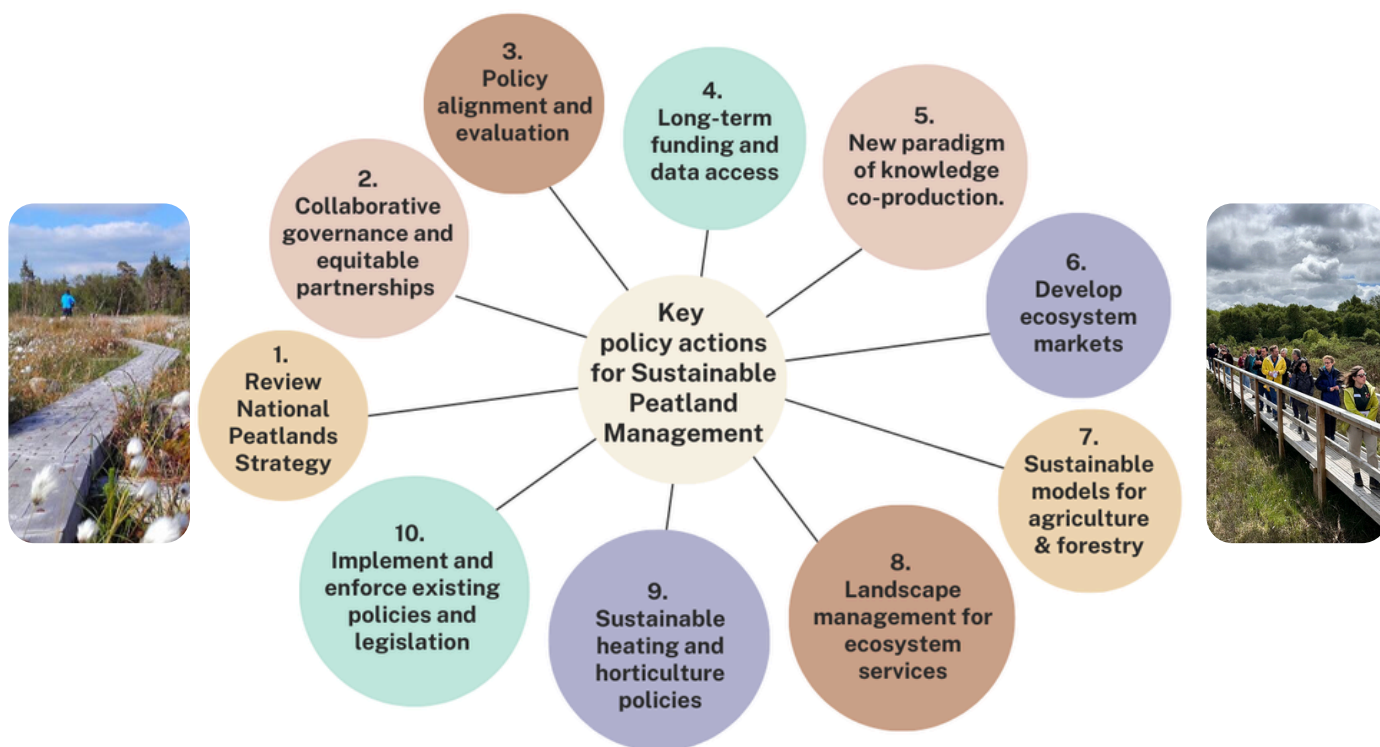
International biodiversity and climate change conventions (Convention on Biological Diversity and United Nation Framework Convention on Climate Change (UNFCCC)) now recognise peatlands as a priority for action.

At EU Level, peatlands are highlighted as playing a central role in achieving the temperature goals in the Paris Agreement, and peatlands are already included in the 2030 Climate and Energy Framework.

At national level, the Climate Action and Low Carbon Development Bill and Amendment (2020) identified the establishment of legally binding GHG emissions targets (following EU targets) as a key priority for transitioning to a low carbon economy. Ireland's Territorial Just Transition Plan sets out the need for supports for regions impacted by the move away from peat production and electricity generation from peat.

Key Policy Actions for Sustainable Peatland Management in Ireland

Evidence-based policy actions for the protection, restoration and sustainable management of Ireland's peatland landscapes.

