Overview about LIFE OrgBalt project, progress and what`s next – overall view

First National workshops on climate change mitigation measures for nutrient rich organic soils – Estonia

29 June 2020, Microsoft Teams platform

Latvian State Forest Research Institute "Silava" (Ieva Līcīte)

LIFE OrgBalt, LIFE18 CCM/LV/001158

EU LIFE Programme project
"Demonstration of climate change mitigation potential of nutrients rich organic soils in Baltic States and Finland"

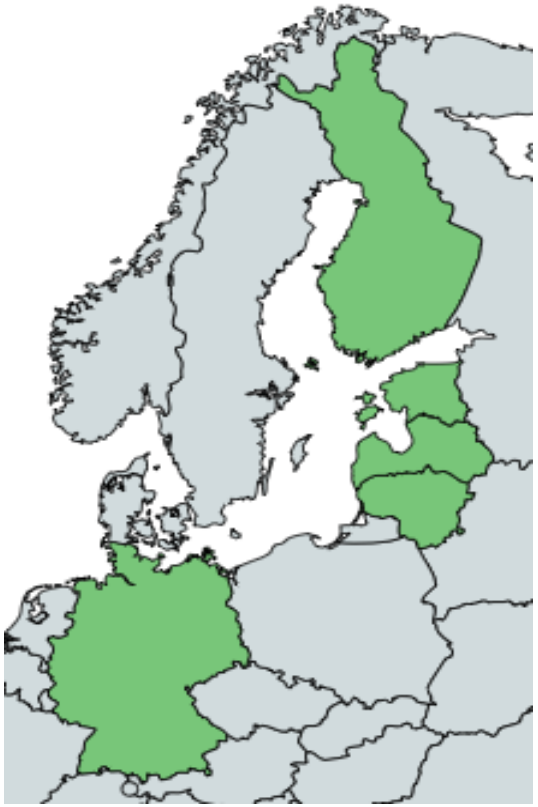
Project "roots"

LIFE REstore project results indicated importance and necessity to continue work on elaboration of GHG inventory data:

- *GHG emissions calculated by using nationally calculated emission factors from the most of the land use categories with nutrient-poor organic soils were about twice as less as the emission estimates using IPCC WS default emission factors*
- *Next step is elaboration of GHG emission factors for nutrient-rich organic soils (**LIFE OrgBalt project**)*

Without scientifically sound knowledge on the accurate emission amounts policy planners are not supported with the necessary information.

5 countries



8 partners

Latvia:	LSFRI Silava
	LLU
	MA
	BalticCoasts
Lithuania:	LAMMC
Estonia:	UT
Finland:	LUKE
Germany:	MSF

Start: 01/08/19 - End: 31/08/23

Budget info:

Total amount: 3 360 948 EUR, **EC Co-funding**: 54,87%

Main idea and objectives

Idea: improve GHG inventory and demonstrate climate change mitigation measures on nutrient-rich organic soils to reduce GHG emissions from cropland, grassland and forest land management.

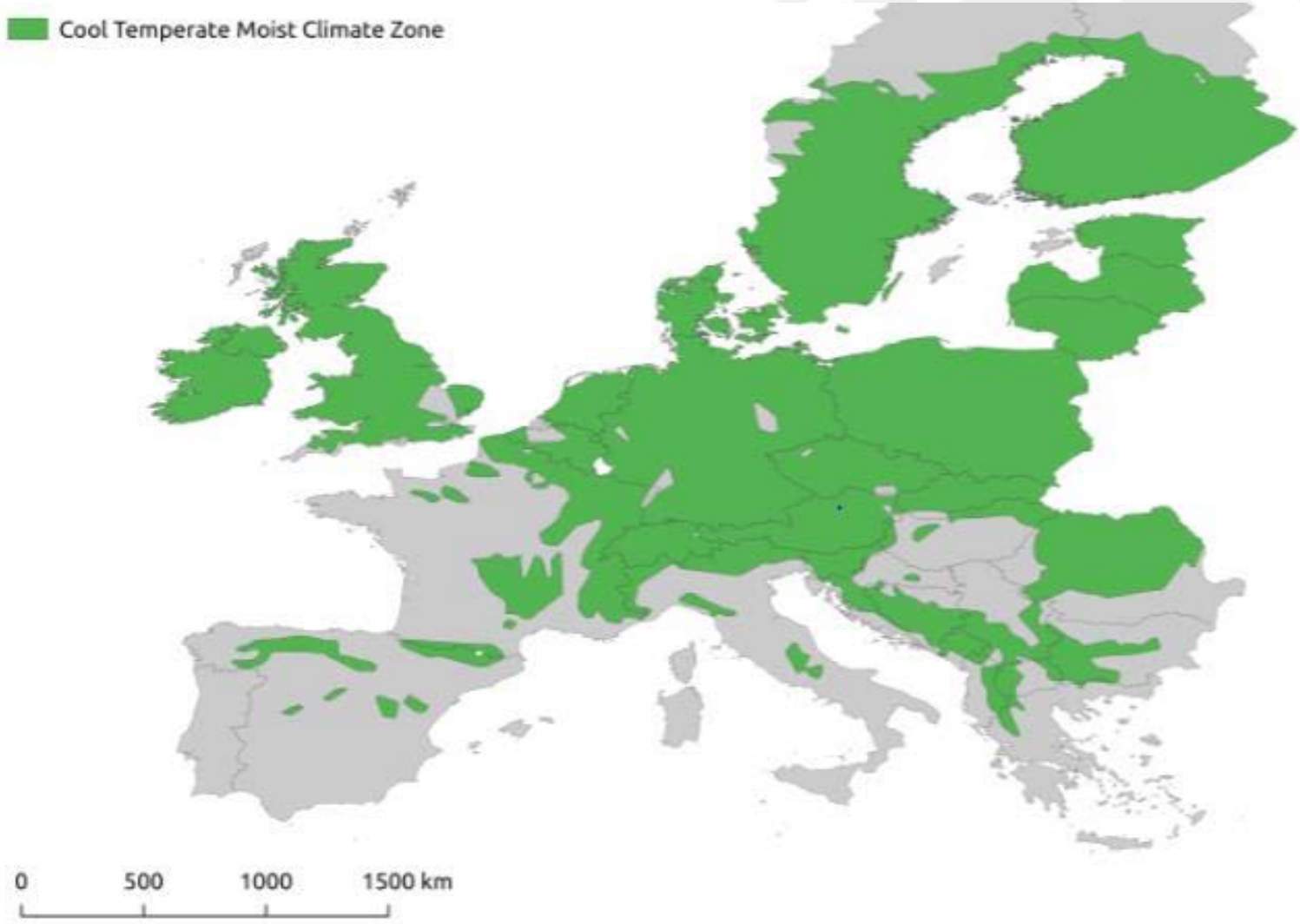
Objectives:

✓ Improve GHG inventory methods (emission factors) and activity data for nutrient-rich organic soils

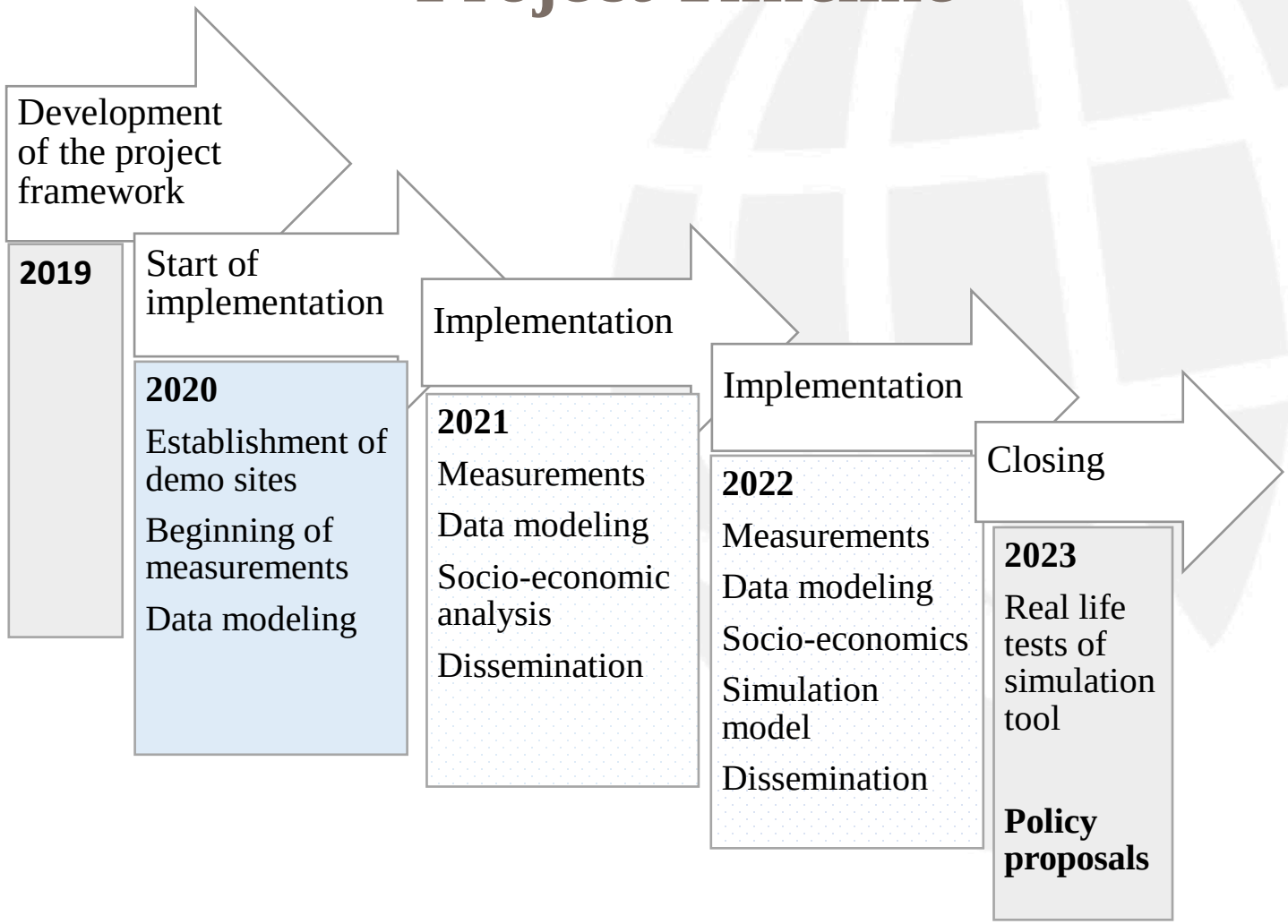
✓ Identify and demonstrate cost-effective climate change mitigation measures for management of nutrient-rich organic soils

