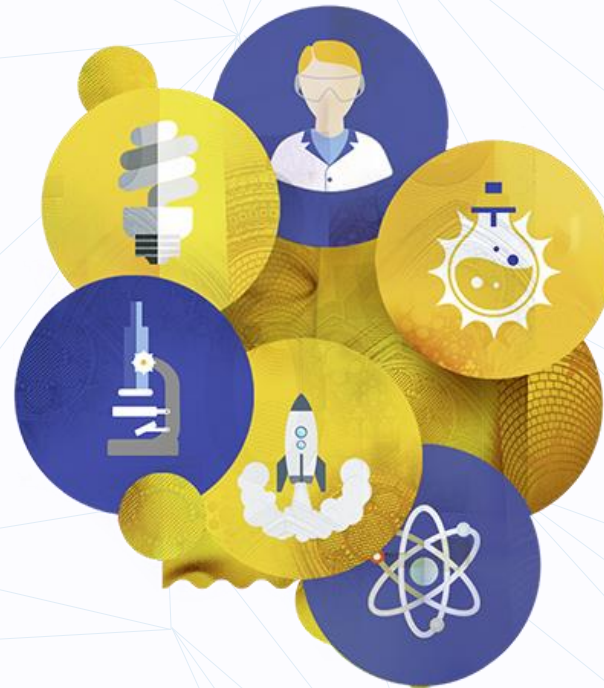


Horizon Europe Cluster 6

Destination 5



Policy Context

- **The WP will support key R&I activities to deliver the objectives of the European Green Deal:**

- Farm to Fork and the CAP objectives
- Fit for 55 package including restoring sustainable carbon cycles (EU climate law targeting climate-neutrality by 2050 and AFOLU climate-neutrality by 2035 support enhanced focus on bio-based circular consumption; AFOLU: “Agriculture, Forestry and Other Land Use”.)
- **The EU Climate Adaptation Strategy**
- **The EU Biodiversity strategy 2030 including recent related initiatives: the EU Forest Strategy and the EU Soil Strategy for 2030 and the planned Nature restoration law (2022)**
- **The EU New Circular Economy Action Plan**
- **The EU Zero Pollution Action Plan “towards zero pollution for air, water and soil”**
- **Contingency plan for food supply and food security in times of crisis**
- **New Approach for a Sustainable Blue Economy in the EU**
- **Proposal for sustainable food systems framework law (planned in 2023)**



Destination 5: Land, ocean and water for climate action

- Expected impact
- Credible pathways contributing to climate action on land, including forestland, grassland, cropland and wetland, ocean and water
- Better understand and enhance the mitigation potential of ecosystems and sectors based on the sustainable management of natural resources
- support adaptation and resilience of natural and managed ecosystems
- Efficient monitoring, assessment, modelling, data-driven decision-making support systems and projections related to climate change impacts, mitigation and adaptation potential
- Foster climate change mitigation in the primary sectors
- Improve the adaptive capacity to climate change of the ocean, sea, water and soil systems and sectors
- Sustainably manage scarce resources



Destination 5: Land, ocean and water for climate action

- 2024 calls:
- Opening: 17 October 2023
- Deadline: 22 February 2024
- Overall indicative budget: 75 million EUR



Destination 5: Land, ocean and water for climate action

- 2024 calls:
- Improving irrigation practices and technologies in agriculture
- Socio-economic, climate and environmental aspects of paludiculture
- Paludiculture: large-scale demonstrations
- Land use change and local / regional climate
- Climate-smart use of wood in the construction sector to support the New European Bauhaus
- Ocean models for seasonal to decadal regional climate impacts and feedbacks
- EU-China international cooperation on improving monitoring for better integrated climate and biodiversity approaches, using environmental and Earth observation



Destination 5: Land, ocean and water for climate action



- Improving irrigation practices and technologies in agriculture
- Project budget: 5 million EUR
- Funded projects: 2
- Type of action: IA
- Expected TRL: 6-7
- Solutions and prevention tools for improving water management in particular in areas experiencing recurrent or permanent water scarcity to anticipate solutions for current and future challenges in water management
- Support available for end-users seeking to take up innovative solutions in irrigation technologies
- Unlocking the potential of recycled sewage sludge and other biowaste streams as alternative, safe water and nutrient supply resources for agriculture
- Increased socio-economic and environmental potential of alternative irrigation practices such as fog harvesting
- Reduced agricultural water demand, as a result of optimized irrigation systems, including new opportunities for alternative water supplies, and expected innovations from the transition towards more sustainable farming systems, including agroecology

