



NATIONAL PEATLANDS PARK

Draft Feasibility study

- Business case for a National Peatlands Park

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Feasibility Study and Business Case for a new National Peatlands Park

Executive Summary

In 2011, the Irish Environment Protection Agency (EPA) recommended that the State establish a new National Peatlands Park (EPA, Bogland Report, recommendation 9). In 2014, the Department of Housing, Local Authority and Heritage published the National Peatlands Strategy recommending that a feasibility study be carried out on a National Peatlands Park (action A28). A mid-term review of this Strategy was carried out in 2021 and concluded again that a “Feasibility Study” on the development of a Peatlands Park should be carried out. It is understood that there is some delay in initiating this “feasibility study” and that such work may not be commence until later in 2023. For this reason, given the passage of time, the urgency of the climate and biodiversity crisis and the creation of a Just Transition Programme and Fund, Conservation NGOs and Community groups¹ based in the midlands have commissioned this feasibility study to assist the decision-making process and make a business case for the location and model for the National Peatlands Park.

The case for the establishment of a National Peatland Park has been well made by the EPA in 2011. Since then, the Citizens Assembly on Biodiversity Loss (2022), the EU Nature Restoration Law (2023) have all recognised the importance of peatlands for habitat and nature restoration. The Kildare County Development Plan 2023-2029 has designated 27% of the county encompassing the peatlands of North and West Kildare for nature.

This report describes the requirement for a peatlands park, the co-benefits for society and the economy in addition to conservation and biodiversity. We look at examples from other countries and put forward recommendations for location and funding of the new national park.

We recommend a core and satellite model to cover the Just Transition Fund and Programme counties² establishing a new National Peatlands Park in Ireland, providing conservation areas, delivering benefits for the climate, environment, biodiversity, local employment, just transition, and tourism. The model recommended provides a Gateway in North Kildare /east Offaly which is within an hour of Dublin. The area already provides long established tourist, educational and research infrastructure. The model includes the peatland districts in the midlands which have the capacity, working with the NPWS and the relevant County Councils to meet or come up to the standard of a National Park peatland

¹ Irish Peatlands Conservation Council, Butterfly Conservation Ireland, Birdwatch Ireland Kildare, Wild Kildare, Kildare Bat Group, Lullymore Heritage and Discovery Park, Ummeras Community Development Association www.nationalpeatlandspark.com

² [https://www.gov.ie/en/publication/4d421-eu-just-transition-fund/#:~:text=Territorial%20Designation&text=The%20designated%20territory%20under%20the,Tipperary\).](https://www.gov.ie/en/publication/4d421-eu-just-transition-fund/#:~:text=Territorial%20Designation&text=The%20designated%20territory%20under%20the,Tipperary).)

district. The Blue Flag model has worked well for Ireland's beaches. A similar Green Flag model for peatland districts should be considered.

Introduction

Ireland boasts a rich natural heritage, characterized by diverse ecosystems, unique landscapes, but in common with all countries is facing a biodiversity crisis, climate and land use stress. The creation of a new national park will serve as a strategic measure to safeguard and sustainably manage irreplaceable natural assets for future generations. This initiative aligns with the principles of environmental stewardship, economic development, and community engagement, thereby fostering a harmonious relationship between nature conservation, local employment, and tourism growth.

The International Union for Conservation of Nature (IUCN) defines National Parks as

“large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities”

Ireland already has 6 national parks of scales ranging from 15 km sq in the Burren to 205 km sq in Wicklow. Not all the parks are in a single location. The Burren National Park is spread over a wide geographic area of limestone karst in Co Clare. Ireland's national parks are located primarily on the western seaboard on blanket bogs. There are none in the midlands and none on raised bogs.

The UK has 10 National Parks. The Netherlands, which is just over half the size of Ireland, has 11 National Parks.

The EU Biodiversity Strategy for 2030, launched by the European Commission on 20 May 2020, proposes ambitious EU actions and commitments to halt biodiversity loss in Europe and worldwide. The Strategy proposes that by 2030, member States collectively legally protect at least 30% of the EU's land and marine areas, and that 10% (or one-third of the protected areas) would be strictly protected (including strict protection relating to ancient woodland and significant areas of other carbon-rich ecosystems, such as peatlands, grasslands, wetlands and seagrass meadows). In effect this means that the state **must double the area of protected habitats in Ireland**. A new EU Nature Restoration law, to give effect to this strategy, is currently under negotiation at EU level.



