

14. Peatland Roadmap

building blocks to fight climate change

The overall aims of this action plan are to protect, sustainably manage and restore Ireland's 1.2 million hectares of peatlands.

The building blocks on the road to success involve management, funding, education and collective effort. These will drive the Irish Peatland Conservation Council's campaign on climate change over the next ten years.

The actions IPCC will take for peatlands and climate change are summarised in Table 17. A variety of groups, both government and non-governmental have responsibilities in relation to the protection and sustainable management of Irish peatlands. Action from these groups is required sooner, rather than later.

The actions presented in Table 17 derive from the Irish Peatland Conservation Council's analysis of our database of over 1,000 sites of conservation importance. This shows an on-going and shocking degradation of site condition due to human activities. The most impactful continues to be turf cutting for domestic use. Campaign steps to change this are outlined in Action 10 of Table 17.

While the recent announcements by Bord na Móna indicate a withdrawal from peat extraction by this company, there still remains over 50 horticultural peat companies operating within Ireland who are having a significant impact on our remaining raised bogs, the most threatened peatland type in western Europe (see Action 8 in Table 17).

It is vital that all government policies, planning, forestry and



Figure 37: Local action on species conservation, habitat creation and restoration, coupled with community engagement and education has the power to provide climate change solutions. Photo: © Irish Peatland Conservation Council

wind energy do not allow any further degradation of our peatland carbon stock. While the Irish Government may congratulate itself on its plans for a climate resilient and carbon-neutral economy, this must be turned into action on the ground targeted at peatlands in recognition of their benefit in the fight against climate change. The Irish Peatland Conservation Council will be campaigning for the development of an immediate 20-year peatland restoration and

rehabilitation action plan with a budget of €1 billion as one powerful solution to climate change (see Action 1, Table 17). Community buy-in will be crucial to success and IPCC will be ensuring that there are ample opportunities for communities to be informed and to participate in the peatlands and climate change action plan (see Action 6, Table 17 and Figure 37).

Table 17: Campaign actions for peatlands and climate change to be pursued by the Irish Peatland Conservation Council.

#	Campaign Actions for peatlands and climate change	Priority	Timescale On-going Short 0-3 yrs Medium 3-5 yrs Long 6-10 yrs	Bodies Responsible
1	Develop a 20-year, €1 billion peatland restoration and rehabilitation action plan to help combat climate change and set up an overseeing group to direct and co-ordinate the programme	High	On-going	National Parks and Wildlife Service, Bord na Móna, Non-Governmental Organisations, Local Authorities, Government Departments of Environment, Climate, Agriculture and Heritage, Peatlands Council
2	Set an annual target and funding stream for peatland restoration and rehabilitation quantifying the greenhouse gas emissions saved and the biodiversity enhanced	High	Short	National Parks and Wildlife Service, Government Departments of Environment, Climate, Agriculture and Heritage, Teagasc
3	A network of demonstration sites on best practice restoration and rehabilitation must be established and documented	High	Medium	Non-Governmental Organisations, Local Authorities, Community Wetlands Forum, Private Individuals, National Parks and Wildlife Service
4	Develop a decision tool to assist land managers in identifying the sites that will give the best short-term restoration or rehabilitation results	Medium	Short	National Parks and Wildlife Service, Bord na Móna
5	A carbon credit system which will allow private corporations and individuals to fund peatland restoration must be developed so as to increase and maintain the level of funding streaming through to peatland restoration	High	Medium	National Parks and Wildlife Service, Government Departments of Environment, Climate, Finance, Public Expenditure and Reform
6	A new story line in education regarding peatlands and climate change must be developed and implemented across all curricula, back to back with a strong public awareness campaign	High	Short	National Parks and Wildlife Service, Non-Governmental Organisations, Local Authorities, Community Wetlands Forum, Heritage Council, Government Departments of Education, Environment, Climate
7	A nationwide land-use and habitat mapping system needs to be made publically available to inform policy development, planning decisions and management actions in relation to climate change	Medium	On-going	National Parks and Wildlife Service, Bord na Móna, Local Authorities, Government Departments of Environment, Climate, Agriculture, Rural Affairs and Heritage, Ordnance Survey Ireland, Environmental Protection Agency, European Environment Agency, Teagasc, Universities
8	Industrial harvesting of peatlands for horticultural moss peat must be stopped and alternative products that are sustainably produced developed. Rehabilitation plans for cutaway areas must be developed and implemented	High	Short	Peatlands Council, Government Departments of Environment, Climate, Agriculture, Rural Affairs and Heritage,
9	Planning laws need to be extended to provide protection for peat carbon stocks remaining in man-modified peatlands	High	Short	Government Departments of Environment, Climate, Justice, Local Authorities
10	Burning turf in private homes must be phased out as a community led initiative, through the provision of grant aided, accessible, sustainable energy sources dovetailed with carbon credits for rewetting from turf-producing bogs	High	Short	Government Departments of Environment, Climate, Finance, Rural and Community Development, Sustainable Energy Association of Ireland, Local Energy Communities, Local Authorities
11	A field survey of fens, setting conservation targets and developing management plans for blanket bogs and fens and the completion of the designation of Special Areas of Conservation and Natural Heritage Areas for peatland habitats must be undertaken	High	Long	National Parks and Wildlife Service, Government Departments of Environment, Climate, Agriculture and Heritage
12	Long-term greenhouse gas monitoring projects on peatlands (to include dissolved organic carbon) need to be established for all peatland in a continuum from intact sites through to sites with a thin coating of peat to allow for reporting of the success of restoration and rehabilitation in terms of greenhouse gas reduction	Medium	On-going	National Parks and Wildlife Service, Environmental Protection Agency, Universities

