Joint statement on the importance of wetland and peatland restoration in the establishment of a certification framework on carbon removal

We, the undersigned conservation organisations, welcome the proposal of the European Commission to establish a certification framework for carbon removal.

We applaud the recognition in the Communication on Sustainable Carbon Cycles, that restoration of wetlands including peatlands, which reduces oxidation of the existing carbon stock and increases the potential for carbon sequestration, is an effective example of improved land management practices that result in the increase of carbon sequestration and in most cases in cobenefits for ecosystems and biodiversity.

We also support farming ministers' conclusions for a legislative proposal on the **certification framework for carbon removals**² to be expected by the end of the year to ensure that economic value is attached to practices that increase carbon removal and storage, based on scientifically proven measurement requirements.

As mentioned in the communication above, "The success of carbon farming in Europe will be judged on the quantity and longevity of the sequestration of carbon in plants and soils by enhancing carbon capture and/or reducing the release of carbon to the atmosphere". On this latter point (in bold), we urge the EC to value that healthy wetlands, including peatlands, store vast amounts of carbon in their soils and biomass, but they can become a huge source of emissions upon degradation.

Recognising that peatlands occur in almost all EU Member States, with a concentration in north-western, Nordic and eastern European countries, covering an area of circa 350.000 km², of which more than 50% are degraded by the effects of drainage for agriculture and forestry, and peat extraction. Although covering only 3% of the world's terrestrial area (Xu et al. 2018) **peatlands are the biggest natural carbon stores, storing twice the amount of carbon present in all forests** (Friedlingstein et al. 2020, 2021). No less than five percent of annual global emissions – more than the aviation and shipping sectors combined – come from draining and converting peatlands alone, and this does not include the vast emissions associated with peatland fires (Günther et al. 2020). A staggering 0.86 billion tonnes of CO2e2 could be emitted from peatlands annually (Huang et al. 2021)³.

The graph below, produced by the European Environment Agency (dated April 2022) shows clearly the importance of wetlands (including peatlands).

 $^{^{\}rm L}$ European Commission (2021) COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL Sustainable Carbon Cycles.

² https://www.consilium.europa.eu/en/press/press-releases/2022/04/07/council-adopts-conclusions-on-carbon-farming/

³ von Unger, M., Tonneijck, F.H. and Soto, C. (2022). Voluntary Carbon Markets for Wetland Conservation and Restoration (Wetlands International and Silvestrum Climate Associates) (soon to be published)

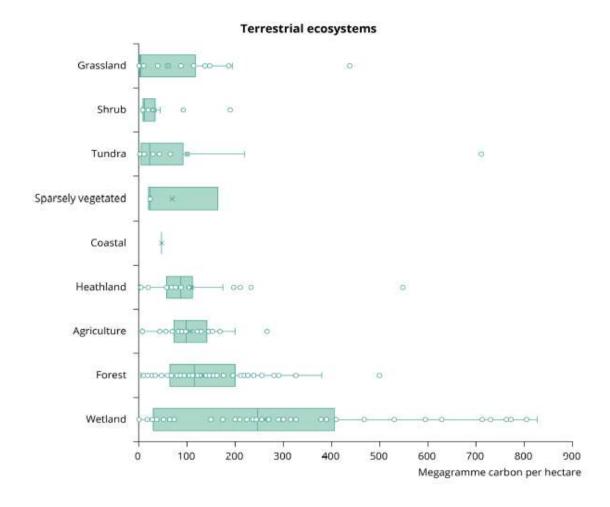


Figure 1: Carbon stocks in Europe's terrestrial ecosystems. Figure from Hendriks et al. (2022): <u>Carbon stocks</u> and sequestration in terrestrial and marine ecosystems: a lever for nature restoration? A quick scan for terrestrial and marine EUNIS habitat types. European Environment Agency.

Greenhouse gas **emissions from peatlands can be easily and significantly reduced** by raising water levels near to the surface (e.g. by blocking drains and no longer pumping water out from polders, which also reduces overall energy consumption). This reduces peat decomposition, stops soil subsidence and protects the remaining peat carbon store. Once adequate hydrological processes are in place, additional carbon can be removed from the atmosphere as peat accumulates.

The amount of carbon locked away by Europe's peatlands is staggering, peat cutting for fuel at an industrial scale and drainage for agriculture and forestry have damaged around 125,000 km2 areas of peatland, resulting in vast emissions. **Rewetting and restoring Europe's degraded peatlands would reduce emissions by about 180 MtCO2e per year—equivalent to 4% of the EU's total emissions in 2017.** According to the latest IPCC WG III mitigation report (AR6)⁴, Agriculture, Forestry and Other Land Uses (AFOLU) can contribute 20–30% of the global mitigation needed for a 1.5C or 2C pathway towards 2050. Within this, the largest share of this economic potential "comes from the conservation, improved management, and restoration" of forests and other ecosystems such as wetlands, including peatlands.⁵

⁴ https://www.ipcc.ch/report/sixth-assessment-report-working-group-3/

⁵ Box 11.1 | AFOLU GHG emissions from peatlands and mangroves

The reduction in carbon emissions resulting from peatland restoration (and later carbon sequestration by healthy peatlands) makes this attractive to carbon finance. The carbon market is growing significantly in Europe, with particular demand for nature-based carbon credits. The limited supply of such credits has led to upward pricing pressure. These market dynamics make the possibility of financing large-scale restoration through the carbon market appealing. It is essential for the EC's certification framework for carbon removal to provide an enabling environment for rapidly scaling up peatland restoration across Europe.