Objectives

In this study, we have identified the following objectives for Ireland's new national park.

- a) Habitats and Environmental Conservation: The national park will protect and preserve fragile ecosystems, habitats, and species, ensuring the long-term sustainability of Ireland's natural heritage.
- b) Biodiversity Enhancement: Through dedicated conservation efforts, the national park will promote biodiversity, allowing native flora and fauna to thrive, thus preserving Ireland's unique ecological balance.
- c) Climate change mitigation and water regulation: Through peatland rehabilitation measures, bare peat areas will be converted from carbon sources to carbon sinks, and water will be retained longer to protect against flooding risks especially during prolonged heavy rain arising from extreme weather events.
- c) Local Employment: The establishment of the national park will generate a range of employment opportunities for local communities, fostering economic growth and providing sustainable livelihoods and a just transition for midland Communities.
- d) Tourism Development: The national park will attract domestic and international tourists, positioning Ireland as a premier destination for nature-based tourism, contributing to the growth of the tourism sector and the overall economy.

These objectives are discussed next.

National Park: Conservation, Biodiversity and Climate change mitigation

Peatlands cover 20.6% of land area in Ireland. Peatlands represent 75% of our total soil organic carbon stock which represents the largest store of carbon in the Irish landscape.³ Artificially drained peatlands represent the single largest source of soil carbon losses from land in Ireland and their restoration offers a high level of climate mitigation potential. A half a century of drainage for the extraction of peat has led to widespread degradation of peatland and wetland habitats, with concomitant biodiversity loss and largescale active and passive carbon leakage and emissions.

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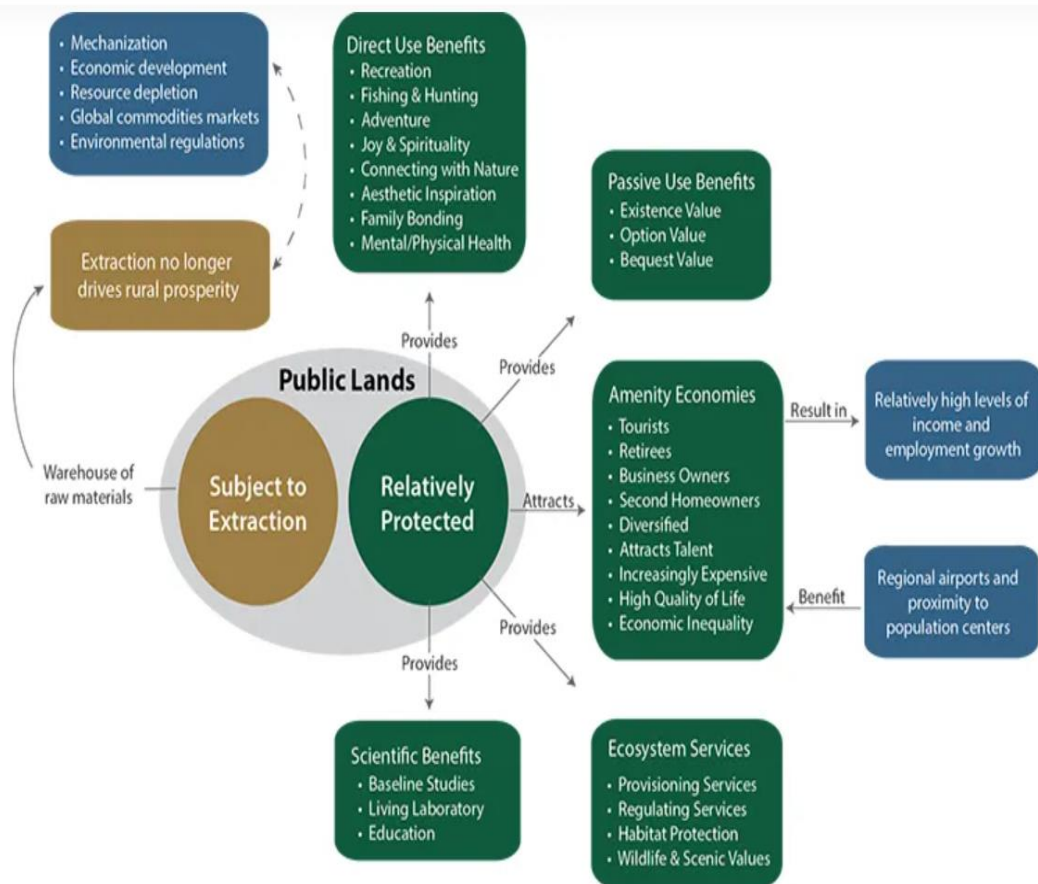
Ireland will be required to designate a land mass of scale to begin to meet these international and national policy objectives. While there are several possible locations for a national park across the Just Transition counties, the peatlands of North Kildare and Offaly provide a unique opportunity with the last remaining large scale land mass of continuous raised bog in Europe.

