

**Call:** STHB.02.03-IP.01-001/22

**Author:** [REDACTED]

**Checksum:**

## C2 Result indicators

No.	Project indicator	Unit of measurement	Breakdown by sex
1	Solutions taken up or up-scaled by organisations	number	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Indicator baseline value			Indicator type	
Total	Women	Men		
0,0000				Additional
Indicator target value				
Total	Women	Men		
2,0000				

**Indicator measuring method**  
A comprehensive soil improvement and dune stabilizer as value-added products and their technologies application designed for effective nutrient's accumulation in a soil and dune's vegetation



**Call:** STHB.02.03-IP.01-001/22

**Author:** [REDACTED]

**Checksum:**

## D Work package

### D1 Work package

No.	Planned start date	Planned end date
1	2023-09-01	2026-08-31

#### Work package name

Management and coordination

#### Work package description

Klaipeda University (LP) will be responsible for the overall project management for the achievement of the the expected results. The LP will coordinate the activities in the work packages, disseminate relevant information and report to the PPs about relevant information, the status of activities and results. LP will contribute to the development of scientific background and the project methodology. As the leading partner, Klaipeda University will focus on cross-border cooperation within PPs, project stakeholders and interested parties, that will give possibilities for innovative solutions for the nutrients management cycle application. All project activities will depend on the WP1 management strategy. In order to guarantee a successful implementation of the project, and to provide the quality of obtained results, ECONUT managerial system will be based on coordination, management, decision making and monitoring levels. LP, Klaipeda University (KU) as the project's consortium leader with the support of PPs will be responsible for WP1. LP will organize the kick-off meeting, and coordinate all projects activities in accordance with the jointly discussed work plan. LP will be responsible for six project meetings and 6 reports during the project period and together with WPLs set deadlines for the reports and plan ahead to avoid delays. The main project body will be the Steering Committee (SC). SC will consist of each PPs representative. SC members will vote for the SC's chairperson. SC will serve the project consortium with a broader view of the overall status of the project, on urgent questions and issues and monitor the overall financial status of the project, such as the budget and investment (via virtual and physical meetings). The next in the leadership hierarchy will be Project Coordinator (PC). PC will be in charge of activities coordination between partners, daily project's operation, reporting, monitoring of the project execution, and reaching the project's objectives. PC will be in contact point to the JS and the EU South Baltic Program Managing Authority. Financial Manager (FM) will be responsible for the financial project management, funds transferring to the PPs and finances' reporting into the SB program's system. The Project Manager (PM) will be in charge of project promotion and external communication actions and will assist PC on the project's network development issue. PP4 with the support of all PPs will be responsible for the project's dissemination and communication activities, project network development and enlargement, strengthening the awareness of nature-based solutions, and the creation of the project logo and website. The SC together with the PC, PM and FM, will develop internal procedures that will need to be followed in order to accurately fulfill the tasks set in the project. Work package leaders (WPLs) will be responsible for the coordination of the activities in the WPs: working group meetings, timely tasks, data, and reports deliverables in order to keep the quality of their outputs. WPLs will disseminate relevant information and reports to the PM. Completed tasks or essential issues should be reported by WPLs to PM and PC. In the monitoring of the project progress will be included questionnaires and feedback from APs and external stakeholders. A detailed risk and quality management plan will be developed at the start of the project. Target groups involvement will create interest in project activities amongst stakeholders. The development of the website with logotype as well as the use of social media will ensure the efficient promotion of the project's information for all interested parties and documents for PPs. The associated partners (APs) will take part in WP1 to promote the project results, add expertise within their field of competence, and broaden the project's network with additional partners in the SB Program area.



**Call:** STHB.02.03-IP.01-001/22

**Author:** [REDACTED]

**Checksum:**

No.	Planned start date	Planned end date
2	2023-09-01	2026-08-31

**Work package name**

Collection and processing of bio-substrate

**Work package description**

The main objective of the WP is to analyze the current situation in all partners' countries, highlighting the main areas characterized by the largest amount of nutrients (hotspots) and define best practices related to nutrient recycling from waste streams and nutrients stabilizers as a water protection and soil conditioner's measures. All this information will be summarized in one methodology that will be crucial for the pilot cases evaluation. All partners will work on the development of nutrient cycling approach, structure and methodology, e.g., for anticipation of the existing nutrients' trends and selection of management's scenarios of the potential usage of the marine biomass for cleaner agricultural production and sustainable management of soil, dunes and aquatic ecosystems.