Peatland restoration generates considerable co-benefits:

- Rewetting prevents soil subsidence and eventual flooding and saltwater intrusion in the coastal areas, as well as lowers risk of peat fires, soil erosion and desertification.
- Some wet peatlands can remain productive with suitable farming methods (paludiculture) that are compatible with saturated soils.
- Wet peatlands can provide reed for thatching, sphagnum as a growing medium and reedmace for fiber, among other ecosystem services.
- Restored peatlands can be rewilded to make space for nature, providing habitat for wildlife (including globally threatened water birds) and contribute to the 2030 biodiversity strategy.
- Rewetted peatlands store water and contribute to regulating the water cycle during heavy rains or droughts, supporting aquatic ecosystems and people downstream. This helps with adaptation to a changing climate⁶ and to achieving good ecological status targets under the Water Framework Directive (WFD).

Obstacles for rewetting range from the existence of complex links between ownership and water governance, which brings complexity to obtaining rewetting permissions. Despite the obstacles, many degraded peatlands are available for rewetting in the short term. A greater challenge comes from competing land-uses such as afforestation and, notably, farming for which **agricultural subsidies provide a perverse incentive to continue farming generally marginal land**. Shifting peatland use away from unproductive and environmentally harmful farming and forestry towards 'carbon farming' through rewetting and rewilding would provide considerable environmental benefits with limited social costs to landowners, farmers, foresters and other users.

Carbon farming on peatlands could be incentivised by introducing specific payments for keeping carbon in the ground could be granted via public payments or appropriate credit schemes for farmers who wish to avail of carbon credits through the voluntary carbon market at regional and national levels. These schemes can be supported and recognised by the CAP and Member States. Facilitating results based agricultural payments schemes (RBAPS) specifically for peatlands will help ensure that peatlands can be rewetted and subsequently managed to a high standard. Funding for watershed restoration and management under MS policies could also be

The FAO emissions database estimates globally 250,000 km2 of drained organic soils under cropland and grassland, with total GHG emissions of 0.9 GtCO2eq / yr in 2010 — with the largest contributions from Asia (0.44 GtCO2eq / yr) and Europe (0.18 GtCO2eq / yr) (FAOSTAT, 2013). Joosten

⁶ Protecting and Restoring Peatlands – Targets and Recommendations for Peatlands in the EU Biodiversity Strategy, policy Brief, Greifswald Mire Centre, Wetlands International, 2021

channeled towards peatland restoration, in order to contribute to achieving targets under the WFD.

We call on the EU to provide farmers, foresters and other peatland owners with incentives to restore and maintain wet peatlands by incorporating peatland restoration into the EU's priorities for carbon drawdown and attracting carbon finance.

A time and cost-effective monitoring system of GHG emissions at the parcel level, across different land uses and management regimes, has to be developed and implemented to allow for sound MRV (measuring, reporting, and verification). In addition, it must be recognized that **carbon markets, including voluntary carbon markets, must not be used to justify business-as-usual GHG emissions, which must be urgently decreased** as part of the EU's net-zero pathway. Companies should set and disclose robust, science-informed and high-ambition targets along with a roadmap with shorter- and longer-term milestones following the mitigation hierarchy. Given the urgency to address the interlinked climate, biodiversity and land degradation crises, and the need to mobilise the required private financing, it is imperative that companies avoid and reduce emissions – particularly also those related to wetlands and peatlands - while simultaneously offsetting residual emissions that cannot yet be addressed.

Key messages:

- 1. Wetlands and peatlands already store huge amounts of C, and can start removing C again with appropriate restoration and sustainable use, at scale
- 2. This can be done with the right incentives to make this land-use choice economically attractive for wetland and peatland owners and managers.
- 3. Wetland and peatland restoration, through rewetting and sustainable use is tried and tested and has been shown to be cost-effective across Europe.[4]



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⁷ Greifswald Mire Centre, National University of Ireland Galway and Wetlands International European association (2020) PEATLANDS IN THE EU COMMON AGRICULTURE POLICY (CAP) AFTER 2020,

⁸ von Unger, M., Tonneijck, F.H. and Soto, C. (2022). Voluntary Carbon Markets for Wetland Conservation and Restoration (Wetlands International and Silvestrum Climate Associates) (soon to be published)