The total protected land area in Kildare, for example, is currently no more than 3%. There is an opportunity to increase the area by creating new habitats in state owned and semi-state managed lands in Kildare. This has been recognised in Kildare's County Development Plan 2023-2029.

At national level, proposals for advanced rehabilitation for the remaining fragments of raised bog on lands managed by Bord na Móna under the Peatlands Climate Action Scheme (PCAS), contribute to mitigating against habitat loss. However, these isolated "islands" will gradually shrink, and their populations of some dependent animals will go extinct if their habitats are not connected through a landscape scale plan for linkage, restoration and repurposing of extracted peatlands. Peatlands in Kildare have a very high biodiversity value starting with soil chemistry and composition. Peatland areas can evolve quickly into new habitats for biodiversity and wilderness. The land area designated for biodiversity and wilderness should be of scale commensurate with the loss of habitat in the bog of Allen, once 100,000 hectares.

³ https://www.epa.ie/pubs/reports/research/land/STRIVE_75_web_SC.pdf

A US study by Headwaters Economics (<https://headwaterseconomics.org/>) illustrating the benefits of using public lands formerly used for the extractive industry is shown below. Peat extraction has dominated the economy of the midlands for decade. Now that industrial scale peat extraction has stopped we can now examine the potential for future use of protected peatlands.



Peatlands play a crucial role in carbon capture and storage, as well as water regulation.

Carbon Capture and Storage: Peatlands are unique ecosystems characterized by the accumulation of partially decayed organic matter known as peat. They act as significant carbon sinks, capturing atmospheric carbon dioxide (CO₂) through the process of photosynthesis. Peatlands store vast amounts of carbon, often exceeding that of other terrestrial ecosystems. When peatlands are drained or degraded, the stored carbon is released back into the atmosphere as CO₂, contributing to greenhouse gas emissions and climate change. Therefore, conserving peatlands is crucial for preventing carbon loss and mitigating climate change.

Carbon Storage Potential: Peatlands have immense carbon storage potential due to the slow decomposition rates of organic matter under waterlogged conditions. The waterlogged environment limits the oxygen supply, slowing down microbial activity and preventing the complete decomposition of organic material. This process leads to the accumulation of peat, which can store carbon for thousands of years. Conserving peatlands helps maintain their carbon storage capacity, reducing the release of CO₂ into the atmosphere and supporting global efforts to combat climate change.

Water Regulation: Peatlands play a vital role in water regulation and management. They act as natural sponges, absorbing and storing rainfall, and slowly releasing it over time. The high water-holding capacity of peatlands helps regulate water flow, reducing the risk of flooding during heavy rainfall and providing a steady water supply during dry periods. The intact vegetation and structure of healthy peatlands also contribute to filtering and purifying water, improving water quality for downstream ecosystems and human consumption.

Peatlands and Biodiversity: Peatlands provide diverse habitats for a wide range of plant and animal species. These unique ecosystems support specialized plant communities, including sphagnum mosses, sedges, and heathers, which are adapted to the waterlogged and acidic conditions of peatlands. Many bird species, insects, and amphibians rely on peatlands for breeding, foraging, and nesting grounds. Conserving peatlands helps preserve biodiversity and protects the habitats of numerous species that depend on these unique environments for survival.

Restoration and Conservation Efforts: Given the importance of peatlands for carbon capture, water regulation, and biodiversity conservation, there are ongoing efforts to restore and conserve degraded peatlands. Restoration measures include rewetting drained areas, controlling invasive species, and implementing sustainable land management practices. Peatland conservation initiatives also involve raising awareness, conducting scientific research, and collaborating with stakeholders to promote sustainable peatland management practices.

Peatlands conservation is crucial for mitigating climate change, preserving biodiversity, and ensuring water resource sustainability. Efforts to protect and restore these valuable ecosystems are essential in achieving global climate goals and maintaining the ecological services they provide.