15 Healthy Peatlands

keep the benefits flowing

Peatlands provide many benefits. These benefits are regarded as natural capital. Natural capital is the world's stocks of physical and biological resources, including air, water, minerals, soils, fossil fuels and all living things. These stocks work together to deliver ecosystem goods and services that in turn provide benefits to society. These benefits include harvestable products like food, materials and fuel, clean water for people to drink and for industry to use, purified air to breathe, the natural decomposition of wastes, the conservation and recycling of essential nutrients like nitrogen and phosphorus, medicine, pest control, pollination, flood and drought regulation and beautiful places to visit. These services matter to people because they give us things we need. But because they are 'free', we don't value them in the same way we value things we have to pay for. The values of peatlands are listed below. This list is adapted for Irish peatlands but was originally published in the Scottish Peatland Strategy (2015¹).

Nature: uniquely adapted groups of birds, plants, fungi, invertebrates and micro-organisms, some not found together anywhere else in the world occur in peatlands. For example half of all endangered birds and 25% of rare plants occur in peatlands. One quarter of all of our mammals depend on peatlands for some phase of their life cycle. Ireland contains over 50% of all raised bog habitat remaining in Europe. Internationally the blanket bogs of Ireland and the UK form the largest single contribution (10-15%) of this habitat in the world.



Figure 38: Healthy functioning peatlands such as the Roundstone Bog in Co. Galway naturally capture and store carbon. Photo: © C. O'Connell

Half of Irish designated lands contain peatland.

Water supply: peatlands play an important role in the provision of drinking water both in areas where catchments are largely covered by peatlands and in drier areas where peatlands provide constant availability of water. Many of our salmon rivers depend on peaty catchments.

Flood management: intact peat bogs contain about 90% water and help to maintain steady flow rates on rivers and reduce downstream flood risks compared to damaged peatlands.

Historic environment: almost 4000 archaeological sites have been recorded within peatlands and the National Museum have over 3000 artifacts catalogued in their collection from peatlands.

International image: peatlands provide the backdrop for Ireland's wild countryside valued by the film and tourism industries and a key part of the brand for much of our food, drink and textiles.

Fuel: while commercial exploitation and turf cutting are

not sustainable in the long-term, turf stacks and clamps are a familiar, if declining, sight in parts of the west, and the scent of peat smoke is distinctively appealing to residents and visitors.

Carbon storage & sequestration: peatlands store 1,566 million tonnes of carbon, 64% of the total soil organic carbon stock in Ireland², Figure 38.

Undisturbed peat accumulates carbon from the air at a rate of up to 0.7 tonnes per hectare per year³.

Livestock grazing: many peatland areas support grazing livestock, mostly sheep, but locally cattle. On some sites these can be used to control scrub and tree regeneration.

Education: peatlands are widely used as outdoor classrooms providing topics ranging from history/archaeology to restoration, climate change and conservation.

Harvestable products: collecting bog myrtle for midge repellent, tapping birch water and collecting berries for domestic preserves or gin additives are valuable.

Cultural enrichment: peatlands provide a sense of place for many and are an inspiration for Irish art, song, poetry and literature. Their colours are also captured in some tweeds and knitwear.

Health & Recreation: walking for its own sake, to reach distant mountains or a stream brings the benefits of physical exercise, refreshes the senses and encourages calm reflection in otherwise busy and crowded lives.

¹ Scotland's National Peatland Plan (2015), Scottish Natural Heritage, Scotland.

² National Parks and Wildlife Service (2015) National Peatlands Strategy, Department of Arts, Heritage and the Gaeltacht, Dublin.

³ Pearce, F. (1994) Peat Bogs Hold Bulk of Britain's Carbon. *New Scientist*: 6 Article



In 2019 Ireland declared a climate and biodiversity emergency. The government has acknowledged that our country needs to act with urgency on the causes and impacts of climate change.

Peatlands are highly significant in the global efforts to combat climate change. Depending on how we manage our peatland resources they can strongly contribute to the climate crisis or they can support climate mitigation plans and international biodiversity targets. The protection and restoration of peatlands is vital in the transition towards a climate resilient and climate neutral economy. The Irish Peatland Conservation Council have developed this action plan focusing on peatlands. Its overall aim is to provide a roadmap for the protection, sustainable management and restoration of the country's 1.2 million hectares of peatlands. The plan involves rehabilitation and restoration actions to enhance the natural carbon capture and storage ability in peatlands. Realising the potential of our peatlands to be a natural solution to reducing greenhouse gas emissions needs community engagement and a budget of at least €1 billion. It must be completed in the next 20 years.

**Irish Peatland Conservation Council
Bog of Allen Nature Centre, Lullymore
Rathangan, Co. Kildare R51V293
www.ipcc.ie**

ISBN 1 874189 34 X

