

Project "Demonstration of climate change mitigation potential of nutrients rich organic soils in Baltic States and Finland"

LIFE OrgBalt, LIFE18 CCM/LV/001158



AFTER – LIFE PLAN

PLANNED CONTINUATION OF THE ACTIONS AFTER THE PROJECT END





An action plan after the project's completion (AFTER-LIFE Plan) has been prepared with financial support from the European Union LIFE Programme and the State Regional Development Agency of Latvia, within the framework of the project "Demonstration of climate change mitigation potential of nutrients-rich organic soils in Baltic States and Finland" (LIFE OrgBalt, LIFE18 CCM/LV/001158).

The information reflects only the LIFE OrgBalt project beneficiaries` view and the European Commission`s Executive Agency for Small and Medium-sized Enterprises is not responsible for any use that may be made of the information contained therein.

Disclaimer to avoid potential misinterpretation of the project results:

"LIFE OrgBalt compiled the first regional Baltic/ Finnish GHG emission factors for managed nutrient-rich organic soils (current and former peatlands), which have been made available for the customary scientific review and further verification for national GHG inventories in the hemiboreal region in Finland and the Baltic countries. While the project analysed selected CCM measures for drained organic soils in agriculture and forestry and developed spatial models and tools, it also identified remaining knowledge gaps. To bridge the remaining limitations and fill the gaps, it is essential to continue GHG measurements and model development, as well to broaden and complete the scope of the evaluated CCM measures in the after-LIFE-project period, notably by including rewetting and restoration of peatlands that are currently considered to be among the most recommended CCM measures on drained peatlands in the EU. In addition, the developed Simulation and PPC models still include limited macroeconomic considerations and lack assessment of all environmental impacts. For all these reasons, these models should be used carefully in CCM strategy development for identification of gaps in climate neutrality transition policy and funding frameworks and need further optimization for broader applicability as decision-making tools."

Abbreviations

BC	Baltic Coasts
CCM	Climate Change Mitigation
EU	European Union
GHG	Greenhous gas
LAMMC	Lithuanian Research Centre for Agriculture and Forestry
LBTU	Latvia University of Life Sciences and Technologies
Luke	Natural Resources Institute Finland
MA	Ministry of Agriculture of Latvia
PPC	Public-Private Cooperation
Silava	Latvian State Forest Research Institute "Silava"
TU	Tartu University



Main results of the Project and Aim of the AFTER-LIFE Plan

The LIFE OrgBalt project implemented several viable Climate Change Mitigation (CCM) measures in nutrient-rich organic soils in the Temperate Cool Moist climate region, thus contributing to the achievement of European Union (EU) and national climate policy targets by reducing greenhouse gas (GHG) emissions from cropland, grassland, and forest land on nutrient-rich organic soils.

The main Project results are:

- the first regional Baltic/ Finnish GHG emission factors for managed nutrient-rich organic soils are elaborated and made available for the customary scientific review;
- depth to water and wet area maps for the Baltic States elaborated and publicly available;
- the GHG emissions modelling tool (spreadsheet for calculation of carbon turnover and non-CO₂ emissions from soil) is created and applicable for the evaluation of the impact of different climate change scenarios on GHG emissions from nutrient-rich organic soils in forest and agricultural land;
- 17 climate change mitigation measures demonstrated in practice in Latvia and Finland with data on greenhouse gas emissions so that the efficiency of the methods can be assessed;
- functional land management model (Public-Private Cooperation (PPC) model) created as a tool for climate change mitigation and sustainable land use planning at the single parcel level;
- spatial planning and socioeconomic implications evaluation tool (Simulation tool) for decision support on implementation of CCM measures in nutrient-rich organic soils at country and regional levels developed;
- Joint Baltic and Finland Climate Change Mitigation Action Programme for science support related to nutrient-rich organic soil management elaborated and 28 + scientific publications published or in the publishing process produced from the Project data and results.

The AFTER-LIFE Plan aims to continue disseminating and communicating the project results after its end and continue activities embedded during the project lifetime but limited in their implementation given the project's time or knowledge constraints – such as monitoring activities at the project's demonstration sites, supplementing of the PPC model and Simulation tool with additional data becoming available during the after-LIFE period, continuous update of the relevant policy instruments and implementation of the Joint Baltic and Finland Climate Change Mitigation Action Programme for science support initiatives.

AFTER-LIFE actions (2025 – 2029)

	Action	Responsible beneficiary	Timing	Funding needs	Possible source of funding	Performance indicators		
	I Monitoring, maintenance and continuous updating actions							
1.	Applying for the funding to cover new intensive measurement campaigns in the demo sites – continuation of the GHG monitoring in the project demo sites	Silava	Immediately after the Project end	600000 EUR/3 years	Silava (research projects funding)	GHG emissions measurements, periodic water table measurements, analysis of GHG samples, etc., by following LIFE OrgBalt methodology		
2.	Maintenance and management of the project demo sites in Latvia	Silava	Continuous (2025 – 2029)	5000 EUR/year	Silava (research projects funding)	 Quarterly inspections of the sites and maintenance of basic data collection infrastructure Agrotechnical tending of afforested sites once a year during 5-7 years period after planting depending on the necessity Maintenance of drainage systems where necessary Plant protection activities if needed 		
3.	Maintenance and management of the project demo sites in Finland	Luke	Continuous (2025 – 2029)	5000 EUR/year	Luke (research projects funding)	 Quarterly inspections of the sites and maintenance of basic data collection infrastructure Continued of central environment data collection by water table level loggers and soil temperature loggers (at least till end of 2025). 		