1. Deliver a comprehensive, evidence-based **review of the National Peatlands Strategy** including all stakeholders, and prioritising implementation of a national **blanket bog restoration** management plan.
2. Build capacity for sustainable peatland management across sectors and stakeholder groups **through collaborative and equitable partnership approaches** and implementation of Just Transition principles.
3. Align regulatory, incentive and educational **policy instruments across sectors** and develop a 'culture' of **policy evaluation** to ensure that policies remain effective and relevant over time.
4. Provide **long-term funding** and ensure **data access** to guide and monitor conservation, rewetting, restoration and sustainable management of peatlands.
5. Fund and promote multi-disciplinary and trans-disciplinary research through **a new paradigm of knowledge co-production and open science.**
6. Develop **ecosystem markets (carbon, biodiversity, water)** and **markets for wet peat-based products** in collaboration with stakeholders & researchers.
7. Progress **sustainable models for agriculture and forestry** on peatlands (rewetting, paludiculture, carbon farming) and phase out drainage-based land use and subsidies.
8. **Transparency and leadership** in restoration/rehabilitation of afforested peatlands and industrial extraction sites in terms of targeted ecosystem services and integration in **catchment and landscape management.**
9. Implement policies to support a shift from solid fuel for residential heating to improve **air quality and health** and from a peat-based to **a sustainable horticulture industry.**
10. **Implement** and **enforce EU directives, policy and legislation,** in particular around peat extraction and enact a new Local Authority licensing system.

Implementing sustainable management of Irish peatlands

PRIORITY

The Peat-Hub-Ireland project collated evidence-based research on Irish peatlands under the following ten themes: Biodiversity, Soil, Climate Change, Water, Archaeology and Palaeo-environment, Technology and Mapping, Society and Culture, Management, Growing Media, and Policy and Law. In total, **71 research gaps** were identified, 50% of which are viewed as High Priority and **96 key actions** were provided across themes, 60% of which are deemed High Priority. To implement these actions and insights, four strategic recommendations are provided, each serving as a foundational pillar to achieving sustainable peatland management across sectors and stakeholder groups in Ireland.

1. Accountability

Sustainable peatland management requires policy alignment, compliance, regulation and enforcement with coherent regulatory frameworks and peatland mainstreaming. Improved participatory processes and inclusion of civil society are also crucial to build trust, knowledge and public support.

2. Longevity

Mechanisms for long-term funding of sustainable peatland management and long-term monitoring are critical and should be leveraged through financial frameworks, subsidies (promote positive; remove negative), private finance and enhancing local community and landowner supports.

3. Equity

To foster equitable and sustainable peatland management, urgent resources are needed for education, training, knowledge exchange, and capacity building across stakeholder groups. Institutions should promote engaged research and empower people and communities to drive change.
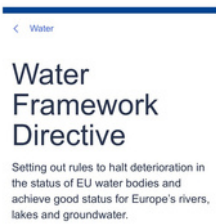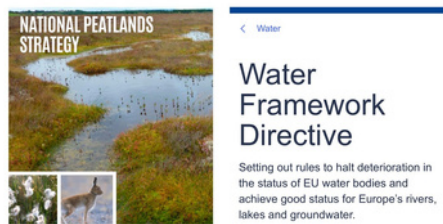
4. Holistic knowledge

A new paradigm for peatland research in Ireland should aim to empower stakeholders via participatory methodologies and knowledge co-production; integrate principles of Open Science for sharing data and knowledge; and develop technological capacity.

Sustainable livelihoods can be provided through peatland restoration, rewetting and paludiculture initiatives, working with communities, farmers and landowners.

Further Information

The information and actions outlined in this Policy Brief are derived from a synthesis of research carried out by the Peat Hub Ireland project which analysed over 900 publications on Irish peatlands (2000-2023).

A series of ten factsheets have been produced which offer accessible and up-to-date summaries of research on the following thematic areas: Biodiversity, Soil, Climate Change, Water, Archaeology and Palaeo-environment, Technology and Mapping, Society and Culture, Management (Forestry), Management (Agriculture), Policy and Law. Scan the QR code to access the factsheets.

Factsheets

Supplementary information

Peat Hub Ireland website for project outputs & reports:
https://www.ucd.ie/peat-hub-ireland/

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