

Joint Committee on Environment and Climate Action meeting on the Nature Restoration Law and Land Use Review

Tuesday, 28 March from 11am in Committee Room CR3, LH2000, Leinster House

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Introduction

Thank you to the Joint Committee for inviting us to present to you today. My name is Fintan Kelly and I'm the Agriculture and Land Use Policy and Advocacy Officer of the Environmental Pillar, which is an advocacy coalition that works to represent the views of the Irish environmental sector. Comprised of 32 environmental NGOs, the Environmental Pillar works to promote environmental sustainability and the protection of Ireland's natural environment.

Ireland's Peatlands

Globally, peatlands support threatened biodiversity and provide essential ecosystem services to society such as climate change adaptation and mitigation, water regulation and human well-being¹. Peatlands are the most important terrestrial ecosystem when it comes to carbon sequestration. Covering a mere 3-4% of the world's land area, they contain up to one third of the world's soil carbon, twice as much as all the world's forests combined².

Ireland proportionally supports one of the greatest peatland areas in Europe. Unfortunately, Ireland has one of the worst records in the world when it comes to peatland and wetland loss, having lost over 90% in the last 300 years³. Ireland also has one of the highest proportions of degraded peatland area in Europe^{4 5}. The Irish Peatland Conservation Council estimates that 75% of Irish peatlands are not functioning hydrologically or ecologically and biodiversity has suffered immensely as a consequence⁶. Despite this, Ireland is still home to a high-proportion of some of Europe's most threatened peatland habitats, such as 60% of Europe's raised bog habitat⁷.

Peatlands and Climate

While healthy peatlands are an ally in our efforts to fight climate change, the drainage and degradation of peatlands has resulted in them being a major source of Greenhouse Gas (GHG) emissions⁸. According to the EPA, Ireland's Land Use Land Use Change and Forestry (LULUCF) sector

¹ Bonn, A., Allott, T., Evans, M., Joosten, H., & Stoneman, R. (2016). Peatland restoration and ecosystem services: an introduction. Peatland Restoration and Ecosystem Services: Science, Policy and Practice, Cambridge University Press, Cambridge, UK, 1-16.

² Parish, F. et al., (2008). Assessment on Peatlands, Biodiversity and Climate Change. 1st ed. Wageningen: Global Environment Centre & Wetlands International.

³ Fluet-Chouinard, E., Stocker, B. D., Zhang, Z., Malhotra, A., Melton, J. R., Poulter, B., ... & McIntyre, P. B. (2023). Extensive global wetland loss over the past three centuries. Nature, 614(7947), 281-286.

⁴ Joosten, H., Tanneberger, F. & Moen, A. (eds.) (2017): Mires and peatlands of Europe: Status, distribution and conservation. Schweizerbart Science Publishers, Stuttgart

⁵ United Nations Environment Programme (2022) Global Peatlands Assessment: The State of the World's Peatlands <https://www.unep.org/resources/global-peatlands-assessment-2022>

⁶ O'Connell, C., Madigan, N., Whyte, T., & Farrell, P. (2021). Peatlands and Climate Change Action Plan 2030.

⁷ NPWS (2015) A National Peatlands Strategy 2015. Dublin: National Parks & Wildlife Services. Department of Arts, Heritage and the Gaeltacht.

⁸ CCAC (2021) Carbon Budget Technical Report

<https://www.climatecouncil.ie/media/climatechangeadvisorycouncil/Technical%20report%20on%20carbon%20budgets%2025.10.2021.pdf>

was a net source of 4.8Mt CO₂eq in 2018⁹, and is projected to increase to 7.1Mt CO₂eq in 2030¹⁰. Grassland is the largest net source of emissions within the sector: the main source of emissions is the drainage of an estimated 337 kha of organic soils, which emit 8.3 Mt CO₂eq. Wetlands, including peatlands are a net source of emissions of 2.5 Mt CO₂eq. Recent research has found that annual mean CO₂ emissions from afforested peatlands in Ireland are around 6 tonnes /hectare/yr¹¹. This is three times greater than the current figures used in Ireland's reporting to the UN¹².

According to the EPA's Land Use Review, only modelling scenarios which combined substantial peatland restoration and rewetting of up to 90% of drained organic soils were capable of delivering net-zero emissions from the combined Agriculture, Forestry and Land Use (AFOLU) sector by 2050. This echo's the previous findings of the Climate Change Advisory Council (CCAC) and highlights the scale of the challenge we face. The EPA identified peatland rewetting and restoration as one of the best policy options available to deliver positive benefits for climate, biodiversity and water. Unfortunately, the EPA also found that existing national policies fall well short of what is necessary to reach zero emissions by mid-century.

