

Horizon Europe Cluster 6

Destination 3, Destination 5, Destination 7



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)**



Emlékeztető 1.



Cluster 6: Elelmiszer, biomassza alapú gazdaság, természeti erőforrások, mezőgazdaság és környezet

D1: Biodiverzitás

D2: Elelmiszerrendszerek

D3: Körforgásos és biomassza alapú gazdaság

D4: Tiszta környezet és zéró szennyezés

D5: Klímavédelem

D6: Vidéki és városi közösségek

D7: Innovatív irányítás, digitalizáció, AKIS



Mekkora volt a sikerarány 2022-ben? (egylépcsős pályázatok)

Emlékeztető 2.

Call ID	Összköltségvetés (M EUR)	Ertékelt pályázatok (db)	Sikerarány	Támogatott projektek (db)
HORIZON-CL6-2022-BIODIV-01	95	49	32,65%	16
HORIZON-CL6-2022-CIRCBIO-01	66	47	27,66%	13
HORIZON-CL6-2022-CLIMATE-01	75	16	37,50%	6
HORIZON-CL6-2022-COMMUNITIES-01	42	39	17,95%	7
HORIZON-CL6-2022-FARM2FORK-01	164	171	14,62%	25
HORIZON-CL6-2022-GOVERNANCE-01	147	126	24,60%	31
HORIZON-CL6-2022-ZEROPOLLUTION-01	51	79	12,66%	10
	640	527	20,49%	108

Adatok forrása: EC tájékoztatás

Destination 3: Circular economy and bioeconomy sectors

- **Expected impact**
- Accelerate regional, rural, local/urban and consumer-based transitions
- Enhance European industrial sustainability, competitiveness and resource independence
- Develop innovative and sustainable value-chains in the bio-based sectors
- Improve on consumer and citizen benefits, including in the rural settings
- Safeguard multi-functionality and management of forests in Europe
- Enlarge potential of marine and freshwater biological resources and blue biotechnology



Destination 3: Circular economy and bioeconomy sectors

- 2023 calls
- Deadlines:
 - 28 March, 2023
 - Two stage: 28 March, 2023; 26 September, 2023 (second stage)
- Number of calls: 17
- Budget: 178,5 million EUR

- 2024 calls
- Deadlines:
 - 22 February, 2024
 - Two stage: 22 February, 2024; 17 September, 2024 (second stage)
- Number of calls: 16
- Budget: 147,5 million EUR



Destination 3: Circular economy and bioeconomy sectors

- **Enabling a circular economy transition**
 - Enhancing collaboration between Circular Cities and Regions Initiative's (CCRI) supporting organisations
 - One hundred circular model households: making European households sustainable through inclusive circular practices
 - Harnessing the innovation potential and market uptake of successful circular economy water related projects
- **Innovating for sustainable bio-based systems, biotechnology and the bioeconomy**
 - Land-based bioprospecting and production of bioactive compounds and functional materials for multiple bio-based value chains
 - Broadening the spectrum of robust enzymes and microbial hosts in industrial biotechnology
 - Bio-based solutions for humanitarian applications
 - Symbiosis in the bio-based industrial ecosystems
 - Eco-friendly consumer products – low-toxicity/zero pollution construction bio-based materials
 - Business models that balance the share of power and profit in the bioeconomy
 - Supporting the fair and just transition from GHG-intensive economies facing challenges towards circular bioeconomy model regions



Destination 3: Circular economy and bioeconomy sectors

- **Innovating for blue bioeconomy and biotechnology value chains**
 - Novel culturing of aquatic organisms for blue biotechnology applications
- **Safeguarding and sustainably innovating the multiple functions of EU forests**
 - Optimising the sustainable production of wood and non-wood products in small forest properties and development of new forest-based value chains
 - Capturing market trends and societal perceptions for tailor-made forest services
 - Monitoring the multi-functionality of European forests
- **Enabling a circular economy transition**
- **Two stage:**
 - Circular Cities and Regions Initiative (CCRI)'s circular systemic solutions
 - Novel, sustainable and circular bio-based textiles
- **Innovating for sustainable bio-based systems, biotechnology and the bioeconomy**
- **Two stage:**
 - Non-plant biomass feedstock for industrial applications: technologies and processes to convert non-lignocellulosic biomass and waste into bio-based chemicals, materials and products, improving the cascading valorisation of biomass



D3: Enabling a circular economy transition

- Enhancing collaboration between Circular Cities and Regions Initiative's (CCRI) supporting organisations
- Project budget: 2.5 million EUR
- Funded projects: 1
- Type of action: CSA
- Strengthened collaboration and complementarity between various relevant initiatives and organisations
- Enhanced support to the implementation of circular systemic solutions in cities and regions
- Increased capacity, efficiency and efficacy of organisations that support circular economy at the local and regional scale
- Enhanced knowledge transfer and exchange of best practices
- More widespread dissemination of circular innovation
- Increased contribution of the Circular Cities and Regions Initiative (CCRI) scheme to the policy targets of the European Green Deal



D3: Enabling a circular economy transition

- One hundred circular model households: making European households sustainable through inclusive circular practices
- Project budget: 6 million EUR
- Funded projects: 3
- Type of action: IA
- Expected TRL: 6-8
- Significant, well-documented increase in material efficiency in participating households
- Significant reduction of emissions of GHG and other pollutants
- Improvement of living conditions in participating households
- Multiplier effect regarding the replication of the approach and its benefits
- Lessons learnt for a European rollout strategy and integration with sectoral strategies



D3: Enabling a circular economy transition

- Harnessing the innovation potential and market uptake of successful circular economy water related projects
- Project budget: 2 million EUR
- Funded projects: 1
- Type of action: CSA
- Boost the uptake of the most promising systemic solutions
- Change perception and behaviour of European citizens
- Enhance collaboration and knowledge sharing on water reuse and recovery, education, awareness, and professional skills development
- Support the implementation of relevant EU policies



D3: Innovating for sustainable bio-based systems, biotechnology and the bioeconomy

- Land-based bioprospecting and production of bioactive compounds and functional materials for multiple bio-based value chains
- Project budget: 4 million EUR
- Funded projects: 1
- Type of action: RIA
- Enhanced understanding of terrestrial biodiversity
- Addressing the need of sustainable sourcing and development of novel natural, sustainable and 'eco-friendly' materials and product ingredients
- Improved sustainable exploitation, cultivation and processing methods
- Increased competitiveness of European biotechnology
- Increased public knowledge and awareness of connections between biodiversity and biotechnology and its potentials



D3: Innovating for sustainable bio-based systems, biotechnology and the bioeconomy

- Broadening the spectrum of robust enzymes and microbial hosts in industrial biotechnology
- Project budget: 5 million EUR
- Funded projects: 2
- Type of action: IA
- Expected TRL: 6-7
- Identification of sustainable bio-based solutions of applicable performance under humanitarian aid contexts
- Improved way to address waste management and waste-related challenges in humanitarian aid contexts
- Significant reduction/minimisation of waste



D3: Innovating for sustainable bio-based systems, biotechnology and the bioeconomy

- **Bio-based solutions for humanitarian applications**
- Project budget: 1.5 million EUR
- Funded projects: 2
- Type of action: CSA
- Identification of sustainable bio-based solutions of applicable performance in humanitarian aid contexts, addressing the technical challenges
- Improved way to address waste management and waste-related challenges in humanitarian aid contexts
- Significant reduction/minimisation of waste



D3: Innovating for sustainable bio-based systems, biotechnology and the bioeconomy

- Symbiosis in the bio-based industrial ecosystems
- Project budget: 1.5 million EUR
- Funded projects: 2
- Type of action: CSA
- Innovative processes and industrial symbiosis approaches in the bio-based industrial value chains, enabling local security of supply chains
- Monitoring systems of the industrial symbiosis in the bio-based industrial value chains



D3: Innovating for sustainable bio-based systems, biotechnology and the bioeconomy

- Eco-friendly consumer products – low-toxicity/zero pollution construction bio-based materials
- Project budget: 5 million EUR
- Funded projects: 2
- Type of action: IA
- Expected TRL: 6-8
- Higher environmental sustainability
- Demonstrated non-toxic and zero-pollution properties of the construction materials, as well as their recyclability and/or reusability
- Increased competitiveness of European industry, including SME sector
- Improved innovation potential in regard to biotechnology



D3: Innovating for sustainable bio-based systems, biotechnology and the bioeconomy

- Business models that balance the share of power and profit in the bioeconomy
- Project budget: 4 million EUR
- Funded projects: 2
- Type of action: RIA
- Revitalisation and resilience of rural economies by creating new green jobs and investments
- Development and validation of replicable, scalable production and business models
- Enhanced joint investment in R&D and demonstration plants
- Linking of underutilised feedstock types with available technologies and market information, improved logistics and quality standards
- Identification of factors for success and policy recommendations
- Climate-neutral land sector by 2035 and climate-neutral economy by 2050
- Diversification and enhancement of agricultural incomes

D3: Innovating for sustainable bio-based systems, biotechnology and the bioeconomy

- Supporting the fair and just transition from GHG-intensive economies facing challenges towards circular bioeconomy model regions
- Project budget: 2 million EUR
- Funded projects: 1
- Type of action: CSA
- Outline widespread best practices showing the economic, social and environmental opportunities and the challenges of transforming GHG-intensive economies towards circular bioeconomy model regions
- Strengthened interactions and coordination between affected European / associated countries regions



D3: Innovating for blue bioeconomy and biotechnology value chains

- Novel culturing of aquatic organisms for blue biotechnology applications
- Project budget: 4 million EUR
- Funded projects: 2
- Type of action: RIA
- Expected TRL: 3-5
- Expansion of the potential offered by marine or other aquatic biological resources
- Development of aquatic biotechnology solutions in cultivation and optimisation of production yield
- Increased bio discovery of products through sustainable methods for robust aquatic bio-based production
- Support to green industrial bioprocessing and more sustainable bio-based products through new biotechnology processes and applications
- Contribution to the development of circular processing



D3: Safeguarding and sustainably innovating the multiple functions of EU forests

- Optimising the sustainable production of wood and non-wood products in small forest properties and development of new forest-based value chains
- Project budget: 6 million EUR
- Funded projects: 2
- Type of action: RIA
- Development of regional and local management models for small-scale forest holdings
- Better understanding of knowledge, skills, motivation and needs of small-scale forest owners, and development of targeted and innovative approaches
- Contribution to forest-related policy goals of the European Green Deal
- Improved guidelines on carbon farming
- Development of lively, prosperous and resilient rural areas and integration of small-scale forests owners in the bioeconomy value chains
- Improvement of the quantity and quality of EU forests



D3: Safeguarding and sustainably innovating the multiple functions of EU forests

- Capturing market trends and societal perceptions for tailor-made forest services
- Project budget: 6 million EUR
- Funded projects: 2
- Type of action: RIA
- Improved integrated management concepts with a focus on market-oriented approaches
- Development of decision support and management tools
- Increased long-term resilience of forest production and use systems and associated value chains
- Improved guidelines on carbon farming
- Accelerated uptake of sustainable business models in the primary production sector



D3: Safeguarding and sustainably innovating the multiple functions of EU forests

- Monitoring the multi-functionality of European forests
- Project budget: 4 million EUR
- Funded projects: 1
- Type of action: RIA
- Development of a comprehensive information base for all stakeholders involved in forest matters
- Successful implementation of forest-related policy objectives under the European Green Deal
- Better understanding of the quantity and quality of European forests
- Efficient implementation of possible certification schemes in relation to forest multifunctionality



D3: Enabling a circular economy transtion – two stage

- Circular Cities and Regions Initiative (CCRI)'s circular systemic solutions
- Project budget: 9-10 million EUR
- Funded projects: 6
- Type of action: IA
- Significantly increased circularity, reduced GHG emissions
- Creation of business opportunities and jobs in the circular economy at urban and/or regional scale
- Increased uptake and participation of citizens in circular and climate-neutral practices
- Enhanced knowledge transfer between the cities, regions
- More effective widespread uptake and easier replication, scalability and visibility of circular systemic solutions
- Contribution to achieving the policy targets of the European Green Deal



D3: Enabling a circular economy transition – two stage

- **Novel, sustainable and circular bio-based textiles**
- Project budget: 7 million EUR
- Funded projects: 2
- Type of action: IA
- Expected TRL: 6-8
- Reduce the negative environmental impact of textiles throughout their lifecycle
- Increase recyclability and circularity of textiles
- Increase the use of EU (locally/regionally-sourced) alternative



D3: Innovating for sustainable bio-based systems, biotechnology and the bioeconomy – two stage

- Non-plant biomass feedstock for industrial applications: technologies and processes to convert non-lignocellulosic biomass and waste into bio-based chemicals, materials and products, improving the cascading valorisation of biomass
- Project budget: 4 million EUR
- Funded projects: 2
- Type of action: RIA
- Expected TRL: 5
- Increased sustainability of biomass resources
- Contribution to climate-neutrality zero pollution and resource efficiency via practical application of the circular (bio)economy concept
- Improved industrial competitiveness, strategic autonomy and resource independence of bio-based value chains of EU Member States and/or Associated Countries
- Environmental, economic and social benefits on territorial and municipal level
- SMEs engagement
- Increased cooperation and awareness across circular bio-based value chains



Destination 3: Circular economy and bioeconomy sectors

- 2024 calls:
- Circular Cities and Regions Initiative's project development assistance (CCRI-PDA)
- Circular solutions for textile value chains based on extended producer responsibility
- Innovative circular solutions for furniture
- Systemic circular solutions for a sustainable tourism
- Circular bioeconomy start-up villages
- Programmed biodegradation capability of bio-based materials and products, validated in specific environments
- Digital information systems for bio-based products
- Demonstrating the fair and just transition from GHG-intensive economies facing challenges towards circular bioeconomy model regions
- Bioeconomy project development assistance
- Targeting aquatic extremophiles for sourcing novel enzymes, drugs, metabolites and chemicals



Destination 3 – Circular economy and bioeconomy sectors

- Two stage:
- Circular solutions for textile value chains through innovative sorting, recycling, and design for recycling
- Increasing the circularity in plastics value chains
- Increasing the circularity in electronics value chains
- New circular solutions and decentralised approaches for water and wastewater management
- Circular design of bio-based processes and products
- From silos to diversity – small-scale bio-based demonstration pilots



Circular Bio-based Europe Joint Undertaking (CBE JU) – 28

Európai partnerség a körforgásos és biomassza alapú gazdaságért



Az átfogó célkitűzés a fenntartható, biomassza alapú gazdaságra való társadalmi átállás előmozdítása a körforgásos jelleg növelésére, illetve a biomassza, a maradékanyagok és a hulladék felhasználására vonatkozó, fenntartható és versenyképes megoldásokkal kapcsolatos KFI fokozásával. A partnerség emellett regionális megközelítés érvényesítésére törekszik az ENSZ fenntartható fejlődési céljainak és az uniós zöld megállapodásnak a végrehajtása során, hogy felgyorsítsa az „Egészséges bolygó” koncepcióra való átállást.

Kiemelt kutatási területek:

biotechnológia

környezet

ipari termelés

A partnerség tagjai: Biomassza alapú iparágak konzorciuma ([Bio-based Industries Consortium \(BIC\)](#))

Magyarország részvétele: konzultatív szerep, magyar delegált a tagállami képviselőcsoportban.

Részletes információ: <https://www.cbe.europa.eu/>

<https://www.cbe.europa.eu/open-calls-proposals>

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

- 2023 calls
 - Deadline: 12 April 2023
 - Number of calls: 8
 - Budget: 90 million EUR
- 2024 calls:
 - Deadline: 22 February 2024
 - Number of calls: 7
 - Budget: 93 million EUR



Destination 5: Land, ocean and water for climate action

- 2023 calls:
- Additional activities for the European Partnership Water Security for the Planet (Water4All)
- Improve the reliability and effectiveness of alternative water resources supply systems and technologies
- Ocean and coastal waters carbon- and biodiversity-rich ecosystems and habitats in Europe and the Polar Regions
- Demonstration network on climate-smart farming – linking research stations
- Pilot network of climate-positive organic farms
- Analysing fossil-energy dependence in agriculture to increase resilience against input price fluctuations
- Enhancing the sustainable production of renewable energy at farm-level
- Closing the research gaps on Essential Ocean Variables (EOVs) in support of global assessments



Destination 5: Land, ocean and water for climate action

- Additional activities for the European Partnership Water Security for the Planet (Water4All)
- Project budget: 36 million EUR
- Funded projects: 1
- Type of action: Co-fund Action
- Continuation of the European Partnership Water Security for the Planet (Water4All), i.e. EU contribution in WP 2023-2024
- The second instalment of the partnership is expected to contribute to expected outcomes specified in topic HORIZON-CL6-2021-CLIMATE-01-02: European Partnership Water Security for the Planet (Water4All), for continuation and new development of activities
- Fund additional activities



Destination 5: Land, ocean and water for climate action

- Improve the reliability and effectiveness of alternative water resources supply systems and technologies
- Project budget: 3.3 million EUR
- Funded projects: 3
- Type of action: IA
- Contribute to fostering the adaptation of water resources to climate change
- Support for decision makers to integrate alternative water resources supply technologies in their strategic plans for water resources management
- Increased societal awareness
- Increased market potential of alternative water resources



Destination 5: Land, ocean and water for climate action

- Ocean and coastal waters carbon- and biodiversity-rich ecosystems and habitats in Europe and the Polar Regions
- Project budget: 5 million EUR
- Funded projects: 2
- Type of action: RIA
- Expected TRL: 2-4, 3-5
- Better understood and enhanced mitigation potential of ecosystems, based on sustainable management of natural resources
- Advanced understanding and science in support of adaptation and resilience of natural and managed marine and polar ecosystems in the context of a changing climate
- Uncovered mitigation opportunities of newly emerging European and polar blue carbon habitats
- Reduced knowledge gaps for enabling the inclusion of carbon- and biodiversity-rich marine habitats



Destination 5: Land, ocean and water for climate action

- Demonstration network on climate-smart farming – linking research stations
- Project budget: 20 million EUR
- Funded projects: 1
- Type of action: RIA
- The knowledge base of climate related practices is expanded, resulting in increased application of climate-neutral farming approaches
- Different methods of climate-smart agriculture in plant and animal production ed
- The involvement of and adoption by farmers of innovative / smart farming practices
- Implementation of the EU carbon farming initiative
- The involvement of Member States' and Associated Countries' agricultural knowledge and innovation systems (AKIS) in climate-related farming issues is increased



Destination 5: Land, ocean and water for climate action

- Pilot network of climate-positive organic farms
- Project budget: 5 million EUR
- Funded projects: 1
- Type of action: CSA
- The capacity of organic holdings to mitigate and adapt to climate change is enhanced
- Qualitative and quantitative data on the climate-related and other (co-)benefits and impacts of organic production are made more easily accessible
- Carbon farming practices are further developed in the organic farming sector
- Agricultural knowledge and innovation systems (AKIS) and decision-support systems in the organic sector are strengthened



Destination 5: Land, ocean and water for climate action

- Analysing fossil-energy dependence in agriculture to increase resilience against input price fluctuations
- Project budget: 5 million EUR
- Funded projects: 1
- Type of action: RIA
- Better analytical tools and capacity to integrate the use of fossil energy and energy-intensive inputs in modelling and in socio-economic analysis more broadly
- Improved decision-making by farmers
- Better capacity of the farming sector to cope with variations in the price of energy and energy-intensive inputs
- Direct and indirect dependence of the sector on hydrocarbons is reduced



Destination 5: Land, ocean and water for climate action

- Enhancing the sustainable production of renewable energy at farm-level
- Project budget: 5 million EUR
- Funded projects: 1
- Type of action: RIA
- Development of sustainable solutions and business models to reduce greenhouse gas emissions by at least 55% by 2030 in the EU
- Identification of technical, economic, societal, environmental and regulatory barriers
- Development of suitable and sustainable solutions to produce co-benefits (e.g. energy production, higher productivity, less water use, further pollination) and increase their up-take in practice
- Recommendations for improved and targeted guidance, incentives and policies at regional, national and EU-level
- Diversification and enhancement of agricultural incomes



Destination 5: Land, ocean and water for climate action

- Closing the research gaps on Essential Ocean Variables (EOVs) in support of global assessments
- Project budget: 5 and 6 million EUR
- Funded projects: 3
- Type of action: IA
- Expected TRL: 5-6, 7-8, 7-8
- Further developed key ocean monitoring indicators
- Further improved Earth System Models
- Better understood links between ocean physical, biogeochemical and biodiversity (including microbes and macro organisms) variability over time
- Strengthened development of common, agreed standards for climate records content
- Enabled evidence-based decision-making

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 7: Innovative governance, environmental observations and digital solutions in support of the Green Deal

- Innovating with governance models and supporting policies
- Deploying and adding value to Environmental Observations
- Digital and data technologies as key enablers
- Strengthening agricultural knowledge and innovation systems (AKIS)
- 2023 calls:
 - Deadline: 23 March, 2023
 - Number of calls: 22
 - Budget: 130 million EUR
- 2024 calls:
 - Deadline: 28 February, 2024
 - Number of calls: 13
 - Budget: 157,5 million EUR