✓ Elaboration of tools and guidance for implementation of climate change mitigation measures through national policies

Scope and target territory



Project Timeline



Implementation actions

C1 - Filling knowledge gaps on GHG emissions from organic soils

C2 – Tools for modelling of impact of climate change on GHG emissions

C3 – Implementation of climate change mitigation measures in selected demo sites

C4 – Strategies and action plans

C5 – Replicability tools

C1 - Filling knowledge gaps on GHG emissions from organic soils

Work done: 2 reports on status quo info 1) applied GHG emission factors; 2) applied climate change mitigation practices

Work in progress and foreseen outcomes:

- **elaboration of GHG EFs** based on in situ measurements of GHG gas fluxes and soil, litter, water sampling & analysis, plant biomass production, soil infrared spectroscopy tests, soil temperature and water level measurements, root ingrowth trials.

- **catalogue of climate change mitigation measures** including socio-economic analysis, mitigation potential, instructions for application in partner countries and guidelines for adjustment in temperate region.

C2 – Tools for modelling of impact of climate change on GHG emissions

Work in progress and foreseen outcomes:

- improved approach to **activity data for GHG emissions calculations** (inventory, GHG projections, tools for evaluating impact of CCM measures). Going spatial – data for GHG emission calculations for every single plot. Infrared screening for characterization of peat properties.

- **Susi peatland simulator** as tool for GHG emission calculations (to be verified with data from in situ measurements).

- Integration of **climate change scenarios** and organic soil **GHG emission projections**.

C3 – Implementation of climate change mitigation measures in selected demo sites

Work done: 15 demo sites identified in Latvia and Finland and 30+ reference sites in Baltic States.

Work in progress and foreseen outcomes:

- **establishment of demonstration sites** (procurement procedures, agreements with land owners and practical work to implement particular measures). 10 demonstrations in forest land and 5 in agricultural land. Measures include: paludicultures (Alnus sp.), agroforestry (fast growing trees and grass), afforestation (shorter rotation), continuous forest cover, wood ash application, conversion of cropland to grassland, legumes, controlled drainage and more.

- **GHG measurements** in demo and reference sites to monitor the impact of implemented measures

C4 – Strategies and action plans

Work in progress and foreseen outcomes:

One of the main aims of the Project: ***Impact national climate policy planning documents by implementing Project results..***

- CAP and CCM action plans (related to LULUCF sector) are selected as catalysts of the process of integration of the Project results in the policy planning.
- The Project will provide quantitative assessment of climate change mitigation effect and proposals about inclusion of the CCM measures (recommended by the Project) into policy planning documents.

C5 – Replicability tools

Work in progress and foreseen outcomes:

- web based **Simulation tool** for projections of GHG mitigation and socio-economic impact of CCM measures. Tool will work as spreadsheet interface for a single parcel based calculations thus giving advice on the sustainable management of organic soils on 'my farm'. It will be tested in real life conditions in all Project partner countries and hopefully also integrated into climate policy planning process.

- **Joint Baltic, German and Finnish CCM Action Programme** that foresees actions and procedures for collaborative implementation of the Project results within and outside the Project region.

Information, dissemination, training…

What is a point of good idea and practice if no one knows and implements it?

Main actions in progress and foreseen:

- National workshops/seminars on climate change mitigation in relation to organic soil management;
- Educational events in universities` (lectures)
- Training workshops for national stakeholders on how to apply the developed simulation tool
- Dissemination of information - website, social media accounts, scientific publications, press releases, policy briefs, articles, documentaries, booklet, newsletters and final conference...

Scientific publications – data needs!

Climate Change Mitigation – policy planning tools for nutrient rich organic soil management in agriculture

Aim of the research – analyze correlations between historically applied climate change mitigation policies and organic soil management practices used and to suggest legislative/policy planning changes that could improve organic soil management in future.

Data needs:

- organic soil data at plot level;

- Rural payments agencies` (Baltic states) data (2000 - to the most recent) about management practices (incl. cultures, yields, fertilizers) applied to organic soils and received support.

Thank you!

www.orgbalt.eu @orgbalt @orgbalt LIFE OrgBalt orgbalt orgbalt

The project "Demonstration of climate change mitigation potential of nutrients rich organic soils in Baltic States and Finland" (LIFE OrgBalt, LIFE18 CCM/LV/001158) has received funding from the LIFE Programme of the European Union and the State Regional Development Agency of Latvia. www.orgbalt.eu