⁴ https://www.epa.ie/pubs/reports/research/land/STRIVE_75_web_SC.pdf

National Parks, Economic Impact and Visitor spend

Figures available for tourist numbers and value to the local economy in our National Parks are in Table 2. Figures for UK National Parks are a table 1 (2011 figures)

Table 2

National Park	Annual Visitor Numbers	Value to Local Economy
Killarney National Park	<u>1.5 million</u>	€145 million annually
Wicklow Mountains National Park	Over 750,000	€200 million annually
Connemara National Park	Over 200,000	€25 million annually
Burren National Park	Over 100,000	€12 million annually
Glenveagh National Park	Over 200,000	€20 million annually

Source: Failte Ireland and County Council websites. Figures are estimates and updated figures awaited

Table 1 Breakdown of visitor spend and other relevant information for the UK's 15 National Parks⁴

National Park name	Year of designation	Population	Scheduled ancient monuments	Conservation Areas	Visitors a year (million)	Visitor days a year (million)	Visitor spend a year (million)	Funding £million to nearest 100k (Central Government)
Brecon Beacons	1957	32,000			3.8	4.3	£143	4.5
Broads	1989	5,721	13	18	5.8	7.2	£296	4.3
Cairngorms	2003	17,000	60	4	1.48	3	£174	4.5
Dartmoor	1951	34,000	1208	23	2.5	3.3	£123	4.7
Exmoor	1954	10,600	208	16	1.4	2	£83	4.0
Lake District	1951	42,200	over 200	21	8.3	15.2	£659	7.0
Loch Lomond and the Trossachs	2002	15,600	60	7	2.1	4	£247	6.8
New Forest	2005	34,400	61	18	Not available	13.5	£123	4.0

Source: nationalparks.gov.uk and NIAR 292-11 September 2011

Location: National Park Gateway and Peatland Districts

Significantly, there are no national parks in the midlands of Ireland. There are a number of small peatlands areas in the midlands, some with conservation status such as a National Heritage Area, Special Area of Conservation (Habitats Directive) or Special Protection Areas (Birds Directive). Each of these areas have their own biodiversity, characteristics and assemblages of species. The only area of sufficient scale which aligns with the definition of UN National Park, is located in the North Kildare-East Offaly across the Bog of Allen. This area of ancient bog is known locally as the “Ballydermot Bog Group” following the name given to the set of bogs by Bord na Móna. This area is also currently being used by researchers to measure carbon transmission (using a carbon flux tower) over the range of habitat types found on the bog.

Identification of potential park land areas

The peatlands of north and west Kildare the “Ballydermot Bog group”, comprising Bord na Móna land in the townlands of Lodge, Barnaran, Blackriver, Ballydermot North and South, Codd 1 and Codd2/Sheridans, Lullymore and Lullybeg, Killina, Glashabaun North and South, Derrybrennan and Ticknevin ranges around 7,000 hectares. There are other important boglands in Kildare including Ummeras and the Kilberry bog group which should form part of the Peatlands park.

The peat-cutting process on these bogs has resulted in the development of a range of habitats and land uses. Some of these habitats and land uses have led to the development of species-rich habitats. The main habitats that exist in the area are bogs, acid and calcareous grassland, scrub, mixed and deciduous woodland, marsh and open water habitats such as flooded cutover bog and rivers. This diversity has resulted in a mosaic landscape in many areas, with a varied landscape contour pleasing to the eye and offering a unique experience for nature lovers, walkers and ramblers, horse riding and many other activities.

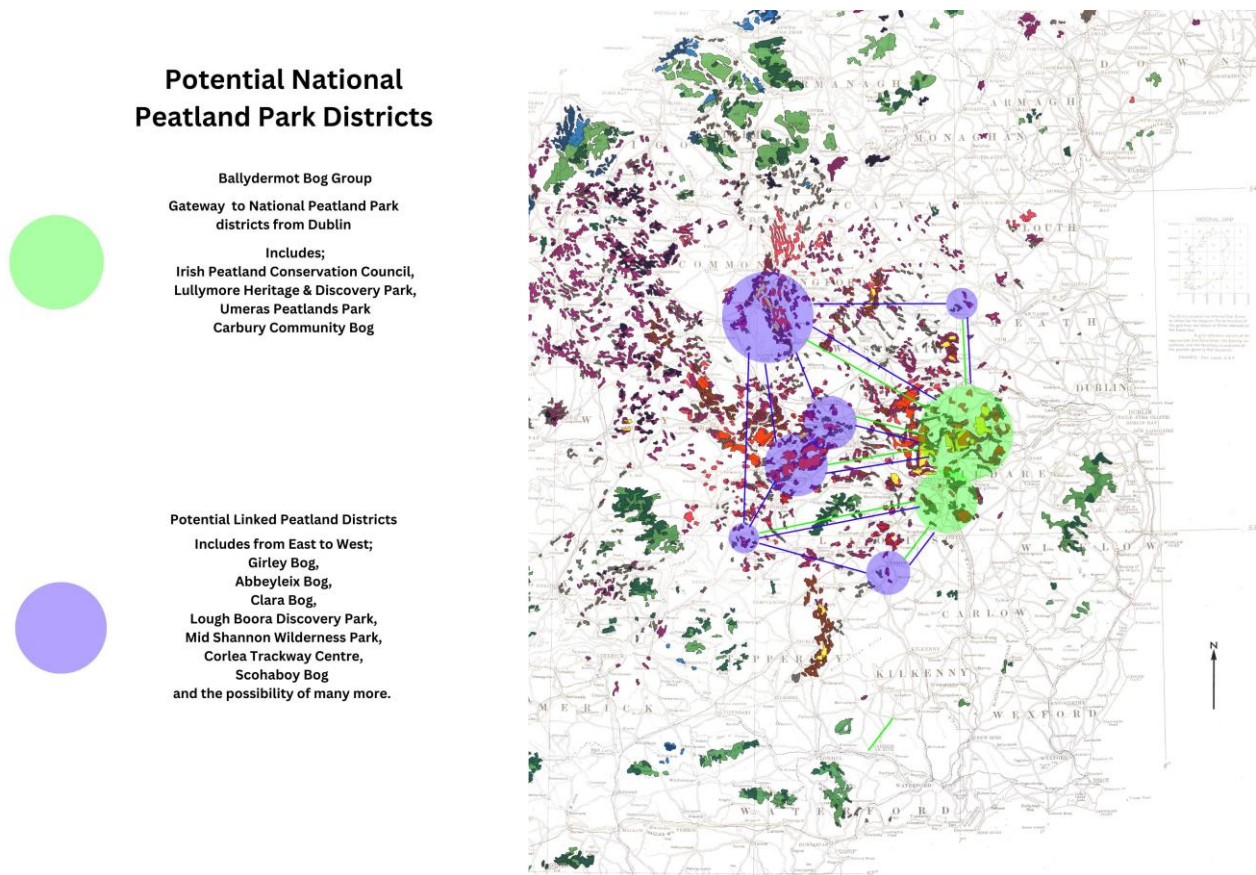
The area is of sufficient size to sustain the populations of animals and plants present and contains several qualifying features for a Special Area of Conservation under the Habitats’ Directive 1992, including Marsh Fritillary, Otter, active raised bog, degraded raised bogs capable of regeneration, Molinia grassland, orchid-rich grassland, wet heath and dry heath. As well as the biodiversity values, the area offers great scope for recreation and tourism, a great boost to the locality and wider region. The potential of the lands managed by Bord na Móna has already been recognised by Kildare County Council in their County Development Plan 2023-2029.⁵

This area in the Ballydermot group alone spans 7000ha and is composed of peatland habitats including naturally regenerated bog woodlands and wetlands. The area hosts a volunteer led nature Reserve by Butterfly Conservation Ireland. In addition, the Irish Peatlands Conservation Council is located at Lullymore. Adjoining these nature institutions and facilities is Lullymore Heritage and Discovery Park, a social enterprise providing employment to 40 people and hosting over 55,000 national and international fee paying visitors each year.