We will start by working with the technical and the economic/social feasibility studies for ECONUT project. The responsible partners for these will be LP, PP2, PP3 and PP5. They will also be supported by the other partners at different stages of this process.

The development of the methodology will be a joint activity with the LP as coordinating partner. The same division of responsibilities will be applied on the input for the tool as during the evaluation and feasibility studies.

The mapping of coastal zone areas of nutrient concentration and biomass sampling for potential new pilot cases will be led by PP2, PP3 and PP5 during the project. Their role is to gather all experiences from the project partners networks as well as from the associated organizations. Based on this input, it will be up to them to purpose an approach for choosing new potential cases and give concrete examples to that have been initiated during the project. PP2 and PP3 will focus mostly on development the processing and use of beach-wrack as a bio-substrate for soil modification for food production and its technical implementation. PP5 will be responsible for the approach/methodology development and testing use of beach wrack for dune stabilization and the creation of biodiversity hotspots at beaches. Beach-wrack as a bio-substrate will be used for the installation of late successional stages of dune succession and creation of beach vegetation biodiversity-hotspots. This can strengthen the resistance of dune to aeolian erosion and during storm floods as well as increase the biodiversity of the beaches that has been lost due to touristic pressure. The effectiveness of the methods will be tested and applicable protocols for the installation will be developed. Monitoring of nutrient's and pollutants distribution in soil, plant, and water bodies will be assessed during the project.

The network creation and development to improve marine biomass management solutions in coastal zone for the stabilization of nutrient flows in the soil by techniques that not only create a favorable nutritious plant's environment but also contribute to valorization will be one of the main task in this WP. This activity will structure and revise all previous activities in the WP and used as the basis for this main output.

All partners will participate in the study tours/cross-border workshops, but these may differ in their structure depending on the aim of the study tour. The main focus of study tours and workshops will be to highlight and focus on the strategy and actions regarding nutrients circularity system and its direct and indirect results to agricultural products quality, surface water state, soil fertility and climate change mitigation. Communication with public, business and local authorities will be involved in planned activities seeking to raise awareness and receive sufficient attention about the coastal zone biomass, its role and metabolism, as well as to create high interest to the add-value product such as complex soil amendment and its preparation technology.



**Call:** STHB.02.03-IP.01-001/22

**Author:** [REDACTED]

**Checksum:**

No.	Planned start date	Planned end date
3	2024-01-01	2026-08-31

**Work package name**  
Added-value products and nutrient cycling technologies' development

**Work package description**

The main objective of the WP is to install three different pilot cases that will test the "nutrients cycling" methodology in Klaipeda, Gdansk and Rostock. This objective is clearly connected to the projects first main outputs which is WP3's main purpose to create Pilot cases for innovative nutrient recycling through nature based solutions. The WP also includes creation of added value products and regional networks for joint cooperation solutions.

The WP will be started by the planning of the pilot cases. This will be coordinated by the PP2, PP3 and PP5. They will use the knowledge and the input from all partners in this process to optimize the plan and cover all aspects for the pilot cases. The plan will include technical, economic and social factors taken into consideration. We will also invite outside stakeholders for this activity with prior experiences of the specific solutions being installed in pilot cases.

The installation of pilot cases will be the responsibility of PP2, PP3 and PP5. The running and maintenance of the installations will be the sole responsibility of PP2 and PP3 and PP5. All pilot cases will focus on sustainable marine-based nutrients circularity in the ecosystem, implementing joint approach of the ECONUT project partners, applied in the Baltic sea-coast areas with the support of local authorities and NGOs. Associated partner SYKE will be responsible for introducing the project partners to the gypsum amendment method and how to monitor its impact on soil, vegetation and nutrient losses and to evaluate the agronomic and environmental effects. The main results of installed pilot cases is to create technology for the nutrients' flow's circularity and sustainable usage of soil and water ecosystems as well as to create an added-value products (organic fertilizers and dune sediment stabilizers) for agriculture and dune protection from wind erosion and storm floods. Reliable efficiency increase of crops using added value products as well as food safety and quality assessments will be tested, in co-operation with all PPs, supported by National Food Agencies, especially in Poland and Lithuania. Botanical mappings of community composition and vegetation coverage as well as sand retainment capacity on beach and dune will quantify the effectiveness of the technology at the pilot case.