Peatlands and the EU Nature Restoration Law

At an EU level, the Nature Restoration Law (NRL)¹³ proposes a range of targets and timelines to turn the tide of biodiversity loss and climate change. One of the most significant elements of the current proposal is Art 9(4), which sets targets to restore and rewet drained peatlands and organic soils under agricultural use. Our understanding is that Ireland has in general been negative towards the NRL during EU negotiations and is one of the Member States that is opposed to the existing rewetting targets on the grounds that they are too onerous. This is despite the fact that the proposed targets for peat soils are less ambitious than existing national targets. For example, the NRL proposes that 7.5% of organic soils in agricultural use be rewetted to some degree by 2030, while the Climate Action Plan 2023 has a 24% rewetting target¹⁴.

While we agree that greater clarity is needed from the Commission in regard to how restoration will be financed, that aside the NRL is a major opportunity to garner EU support for our existing national commitments. We have called on Irish leaders to increase the scope and the ambition of the NRL. The challenge for decision makers is how can the NRL help us to collectively improve peatland management as a nature-based solution to biodiversity loss and climate change while supporting the wellbeing of communities living in peatland landscapes.

There has understandably been concern around the implications of rewetting for farmers. Our own interpretation of the NRL proposal is that rewetting is consistent with existing policies targeting reduced management intensity, rather than implying full rewetting, and this was confirmed to the Joint Committee for AG, Food and Marine in January. Raising the water table of drained peat soils in agricultural use can greatly reduce GHG emissions without necessarily halting their productive use¹⁵.

⁹ EPA (2023) Evidence Synthesis Report 4: Land Use Review: Fluxes, Scenarios and Capacity Synthesis Report

¹⁰ Ibid

¹¹ Jovani-Sancho, A. J., Cummins, T., & Byrne, K. A. (2021). Soil carbon balance of afforested peatlands in the maritime temperate climatic zone. *Global Change Biology*, 27(15), 3681-3698.

¹² Duffy, P., Black, K., Fahey, D., Hyde, B., Kehoe, A., Murphy, J., Quirke, B., Ryan, A. M., & Ponzi, J. (2021). Ireland National Inventory Report 2021, Greenhouse gas emissions 1990–2019 reported to the United Nations Framework Convention on Climate Change

¹³ https://environment.ec.europa.eu/topics/nature-and-biodiversity/nature-restoration-law_en

¹⁴ Government of Ireland (2023) Climate Action Plan 2023 <https://www.gov.ie/pdf/?file=https://assets.gov.ie/249626/1c20a481-bb51-42d6-9bb9-08b9f728e4b5.pdf#page=null>

¹⁵ Evans, C. D., Peacock, M., Baird, A. J., Artz, R. R. E., Burden, A., Callaghan, N., ... & Morrison, R. (2021). Overriding water table control on managed peatland greenhouse gas emissions. *Nature*, 593(7860), 548-552.

Research has shown that for every 10 centimetres of reduction in water table depth, a reduction can be achieved in the net warming impact of emissions by the equivalent of at least 3 tonnes of CO₂ per hectare per year.

Farmers and communities must be central in shaping any future measures. Wherever possible, management interventions should look to deliver multiple environmental and social benefits and reward practitioners for the ecosystem services provided. In Ireland's Results Based Agri-Environmental Schemes, we have the perfect delivery mechanism, and we welcome the FarmPEAT¹⁶ and Farm Carbon EIP¹⁷ projects which are working to create a blueprint for future interventions. More projects like these are needed - and quickly.

We recently wrote to relevant ministers calling for the Government to deliver on the commitments within the programme for government to reform the outdated legal mandates of Coillte and Bord Na Mona¹⁸. We are strongly of the view that public land must be utilised in the public interest and that all public bodies must be mandated to lead in Ireland's response to climate change and biodiversity loss. Coillte and Bord Na Mona manage 7% and 1% respectively of Ireland and are the state's largest peatland landowners. At a time when we are asking more of private landowners, it is critically important that the State is seen to lead from the front. Public land must be utilised in the public interest, and the Irish people should have a greater say in how that is achieved.

¹⁶ Farm Payments for Ecology and Agricultural Transitions <https://www.farmpeat.ie/>

¹⁷ Farm Carbon EIP <https://farmcarbon.ie/>

¹⁸ Environmental Pillar (2023) Coillte, Bord Na Móna and other public bodies in urgent need of reform <https://environmentalpillar.ie/2023/02/16/coillte-bord-na-mona-and-other-public-bodies-in-urgent-need-of-reform/>

Annex

Figure 1. Estimated areas (ha) of peatland land use categories in Ireland. For grassland and domestic peat extraction area an average of the min and max range values was used (Source: Renou-Wilson, F. et al 2022)