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						 Monitoring of tree stand and ground vegetation characteristics on 4-5 year intervals (2024, 2028, 2029) Maintenance of drainage systems where necessary
4.	Replacement/repairing of noticeboards (in demo sites) in Latvia	Silava	Upon necessity (2025 – 2029)	4000 EUR	Silava	Information on the project and its actions in demo sites is available for the general public in Latvia
5.	Replacement/repairing of noticeboards (in demo sites) in Finland	Luke	Upon necessity (2025 – 2029)	2000 EUR	Luke	Information on the project and its actions in demo sites is available for the general public in Finland
6.	Implementation of climate change mitigation measures in additional territories in Latvia (in total 73 ha - 56 ha forest land related measures, 17 ha agriculture related measures)	Silava	3 years after the project end (2025 – 2027)	365 000	Silava (in cooperation with land managers)	CCM measures implemented in 73 ha (~5000 EUR/ha) of forest and agriculture land in Latvia (complementary to demo sites) 3 years beyond the end of the project
7.	Maintenance and updates (upon availability of new information from other projects about management scenarios not included in LIFE OrgBalt – especially rewetting and water retention and fire risk reduction aspects) of Simulation tool	LBTU	Continuous (2025 – 2029)	Up to 20 000	LBTU (research projects funding)	 Simulation tool accessible on the LBTU website (https://bioekonomika.lbtu.lv/orgbalt/) The simulation tool is updated with information on other scenarios (especially- rewetting) when data is available from other projects like LIFE PeatCarbon and LIFE PeatRestore.
8.	Maintenance and updates (upon the availability of new information from other projects about the valuation of	BC	Continuous (2025 – 2029)	7500	BC (projects funding)	• PPC model accessible from the project webpage (https://www.orgbalt.eu/?page_id=2761)



	biodiversity aspects, water retention and fire risk reduction and management scenarios not included in LIFE OrgBalt – especially rewetting) of the PPC model.					 and consultations on its use available upon the request PPC model updated with aspects of biodiversity valuation (when/if more detailed information is available) The PPC model is updated with information on other scenarios (especially rewetting) when data is available from other projects like LIFE PeatCarbon and LIFE PeatRestore.
9.	Updating of the relevant policy documents by mirroring the continuous project updating during its AFTER-LIFE period.	МА	Continuous (2025 – 2029)	n/a	MA	The relevant policy documents (e.g. National Energy and Climate Plan) are updated.
10.	Wrap-up of LIFE OrgBalt initiated experiment on vegetation above- and belowground litter decomposition in hemiboreal and boreal forests	Luke, TU, Silava, LAMMC	2024 - 2027	20000	Luke, TU, Silava, LAMMC (research projects funding)	 Annual re-harvesting of vegetation litter decomposition samples (2024, 2025, 2026) Laboratory analyses on mass loss and sample chemistry (2027)
	Monitoring, maintenance and continue		ating actions – total funding:	1 028 500 EUR		
II R	II Research publishing continuity actions					
1.	Scientific publications of the first regional Baltic/ Finnish GHG emission factors for managed nutrient-rich organic soils	TU, Silava, Luke	2025	12 000 – 24 000 EUR	TU, Silava, Luke	Scientific articles published



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2. 3.	Mini review paper on research gaps identified based on Joint Baltic and Finnish Climate Change Mitigation Action Program The refinement of the LIFE OrgBalt data collection	Luke, TU, Silava, LAMMC Luke, TU, Silava,	2026	4000 4000	Luke, TU, Silava, LAMMC (research projects funding) Luke, TU, Silava, LAMMC	Scientific article published Scientific article published
	protocols into a scientific publication	LAMMC			(research projects funding)	
4.	Scientific publication on forest vegetation litter decomposition on soil surface in hemiboreal and boreal forests	Luke, TU, Silava, LAMMC	2028	8000	Luke, TU, Silava, LAMMC (research projects funding)	Scientific article published
5.	Scientific publication on tree fine root decomposition rates in hemiboreal- and boreal forests	Luke, TU, Silava, LAMMC	2029	10000	Luke, TU, Silava, LAMMC (research projects funding)	Scientific article published
	Research publishing contin	uity actions –	total funding:	50 000 EUR		
III I	III Dissemination and communication actions					
1.	Project website management/updates <u>https://www.orgbalt.eu</u>	Silava	Continuous (2025 – 2029)	Up to 50 EUR/year (domain maintenance costs after	Silava	 The project website is accessible five years after the project end Website contains full project information and is updated when updates are done according to the
				expiration of		AFTER-LIFE plan actions



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				the existing contract)		
2.	Participation in international events/initiatives to share the project results and experience	Silava, Luke, TU, LAMMC, BC, LBTU	at least 3 events	4500 EUR	Silava, Luke, TU, LAMMC, BC, LBTU	Project information shared with international auditory through scientific or professional conferences/events
3.	Educational events (lectures) to share project knowledge with university students	TU, LBTU	at least 4 events	n/a	TU, LBTU	Project information disseminated among university students/young specialists
4.	Dissemination of informative materials (leaflets, Laymans` report)	All partners	Continuous (2025 – 2029)	n/a	All partners	Materials disseminated in various thematically relevant national and international events
	Dissemination and communication actions – total funding: Total funding needed:					