Destination 7: Innovative governance, environmental observations and digital solutions in support of the Green Deal

- Innovating with governance models and supporting policies
 - European Partnership of Agriculture of Data
 - Advancing analytical capacity and tools to support EU agri-food policies post 2027
 - Towards CAP post 2027: evidence on nudging farmers to leverage more sustainable practices and behaviours
 - Developing an interdisciplinary and inclusive pan-European academic network for food system science
 - Revitalisation of European local (rural / peri-urban) communities with innovative bio-based business models and social innovation
 - Co-creation and trust-building measures for biotechnology and bio-based innovation systems
 - Integrated assessment of land use and biomass demands to contribute to a sustainable healthy and fair bioeconomy



Destination 7: Innovative governance, environmental observations and digital solutions in support of the Green Deal

- Mobilising BIOEAST networks for the development of national bioeconomy action programmes in support of the European Green Deal
- **Deploying and adding value to environmental observations**
 - Coordination and supporting action to increase synergies in the dissemination and exploitation of climate observation by World Meteorological Organization and its affiliated bodies
 - Support to EuroGEO initiative coordination/establishing a EuroGEO secretariat
 - Reducing observation gaps in the land-sea interface area
 - Empowering citizens to monitor, report and act in partnership with relevant public authorities to protect their environment in the context of environmental compliance assurance



Destination 7: Innovative governance, environmental observations and digital solutions in support of the Green Deal

- **Digital and data technologies as key enablers**
 - Open source solutions for edge, cloud and mixed model applications to strengthen production and administrative capacities in agriculture
 - Digital and data technologies for livestock tracking
 - Digitalisation in agriculture and forestry: markets for data, and digital technologies and infrastructure – state of play and foresight in a fast changing regulatory, trade and technical environment
 - Digital technologies supporting plant health early detection, territory surveillance and phytosanitary measures
 - Data-driven solutions to foster industry's contribution to inclusive and sustainable food systems



Destination 7: Innovative governance, environmental observations and digital solutions in support of the Green Deal

- Strengthening agricultural knowledge and innovation systems (AKIS)
 - Broaden EIP Operational Group outcomes across borders by means of thematic networks to compile and share knowledge ready for practice
 - Thematic networks to compile and share knowledge ready for practice
 - Developing an EU advisory network on organic agriculture
 - Developing EU advisory networks on the use of pesticides
 - Developing EU advisory networks on the optimal fertiliser use



D7: Innovating with governance models and supporting policies

- European Partnership of Agriculture of Data
- Partnership budget: 40 million EUR
- Type of action: Programme Co-fund Action
- Exploit the potential of public and private data, including in the combination with data technologies (including AI) for the agricultural sector in the public and private domain
- Build on results of existing (ongoing or finished) initiatives and projects
- Foster EU-wide solutions, scaling up of use-cases and applications close to deployment stage
- Develop data-based solutions and digital applications in support of achieving the expected impacts of the partnership
- Consider the necessary technical systemic elements related to e.g. digital and data infrastructure and interoperability
- Demonstrate how the expected result contribute to the European Green Deal objectives and the ambition of better policy-making
- Demonstrate how it will align to the ongoing work of the Horizon Europe partnership on Agriculture of Data and the projects granted under call HORIZON-CL6-2022-GOVERNANCE-01-11: Upscaling (real-time) sensor data for EU-wide monitoring of production and agri-environmental conditions



D7: Innovating with governance models and supporting policies

- Advancing analytical capacity and tools to support EU agri-food policies post 2027
- Project budget: 6 million EUR
- Funded projects: 1
- Type of action: RIA
- Improved analytical capacity and tools (including models) to assess short-term and long-term impacts of future EU agri-food policies on food systems (and on their actors)
- Enhanced evidence-based knowledge supporting analysis and design of agri-food policies



D7: Innovating with governance models and supporting policies

- Towards CAP post 2027: evidence on nudging farmers to leverage more sustainable practices and behaviours
- Project budget: 3 million EUR
- Funded projects: 1
- Type of action: RIA
- Move farmers and foresters towards more sustainable practices
- Models of social innovation and innovative co-operation along the value chains
- New effective nudging solutions are provided to policymakers to better address sustainability goals
- New policies are designed taking into account farmers' environmental attitudes