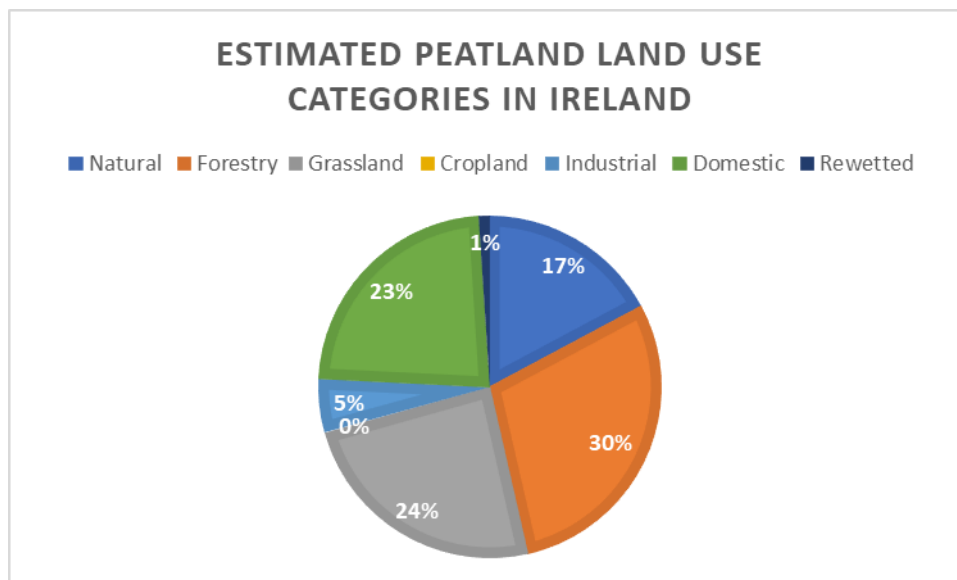


Table 1. Estimated areas (ha) of peatland land use categories in Ireland (Source: Renou-Wilson, F. et al 2022)

Land use category Area (ha)	Area (ha)	References
Natural	269,267	Wilson et al. (2013a)
Forestry	450,940	Duffy et al. (2020)
Agriculture		
Grassland	332,000 – 420,000	Duffy et al. (2020), Green (2020)
Cropland	1235	Donlan et al. (2016)
Peat extraction		
Industrial	80,000	Duffy et al. (2020)
Domestic	101,767 – 612,000	Malone and O’Connell (2009), Forest Service (2012)
Rewetted	21,000	Wilson et al. (2013a)

Table 2. Policy targets for drained organic soils in Ireland

Source	Target	Target	Deadline
Nature Restoration Law	Art 9(4) target for the rewetting of organic soils in agricultural use constituting drained peatlands is 7.5% rewetting target by 2030.	7.5%	2030

CCAC Illustrative Scenario	337,000 ha of drained organic soils of which the 110,000 ha should be rewetted by 2030, which equates to a 33% rewetting target by 2030.	33%	2030
ClimAP 2021	Reduced management intensity (water table management) of 80,000 hectares on drained organic soils by 2030. Based on an assumed area of 337,000 ha this equates to a 24% rewetting target by 2030.	24%	2030
ClimAP 2023	At least 80,000 ha per annum of reduced management intensity of grasslands on drained organic soils (direct savings of 0.88 Mt CO ₂ eq in 2030). Based on an assumed area of 337,000ha this equates to a 24% rewetting target by 2030.	24%	2030
Ag Climatise Roadmap	Under the Ag Climatise Roadmap, there is a target to reduce the management intensity of at least 40,000 ha of peat based agricultural soils to reduce CO ₂ emissions. Based on an assumed area of 337,000 ha, if the 40,000 ha were to be fully rewetted, it would equate to a 12% rewetting target by 2030.	12%	2030
EPA Land Use Review	Only scenarios which included ambitious organic soil rewetting of 90% or 302,000 ha managed to achieve net-zero AFOLU sector by 2050.	90%	2050

Table 3. Policy targets for peatland rehabilitation in Ireland by 2030

Source	Target	Deadline
CCAC Illustrative Scenario	The Climate Change Advisory Council illustrative scenario assumes 90% of peatlands currently used for peat extraction are rewetted.	2030
Draft ClimAP 2023	45,000 ha of Bord na Móna and LIFE peatlands will be rehabilitated (direct savings of 0.30 Mt CO ₂ eq in 2030) and a further 20,000 ha of peatlands (direct savings of 0.20 Mt CO ₂ eq in 2030). Total area to be rehabilitated 65,000 ha.	2030
Peatland Climate Action Scheme	The Peatland Climate Action Scheme will fund Bord na Móna to carry out enhanced peatland decommissioning, rehabilitation and restoration measures on peat extraction sites, targeting circa 33,000 ha between 2021 and 2025.	2025