The experiences and accumulated knowledge from these activities will be disseminated through all partners as well as the project's communication channels, such as the website, newsletters, visual materials and short films sent through own communication channels of partners. It is important for the project that the cases have a cross-border approach, which is aligned with our project approach and will be included in the strategic communication plan. Cross-border cooperation will open the perspectives to project consortium from different regions to find new technical and sustainable solutions for rational use of resources, biomass utilization and water quality protection. Partners from different institutions will have the opportunity to learn from each other that will strengthen the SB region's approach in nutrients' circularity. During the project's activities, the cross-border approach based on knowledge and exchange of best practices will be developed and applied for sustainable nutrients' circulation. To ensure the delivery of the results of the project the politicians, authorities, NGOs, scientists and public will be involved in the project's actions.



<b>Call:</b>	STHB.02.03-IP.01-001/22
<b>Author:</b>	██████████
<b>Checksum:</b>	

No.	Planned start date	Planned end date
4	2024-01-01	2026-08-31

**Work package name**  
 Evaluation of nutrients recycling technology's impact to the climate change

**Work package description**  
 The aim of this WP is the evaluation of the climate benefits of beach wrack removal from the coast and its application for soil fertility, slope stability and biodiversity reviving, which will be led by the University of Southern Denmark (PP6).  
 The main output of this WP is to investigate the climate benefits of recycling nutrients by the harvest of marine resources and use as fertilizer in soils in project partners and other countries from the Baltic coastal zone. Traditional and innovative nutrient circularity footprint calculations and their comparison will be defined during the project. We will incubate beach wrack in the laboratory at changing temperatures for evaluation of greenhouse gas production (CO2, CH4, and N2O) through time. Determination of macroalgae/macrophyte composition will be done before incubations and calculation of biomass based on coverage observed by partners. The results will be later evaluated in relation to natural beach wrack coverage in beaches to evaluate the associated climate impacts. The climate benefit will be estimated by how much beach wrack biomass is removed from the system and used in various amendment treatments in the soil in terms of CO2 equivalents and avoided emissions.  
 End-of-life assessment of developed added-value products and nutrient cycling technologies' will be carried out. PP6 together with all PPs will manage the creation of a risk analysis tool to evaluate what potential current risks as well as future cases could be faced. A risk analysis tool that takes into consideration organizational, technical, economic and social factors when processing added-value products and implementing nutrient cycling technologies. The purpose of the tool is to assess current pilot case risks in the project, as well as to evaluate future investments in other regions and cases in light of nutrient mitigation discharge into the Baltic Sea for climate benefits.

<b>Call:</b>	STHB.02.03-IP.01-001/22
<b>Author:</b>	[REDACTED]
<b>Checksum:</b>	

No.	Planned start date	Planned end date
5	2024-01-01	2026-08-31

**Work package name**  
Market analysis and development of business models

**Work package description**  
The main objective of this WP is to carry out market analyses for each of the technologies and value-added products developed in the project and to choose the most appropriate business models for the business adoption of each of the technologies and the value-added products. First of all, a collection of the necessary information about nutrient markets through reports and interviews as well as information about each of the technologies in the development stage will be done. Interviews will be made with representatives of companies, industry experts, farmers and researchers. Based on the collection of background information the result of the interviews the supply chains of each type of product will be mapped and the position of each technology and the value-added product developed in the project will be identified and described. Strategies for the launch of the technologies and products in the market will be developed in collaboration with partners. Development of market analyses and strategies and consultation with each partner around market and business opportunities for their developments will be performed. All necessary information about the possible customers and users of the nutrients developed on the products will be defined. In the context of the market analysis and the development of the business models for the market launch of the products, the project manager from PP4 together with the external expert will interview potential customers and business partners of the PPs. The expert will then analyze market data, and develop strategies to get the technologies used in relevant user markets. They will also advise the partners on the different steps in the development of partnerships and launch strategies. With their extensive experience from a large number of industries, farmers and business situations, the expert will contribute significantly to the success of the development efforts in markets during and after the project. The main result of this WP will be the development of business models and plans for the market launch in cooperation with each of the partners. Sustainable Development Skåne (PP4) will lead and coordinate the dissemination and communication actions in the project. With PP4 extensive network of contacts in Swedish municipalities, the organization will disseminate information from all WPs to Swedish municipalities. All partners jointly create awareness and high interest in nutrient cycling technologies, based on cross-border cooperation with the public, businesses, farmers and local authorities. Social media tools and live discussions will help to implement the dynamic exchange of ideas and knowledge between project partners and stakeholders for project network development.

**D2 Work package - indirect costs**

No.	Planned start date	Planned end date
6	2023-09-01	2026-08-31

**Work package name**  
Indirect costs

**Work package description**  
technical work package