Destination 5: Land, ocean and water for climate action

- Socio-economic, climate and environmental aspects of paludiculture
- Project budget: 5 million EUR
- Funded projects: 1
- Type of action: RIA
- Paludiculture systems and their potential to provide jobs and income, while addressing climate mitigation, environmental objectives (notably water quality) and nature conservation, are better understood
- The EU approach to carbon farming regarding wetlands and peatlands and their restoration, with the aim of reducing oxidation of the existing carbon stock and increasing the potential for carbon sequestration, is supported
- Innovative solutions to facilitate the development of paludiculture are explored



Destination 5: Land, ocean and water for climate action

- Paludiculture: large-scale demonstrations
- Project budget: 10 million EUR
- Funded projects: 2
- Type of action: IA
- Practical options for the development of paludiculture and pathways for the conversion of degraded organic agricultural and forest soils to paludiculture are demonstrate
- Recommendations for the approach to be taken towards large-scale deployment of paludiculture are developed
- The carbon sequestration potential of paludiculture is quantified, including an assessment of its potential contribution to the achievement of EU targets



Destination 5: Land, ocean and water for climate action



- Land use change and local / regional climate
- Project budget: 6 million EUR
- Funded projects: 2
- Type of action: RIA
- Solutions are made available for understanding, modelling and optimising the relationships between net removals from Land Use, Land Use Change and Forestry (LULUCF) and biogenic emissions from the agriculture sector at local / regional level
- Strategies are developed at local and regional level to deal with impacts of climate change and to maximise co-benefits for other objectives, including biodiversity protection

Destination 5: Land, ocean and water for climate action



- **Climate-smart use of wood in the construction sector to support the New European Bauhaus**
- Project budget: 7 million EUR
- Funded projects: 2
- Type of action: RIA
- Enhanced contribution of the forest-based sector with respect to climate change mitigation and adaptation, a toxic-free environment and rural development objectives
- Pathways for an efficient conversion of solid biomass into forms of long-term carbon storage
- Enhanced contribution of the forest-based sector to decarbonisation strategies for buildings, both in terms of operational emissions, embodied emissions, and carbon removals, in relation to the Energy Performance of Buildings Directive, the renovation wave strategy, the Construction Products Regulation and other EU policies on buildings
- Contribute to a robust and transparent methodology to quantify the climate benefits of wood construction products and other building materials, reflecting the most advanced dynamic life-cycle analyses and in view of contributing to the carbon farming initiative and carbon removal certification
- Increased resource efficiency and minimisation of environmental footprint of wood products used in construction works
- Better knowledge about the quantitative limits of global wood supply and the limits of wood as a resource

Destination 5: Land, ocean and water for climate action



- Ocean models for seasonal to decadal regional climate impacts and feedbacks
- Project budget: 4.5 million EUR
- Funded projects: 2
- Type of action: RIA
- Expected TRL: 3-5
- Demonstration of the fit for purpose and configuration of ocean models, for climate change impact assessment in European sea basins and coastal areas, in particular on marine ecosystems
- Demonstration of EU basin scale to coastal ocean climate services that support policy implementation and the development of climate adaptation strategies and of a carbon-neutral blue economy (e.g., ocean climate risk services)
- Development and publication of indicators on ocean status and health, targeted towards territorial decision-makers, complementary to current Global Climate Observing System (GCOS) Essential Climate Variables or Copernicus Ocean State Reports
- Integration of the developments in the digital perspective, interoperable and/or integrable with Destination Earth and the Digital Twin Ocean
- Fostered collaboration between the climate science community and operational oceanography communities (operating ocean services on a sustained way)

Destination 5: Land, ocean and water for climate action

- EU-China international cooperation on improving monitoring for better integrated climate and biodiversity approaches, using environmental and Earth observation
- Project budget: 5 million EUR
- Funded projects: 1
- Type of action: RIA
- Protect biodiversity and maximize synergetic benefits of biodiversity conservation, climate mitigation and adaptation based on both remote sensing and ground-based observation
- Development and exchange of best practices in using ground-based observation and Earth observation data and information, and establish standard and indicator system for biodiversity measurement for better integrated approaches in order to deliver increased synergies between mitigation, adaptation and conservation
- Geographically-explicit monitoring on regions that has been identified high biodiversity value and/or subject to biodiversity protection and restoration provisions due to high climate risk
- Strengthen scientific research in supporting of the synergies between the monitoring and reporting frameworks under the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Convention on Biological Diversity (CBD), including on the impacts of climate change on biodiversity, for better implementation and progress assessment of the post-2020 global biodiversity framework



Useful links

- <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/horizon>
- https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2023-2024/wp-9-food-bioeconomy-natural-resources-agriculture-and-environment_horizon-2023-2024_en.pdf
- <https://research-innovation-community.ec.europa.eu/events/2tcohVdY0dfgCvuJRj8RTw/overview>



Köszönöm a figyelmet!

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