

Restoration of peatland in Niremont



The raised bog in Niremont. Photo: Grégoire Schaub, Natura Consultus

Thanks to this project, the raised bog in Niremont in Freiburg can be restored to its natural state, resulting in the release of less greenhouse gas into the atmosphere. But climate protection is not the only advantage of rewetting this moorland; it also benefits biodiversity, the water balance, tourism and the local construction industry.

In their natural state, raised bogs have enormous carbon storage potential. Globally, peatlands store 30 per cent of soil carbon, despite the fact that they cover only three per cent of the world's surface. In the past, many of Switzerland's peatlands were dried out using drainage ditches in order to use the land for agriculture or to remove peat. Although they have been protected since the Rothenthurm Initiative in 1987, two thirds of Switzerland's over 500 raised bogs are still in their drained state due to a lack of money. Carbon dioxide is released into the atmosphere continuously. Rewetting is the only thing that guarantees that a drained peatland once again becomes a long-term carbon storage facility.

Parts of the peatland Les Mauvaises Places in Niremont in the Canton of Freiburg – a moor of national significance – have not yet been rewetted due to a lack of financial resources. The climate protection project fills this financing gap and is thus crucial for the implementation of the renaturation project. The project is co-financed by federal and cantonal contributions (Freiburg). The renaturation will take place in stages between 2020-2024.

Intact Moorland as Long-Term Carbon Storage

When a moor has been drained, oxygen penetrates into the soil and converts the carbon bound in the peat into carbon dioxide, which escapes into the atmosphere. To rewet a moor, the drainage ditches have to be blocked using construction measures. Once moorland has been returned to its natural, intact state, the high water level inhibits the decomposition of the organic material, in which large quantities of carbon are permanently stored. The climate protection project is possible thanks to a

Project type:

Land Use and Forestry

Project location:

Freiburg, Switzerland

Project status:

Planning, no credits available

Annual CO₂ reduction:

10,320 t CO₂e (total reduction)

Situation without project

Drained moorland releases CO₂ into the atmosphere

Project standard

VER

Partner



ETAT DE FRIBOURG
STAAT FREIBURG

Service des forêts et de la nature SFN
Amt für Wald und Natur WNA

Impressions



Garden tiger moth. Natural moors are both CO₂ sinks and hotspots of biodiversity. Photo: Swiss Federal Institute for Forest, Snow and Landscape Research

methodology developed by the Swiss Federal Institute for Forest, Snow and Landscape Research (WSL), which estimates the volume of CO₂ emissions that are avoided thanks to rewetting. According to this approach, the top 50 cm of the peat bind potential emissions of 925 tonnes of carbon dioxide per hectare for the next 50 to 100 years.

Multifaceted Benefit

Moors are not protected for nothing. They are hotspots of biodiversity. Intact moors offer habitats for rare or even endangered species of animals and plants. Renaturation also improves flood protection, water pollution control, the microclimate and the landscape. It offers the local population a place for recreation. The money for restoring the moor mostly flows into regional trade and industry.

This project contributes to 3 SDGs:



A renaturalised bog improves protection and water pollution control.



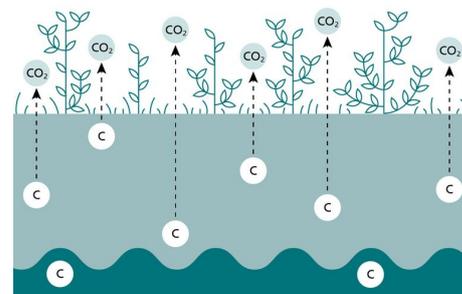
Renatured bogs are large carbon reservoirs.



15.6 hectares are going to be rewetted over the next 3-4 years and provide a valuable habitat for rare animal and plant species.



The investments in rewetting largely benefit regional trade and industry. Photo: Beck und Staubli



Drained moorland releases carbon dioxide. Info graphic: Lena Gubler, Swiss Federal Institute for Forest, Snow and Landscape