



LIFE Multi Peat: Peatland restoration as part of the climate solution

Why peatlands matter? Healthy peatlands are the largest terrestrial carbon store in the world. This means that under natural, water-saturated conditions, peatlands accumulate huge amounts of organic material (e.g., dead plant matter) and keep it “locked” in the ground. However, when drained, the oxidation of the organic material causes tons of carbon dioxide to be released into the atmosphere.

Drained peatlands thus constitute a major source of greenhouse gas (GHG) emissions. On a global scale, the EU is the second largest emitter of GHG stemming from degraded peatlands. Approximately 7% of total EU GHG emissions come from drained peatlands used for agriculture or forestry.

In addition to helping regulate the climate, healthy peatlands provide many other essential ecosystem functions. They act as natural flood control and groundwater filters and provide habitats for threatened species.

Rewetting helps to restore the natural functions of peatlands. Raising water levels in peatlands immediately reduces GHG emissions and, in the long term, also helps to restore the peatlands’ function of accumulating organic carbon. By rewetting degraded peatlands in five countries, the LIFE Multi Peat project now aims to convert an urgent climate crisis into a sustainable pathway to the future.



This is how peatland restoration measures can look like: In the predecessor project LIFE Peat Restore, dams were built in the Latvian mire Augstroze Nature Reserve.



Climate change mitigation

Drained peatlands release large amounts of carbon dioxide into the atmosphere, causing global warming. Healthy peatlands, on the contrary, store twice as much carbon as all the world’s forests.



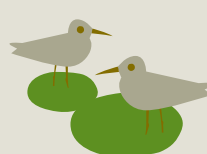
Flood control

Peatlands function as the “kidneys” of landscapes, filtering the water and retaining pollutants. Peatlands absorb rainwater like a sponge, thus helping us become more resilient to floods.



Groundwater filters

Pollutants dissolved in water are absorbed by peatland vegetation and when the plants die, the pollutants are permanently stored within the peat.



Valuable habitat

In addition to providing a habitat for specific flora and fauna, peatlands are also important resting and breeding grounds for migratory birds.



Recreational and aesthetic value

Peatlands also provide space for recreation and engaging with nature, which can have a positive impact on mental health.



Fire prevention

Drained peatlands may easily become a source of fire. Restored peatlands, on the contrary, keep water in the landscape and help prevent droughts and fires.



About the project

The LIFE Multi Peat project aims to restore degraded peatlands by rewetting five project sites across Belgium, Germany, Ireland, the Netherlands, and Poland. The close monitoring of greenhouse gas emissions on the restoration sites will help to understand how peatland restoration can contribute to climate change mitigation. In addition, the project aims to test and disseminate alternative wet land use options, i.e. paludiculture, as a sustainable alternative to drainage-based agriculture on peatlands. Close networking and knowledge exchange with experts on peatland restoration and management will support the development of evidence-based peatland policy.

Project measures

- **Collection of comprehensive field data:** peat stratigraphy, peat depth, vegetation cover, and water level.
- **Restoration of degraded peatlands:** improving hydrological conditions by filling out drainage ditches, building dams, removing trees and shrubs.
- **Assessment of the climate impact of the restoration measures:** monitoring greenhouse gas emissions from the project sites and comparing them to sites without restoration measures.
- **Testing of paludiculture solutions in Belgium and Germany:** testing of alternative agricultural and forestry techniques on permanently wet peatlands.
- **Establishment of buffer zones:** to reduce nutrient leaching into the restored peatlands.
- **Development of the European-wide Peatland Policy Portal:** a digital interactive map where data on all facets of European peatlands, existing restoration projects as well as peatland relevant policies will be gathered in one central place. It will be accessible to anyone, from interested citizens, to policymakers, climate campaigners, and private companies.
- **Organisation of events and elaboration of reports and policy analyses:** to raise the public awareness, share and exchange insights gained on greenhouse gas monitoring instruments and standards, as well as to discuss, and disseminate recommendations on policy developments relevant to peatlands.

Expected results

- 689 ha of degraded peatlands restored
- Up to 50% reduction of Global Warming Potential on all sites (~3600 t CO₂-eq./year)
- Establishment of paludiculture solutions in Germany and Belgium and dissemination of the technique's feasibility to farmers and policymakers, as a sustainable alternative to drainage-based agriculture
- Improved communication and coordinated collaboration amongst EU peatland projects
- Improved conditions of the peatland habitats and key species
- Dissemination of recommendations for the upscaling of peatland restoration

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Location

Belgium, Germany, Ireland, the Netherlands, Poland

Budget info

Total amount: 7.763.615 €
EC Co-funding: 55%

Duration

1/10/2021 - 30/09/2026

Further Information

www.en.NABU.de/life-multi-peat



Installation of chambers for the measurement of greenhouse gases in the predecessor project LIFE Peat Restore.



Partner organisations:



Co-financing:

