



# LIFE Peat Restore

## Reduction of CO<sub>2</sub> emissions by restoring degraded peatlands in Northern European Lowland

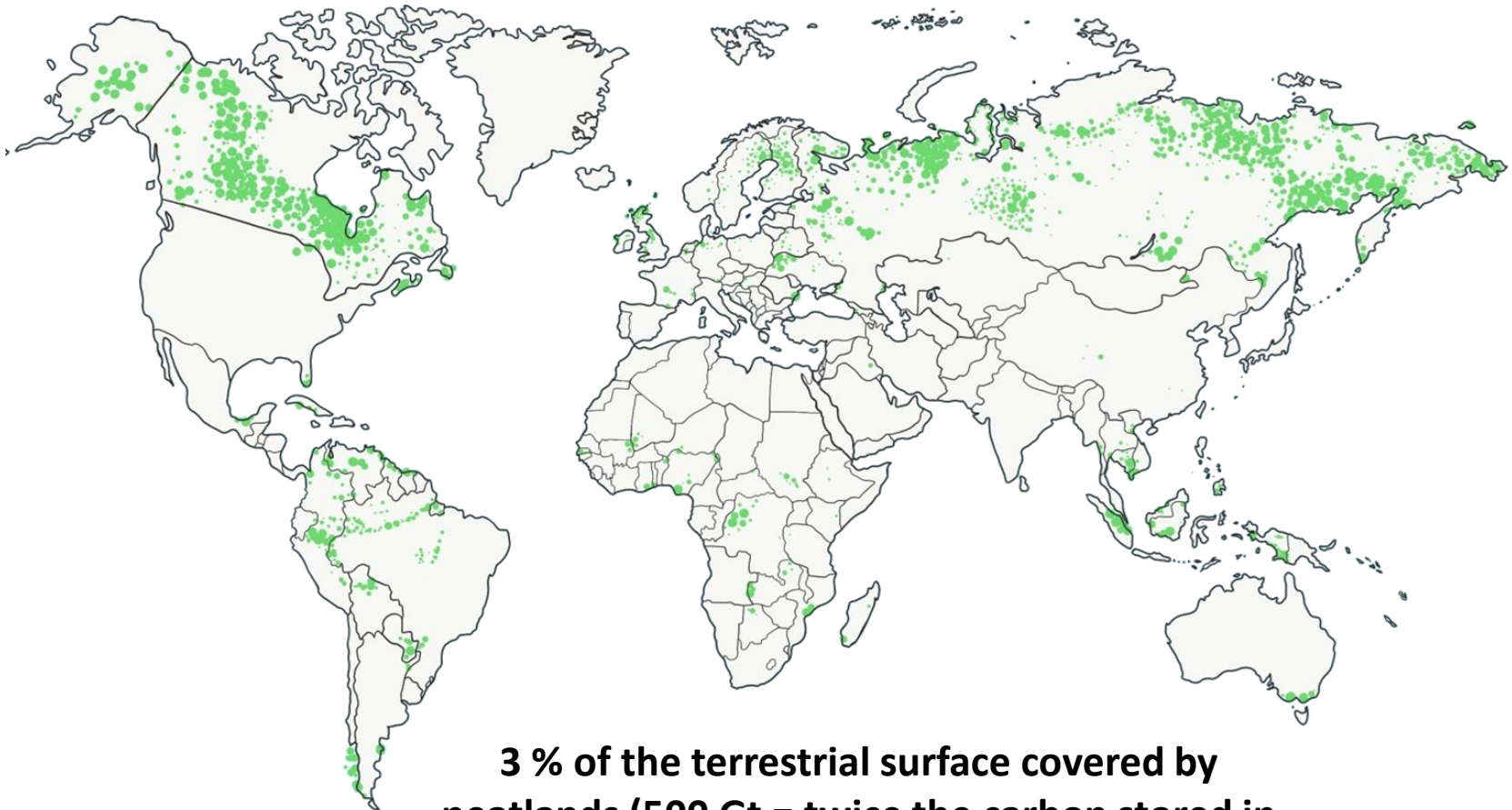
LIFE15 CCM/DE/000138  
Webinar Forestry Mitigation  
October 8, 2020

13.10.2020

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LIFE Climate Change Mitigation  
Programme  
LIFE 15 CCM/DE/000138



# Global peatland distribution



**3 % of the terrestrial surface covered by  
peatlands (500 Gt = twice the carbon stored in  
forests)**

# SOURCE OR SINK?

10 % of the drained/degraded peatland  
(0,3 % of the terrestrial surface)

=

5 (to 15) % of the global GHG emissions (IPCC August 2019)



How we treat our peatlands is  
of global importance!

## Partners from 5 Northern European countries

**Germany:** NABU

**Poland:** Klub Przyrodników

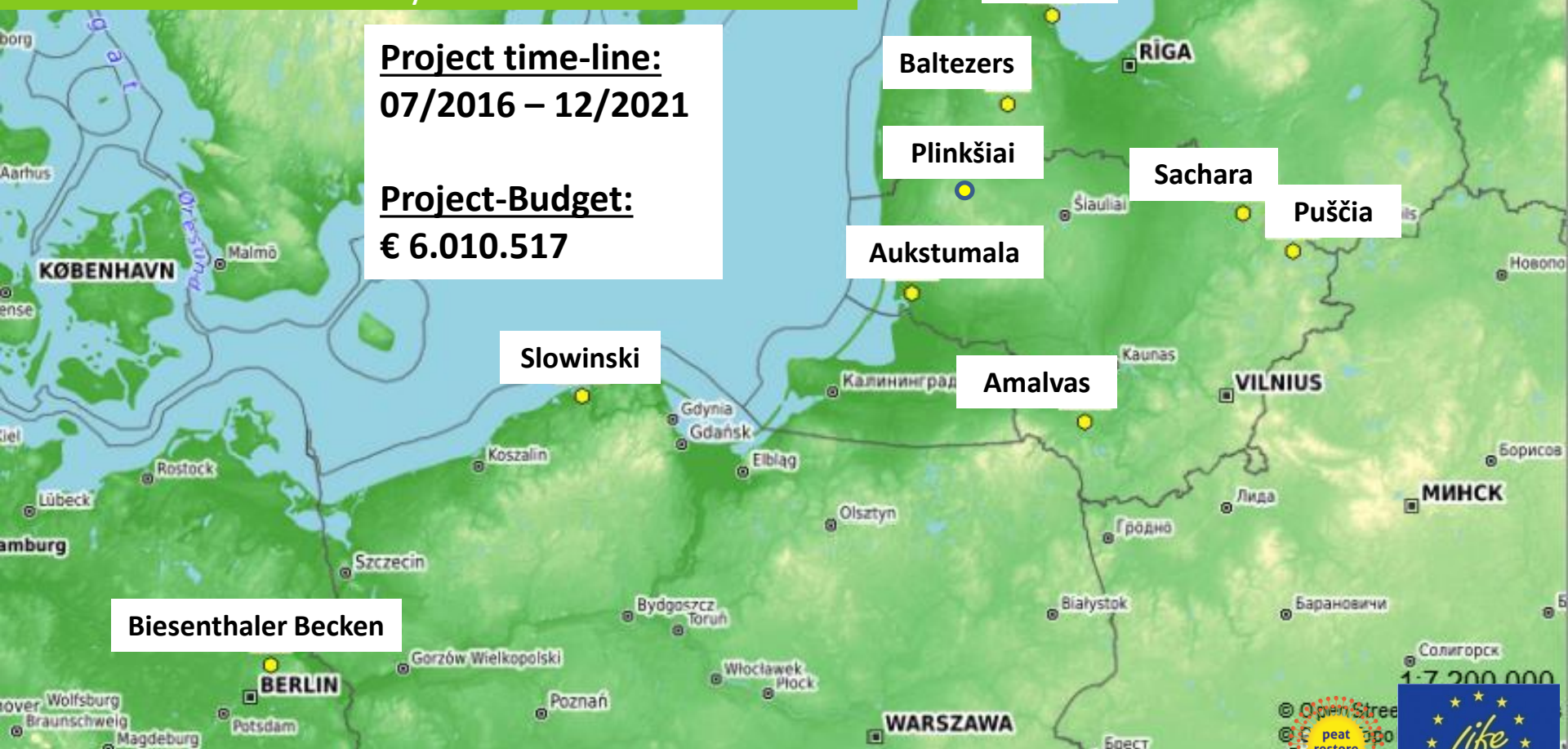
**Lithuania:** Lithuanian Fund for Nature and Peat Producers Association

**Latvia:** University of Latvia, E-Būvvaldība, Rūcka Art Foundation and Lake Engure Nature Park Fund

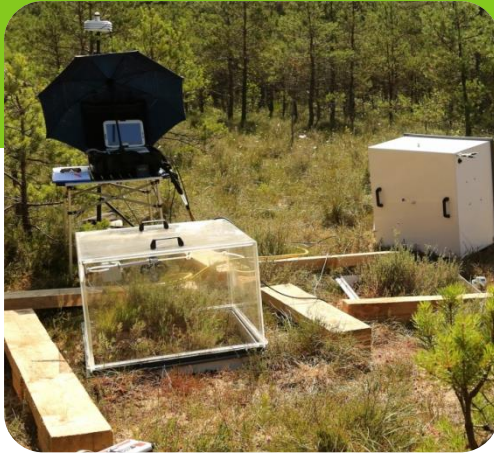
**Estonia:** Tallinn University

**Project time-line:**  
**07/2016 – 12/2021**

**Project-Budget:**  
**€ 6.010.517**



# Main project activities & aims



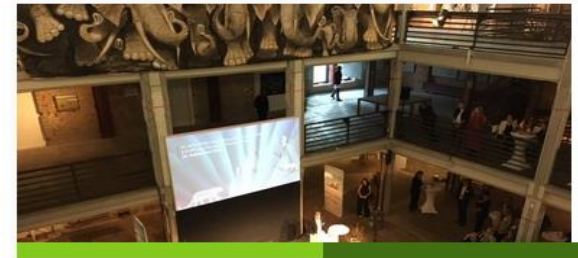
**Data collection and monitoring** – water, vegetation & GHG emissions



**Practical restoration** – 5,300 ha



**Communication** – dissemination & awareness raising



**LIFE PEAT RESTORE PROMOTES PEATLANDS DURING ART WEEK BERLIN**

■ Event, General

From September 11 to 21, during Art Week Berlin NABU organised PlanetArt – Festival of Nature – where more than 40 artists from all over the world found creative ways to portray the encounter between art and nature. For nearly two weeks, visitors of all ages and backgrounds came to appreciate the art work and ...

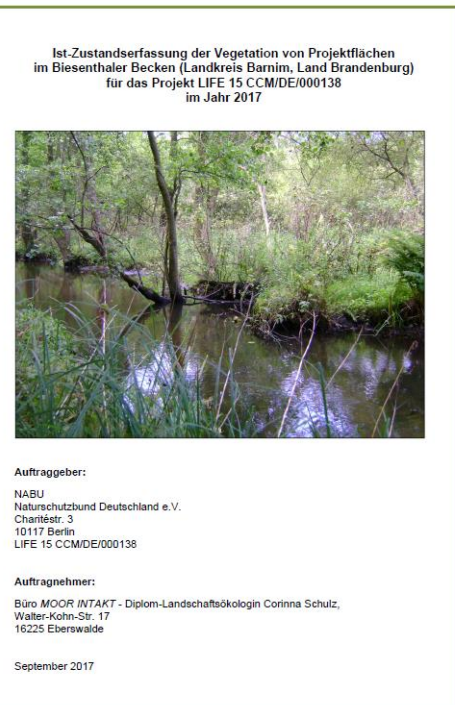
[read more](#)

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# Preparatory and monitoring measures

- Data collection to record the initial state, vegetation mapping (including Greenhouse gas Emission Site Types "GEST")
- Setting up fixed plots and measuring points for vegetation, water level and gas measurements



# GHG monitoring - 2018-2020 - and GEST projections



- Modelling the total annual values of the calculated gas flows to determine the annual balance and to assess
- What for? To illustrate scenarios of how much GHG is emitted less or bound more by measures.