This area of peatlands in North Kildare, in addition to the scale of the peatlands, proximity to Dublin, has an established visitor, educational and research infrastructure. These features identify the area as a prime location for a **Gateway to the National Park** with satellite peat districts forming part of a peatland experience across the Just Transition counties in the midlands. See Figure 3

⁵ <https://kildarecoco.ie/AllServices/Planning/DevelopmentPlans/KildareCountyDevelopmentPlan2023-2029/>

Figure 3



Costs, Funding and Governance

a) Land Acquisition: The primary cost of creating a national park is acquiring suitable land for the national park. In the case of the midlands, the land is already owned by the state so the cost to the taxpayer is zero apart from the legal forms of agreement or memos of understanding which would need to be created.

b) Infrastructure Development: To support visitor activities and ensure sustainable management, the national park will require investment in infrastructure such as visitor centers, trails, signage, waste management facilities, and staff accommodations. The estimated cost for infrastructure development should be informed by experience with Ireland's existing national parks such as Ballycroy or Wicklow national parks.

c) Conservation and Maintenance: Adequate resources will be allocated for conservation efforts, habitat restoration, species monitoring, and ongoing park maintenance. These costs are expected to be similar to our existing national parks.

d) Sources of funding:

The Revised Book of Estimates for 2023 provides;

Extracts from the revised Book of Estimates 2023 Dep of Public Expenditure and Reform

Vote 34: Department of Housing, Local Government & Heritage

Programme/Scheme	Subhead	2022 €,000	2023 €,000	% Change
Energy Efficiency - Retrofitting	A.16	85,000	87,000	2%
Water Quality Programme	B.3	25,252	31,787	26%
Rural Water Programme	B.4	62,650	67,650	8%
National Heritage (NPWS)	F.5	30,112	42,582	41%
Peatlands Restoration and Management*	F.8	10,280	10,280	-
Total		213,294	239,299	12%

* Please note that sub-heads marked with an asterisk will receive additional funding in 2023 via the carryover of unspent capital funds from 2022, as detailed in the table below.

Total New Climate Related Exchequer Expenditure Projected in 2023 – € 3,480 million

Increase in Projected Climate Related Expenditure in 2023 Over 2022 - 12.7%

Total Expected Climate Related Expenditure (Including Capital Carryover) in 2023 - € 3,587 million

Additional Climate Related Spending In 2023 via Capital Carryover

Programme/Scheme	Vote	2023 €,000
Greenways	31	17,000
Carbon Reduction	31	18,560
Public Service Provision Payments	31	450
Public Transport Investment	31	66,956
Peatlands Restoration and Management	34	4,200
Total		107,166

It is clear therefore that the Government has already set aside funding streams for Peatland Restoration and Management. In addition, the European Union's Just Transition Fund (€169m) and Climate Action Initiative (€10m) are further sources of funding.

e) Governance: The national Parks and Wildlife Service is ideally placed to oversee and manage the new National Park. The most recent experience with Ballycroy National Park in Mayo where the NPWS together with Coillte and the Local Authority worked for the creation of Ireland sixth national park provides a suitable model for Ireland's seventh National Park.

Benefits

International experience and Irish experience shows that these are the areas of significant benefit that arise for the creation of a national park;

a) Environmental Conservation: The national park will serve as a haven for the preservation of Ireland's diverse peatland ecosystems, protecting vulnerable habitats and species from degradation and promoting sustainable ecological practices.

b) Biodiversity Enhancement: By providing protected areas for native flora and fauna, the national park will facilitate the regeneration of natural habitats, contributing to enhanced biodiversity and the conservation of endangered species.

- c) **Local Employment:** The establishment of the national park will create numerous job opportunities in various sectors, including park management, ecotourism, research, and hospitality. These jobs will support local communities, providing stable incomes and fostering economic growth.
- d) **Tourism Growth:** The national park will attract nature enthusiasts, conservationists, and adventure seekers, stimulating tourism growth across the region. Increased visitor spending will benefit local businesses, including accommodation providers, restaurants, and recreational services.
- e) **Education and Awareness:** The national park will serve as an educational and research platform, offering interpretive programs, guided tours, and interactive exhibits, raising awareness about environmental conservation, sustainability, and the importance of biodiversity.
- f) **Economic Stimulus:** The establishment of the national park will contribute to the overall economic growth of Ireland, creating a positive ripple effect across multiple sectors, including hospitality, transportation, retail, and recreation. Indications from similar National Parks suggest that the local economy could benefit from between £25m and £200 m per annum.
- g) **Compliance with EU Initiatives:** The establishment of the national park will contribute to the State's commitment to the EU Biodiversity Strategy 2030 and the re-wetting targets set out in the EUNature Restoration Law.