# Restoration measures

- Removal of woody plants to improve the peatland water balance
- Rewetting: Trench backfilling and dam construction
- Innovative restoration methods:
  - Floating islands and dams as windbreakers and initial spark for the establishment of bog vegetation on peat-cut waters (Poland)
  - Spreading of peat mosses on peat extraction areas free of vegetation (Lithuania)



# Testing restoration techniques

## Large-scale Sphagnum farming on bare peat in Lithuania

<https://www.youtube.com/watch?v=2aWDjVNHWak>



## Reshaping open post-extraction water bodies in Słowiński National Park, Poland



<https://life-peat-restore.eu/en/publications/>

### Booklets for general public

The photograph shows an exhibition space with several tall, black display racks. Each rack holds multiple panels. The panels contain a mix of text, maps, and photographs. One panel on the left has a map of the UK and the title 'WETLANDS AND CLIMATE'. Another panel features a large photograph of a peatland landscape. The racks are arranged in a row, and the background shows a window with a view of the outdoors. The overall theme of the exhibition appears to be environmental conservation, specifically focusing on wetlands and peatlands.



- |   |                      |                   |
|---|----------------------|-------------------|
|  | 1 Druha<br>Strojnice | 2 Druhá<br>Sila   |
|   | 3 Druhá<br>Zastava   | 4 Četvrtá<br>Silu |
- 
- |   |  |
|---|--|
|  | 1-6 Fotografijské plakáty Mladějova<br>pauz, dáleho Segunep "Apostrofne"             |
|  | 1-6 Fotografijské výtiskové<br>Mladějova vane Apostrofne<br>hodnotětešed             |
|  | 1-6 Fotografijské plakáty<br>Mladějova pofije, Apostrofne<br>gromě dvaněti           |
|  | 1-6 Výtiskové fotografijské<br>Mladějova Mladějova, Apostrofne<br>přijímá Apostrofne |
|  | 1-6 Fotografijské plakáty<br>Mladějova, Apostrofne<br>Mladějova, Apostrofne          |
|  | 1-6 Fotografijské plakáty<br>Mladějova, Apostrofne<br>Mladějova, Apostrofne          |



**CONCLUSION FROM GERMANY'S FOOD AND AGRICULTURE MINISTRY CONFERENCE:  
ALTERNATIVES TO PEAT PERFORM JUST AS WELL AS PEAT!**

# Discussion topics I

## **End destination of restored areas?**

Carbon storage

Most project sites are publicly owned, within protected areas (National parks, Nature Reserves, etc.) and/or owned by environmental organisations

**But**, who maintains the restored areas afterwards? E.g. dams maintained, mowing or grazing.

## **Restoring natural sinks for carbon sequestration – synergies and collateral benefits?**

We know it improves Adaptation. E.g. flood and fire prevention, biodiversity enhancement

**But**, it is not being monitored!



# Discussion topics II

## **Main barriers to implementation? Project contribution to overcoming these barriers?**

Legal obstacles (e. g. Bureaucracy, lack of binding requirements)

Project contribution:

Lack of know-how to restore, lack of public and experts awareness on peatland's important role in CCM.

## **Potential to upscale project results at regional/national/EU level?**

Huge!

**But**, where highest impact (i.e. Private/agricultural lands vs Protect areas), stakeholder resistance and lack of incentives)

Also, lack of political will

## **How to identify areas for potential implementation? What kinds of indicators would be applicable?**

Areas of peatlands, water conditions (favourable – non favourable); GIS methods



# Thank you!

Questions?

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