Conclusion

This feasibility study proposes the establishment of a new National Peatlands Park in Ireland, aimed at conserving and protecting the country's valuable peatland ecosystems. The park would serve as a flagship conservation area, delivering numerous benefits for the climate, environment, biodiversity, local employment, just transition, and tourism. The model recommended provides a Gateway in North Kildare /east Offaly which is within an hour of Dublin already providing long established tourist, educational and research infrastructure. The model includes the peatland districts in the midlands which have the capacity, working with the NPWS and the relevant County Councils to meet or come up to the standard of a national park peatland district. The Blue Flag model has worked well for beaches. A similar "Green Flag" model for peatland districts should be considered. The creation of new standards by the NPWS for peatlands such as a Green Flag would help guide Tourism Authorities and Action Groups to strive for designation status and funding.

Climate Benefits: Peatlands play a critical role in climate change mitigation. By establishing a National Peatlands Park, Ireland would demonstrate its commitment to reducing greenhouse gas emissions. The park's preservation and restoration efforts would help maintain carbon stocks, preventing the release of stored carbon dioxide (CO₂) into the atmosphere. Conserving peatlands is crucial for Ireland's climate goals and contributes to international efforts to address climate change.

Environmental Preservation: The National Peatlands Park would safeguard Ireland's unique peatland ecosystems, protecting their integrity and promoting sustainable land management practices. The park's conservation measures would preserve valuable habitats, water resources, and biodiversity. It would serve as a sanctuary for rare and endangered plant and animal species that depend on peatland environments for their survival.

Biodiversity Conservation: Peatlands support diverse and specialized plant and animal communities. The National Peatlands Park would provide a protected area for these species, including sphagnum mosses, heathers, sedges, and various bird and insect species. By preserving peatlands and their associated habitats, the park would contribute to biodiversity conservation and help maintain ecological balance in the region.

Local Employment and Just Transition: The establishment of the National Peatlands Park would create local employment opportunities. The park would require a range of staff, including park rangers, guides, conservationists, educators, and support personnel. By providing sustainable jobs, the park would contribute to the just transition of local communities impacted by changes in peatland management practices, fostering economic resilience and social well-being.

Tourism and Economic Benefits: The National Peatlands Park would attract visitors interested in nature-based tourism, offering opportunities for education, recreation, and exploration of Ireland's unique peatland landscapes. Increased tourism would stimulate the local economy, supporting accommodations, restaurants, transportation services, and other tourism-related businesses. The park's presence would enhance Ireland's reputation as a sustainable tourism destination and contribute to regional economic growth.

Education and Research Opportunities: The National Peatlands Park would serve as an educational and research hub, providing opportunities for schools, universities, and research institutions. It would offer educational programs, workshops, and interpretive exhibits to increase public awareness of the importance of peatlands, climate change, and sustainable land management. The park would support research initiatives on peatland ecology, carbon dynamics, and biodiversity, contributing to scientific knowledge and environmental stewardship.

Collaboration and Partnerships: Successful implementation of the National Peatlands Park would require collaboration among various stakeholders, including government agencies, local communities, NGOs, environmental organizations, and research institutions. Partnerships would foster knowledge exchange, resource sharing, and co-management arrangements, ensuring the park's long-term sustainability and effectiveness in achieving conservation and climate goals. As a project with districts the Park would be a collective endeavour for the nine Just Transition Counties bringing together communities and creation business opportunities.

Funding and Financial Considerations: Provision for the new national park should be included in the estimates for the Department of Housing, Local Government and Heritage under the Heritage and Peatlands Restoration and Management votes. It is noted that the budget for the NPWS has almost doubled in 2023. Financial support is available through central and local government allocations and EU funds. These funding sources can be further augmented by public-private partnerships, grants, philanthropic donations, and revenue generated from sustainable tourism activities.

The establishment of a National Peatlands Park in Ireland would demonstrate the country's commitment to climate action, environmental preservation, and sustainable development. The park would deliver benefits for the climate, environment, biodiversity, local employment, just transition, and tourism. By investing in this initiative, Ireland would showcase its leadership in peatland conservation and contribute to global efforts to address climate change and protect natural ecosystems.

The establishment of a new national park in Ireland presents a compelling opportunity to protect and preserve the nation's natural heritage while simultaneously creating local employment opportunities and driving tourism growth. The costs associated with infrastructure development, and ongoing maintenance are outweighed by the substantial benefits to the environment, biodiversity, local communities, and the national economy. By taking a proactive stance towards conservation and sustainable development, Ireland can position itself as a global leader in environmental stewardship of its peatlands, attracting visitors who seek immersive and impactful nature-based experiences.

Environment and Conservation Consultants
Naas Co Kildare
25 June 2023