D7: Innovating with governance models and supporting policies

- Developing an interdisciplinary and inclusive pan-European academic network for food system science
- Project budget: 6 million EUR
- Funded projects: 1
- Type of action: RIA
- Establish a broad pan-European interdisciplinary academic network
- Foster inter-, transdisciplinary, participatory, policy and regulatory research
- A strengthened European Research Area for sustainable food systems transformation
- Contribution to the farm to fork objectives and Food 2030 priorities



D7: Innovating with governance models and supporting policies

- Revitalisation of European local (rural / peri-urban) communities with innovative bio-based business models and social innovation
- Project budget: 5 million EUR
- Funded projects: 1
- Type of action: RIA
- Higher impact of bio-based innovation to accelerate the transition from a linear fossil-based economy
- Improved and informed public awareness, governance and especially social innovation
- Higher level of innovation at local scale and inclusive engagement of all actors



D7: Innovating with governance models and supporting policies

- Co-creation and trust-building measures for biotechnology and bio-based innovation systems
- Project budget: 1.5 million EUR
- Funded projects: 1
- Type of action: CSA
- Developing a co-creation programme and guidelines on improved knowledge exchange and awareness raising
- Improvement of innovation uptake for modern and emerging key enabling technologies
- Creation of the forum to foster an inclusive, science-oriented mutual learning platform
- Reinforcing the evidence-based understanding of potential positive (benefits) and negative impacts of biotechnology
- Development of the transparent and inclusive trust building measures for the implementation of industrial biotechnology, and bio-based innovation according to the UN Sustainable Development Goals



D7: Innovating with governance models and supporting policies

- Integrated assessment of land use and biomass demands to contribute to a sustainable healthy and fair bioeconomy
- Project budget: 4 million EUR
- Funded projects: 1
- Type of action: RIA
- Better understanding, methods and tools for determining the potential and limits of land and biomass
- Enhanced knowledge on the policy pathways for maximising the climate benefit of bioeconomy solutions



D7: Innovating with governance models and supporting policies

- Mobilising BIOEAST networks for the development of national bioeconomy action programmes in support of the European Green Deal
- Project budget: 3.5 million EUR
- Funded projects: 1
- Type of action: CSA
- Strengthened human capacity and competitiveness of the BIOEAST public administrative bodies
- Connecting experts and policy makers in national bioeconomy networks for better engagement of stakeholders
- Mobilisation and increased linkages of national and regional capacities to leverage investments
- Facilitating the development of inclusive national bioeconomy action programmes
- Increased participation and innovation capacity of the BIOEAST Member States and stakeholders in the EU framework programmes and structural funds
- Improved coherence of policies to build a sustainable bioeconomy



D7: Deploying and adding value to environmental observations

- Coordination and supporting action to increase synergies in the dissemination and exploitation of climate observation by World Meteorological Organization and its affiliated bodies
- Project budget: 2 million EUR
- Funded projects: 1
- Type of action: CSA
- Strengthened collaboration and complementarity between the World Meteorological Organization (WMO), the Group on Earth Observations (GEO), the Intergovernmental Panel on Climate Change (IPCC) and the Global Climate Observing System (GCOS) on climate observations
- Analysis, streamlining and creation of synergies between Work Programmes of above-mentioned bodies and with the objectives of the European Green Deal
- Promotion of the collection, improvement, dissemination, and exploitation of observations on climate, climate change and its impacts



D7: Deploying and adding value to environmental observations

- Support to EuroGEO initiative coordination/establishing a EuroGEO secretariat
- Project budget: 2 million EUR
- Funded projects: 1
- Type of action: CSA
- Support to the EuroGEO community
- Establishment of organisational support, e.g., coordination of EuroGEO communication activities and events
- A more developed and better monitored execution of the EuroGEO Implementation Plan
- Assistance to the development of a sustainability concept for the EuroGEO initiative
- Further developed research policies, guidelines



D7: Deploying and adding value to environmental observations

- Reducing observation gaps in the land-sea interface area
- Project budget: 9 million EUR
- Funded projects: 1
- Type of action: RIA
- Increased availability of integrated in-situ observations at the land-sea interface
- Improved hydrological, biogeochemical, ecological and coastal modelling
- Enhanced networking between the relevant observation communities
- Strengthened coordination between Earth observation communities in the land and marine domains



D7: Deploying and adding value to environmental observations

- Empowering citizens to monitor, report and act in partnership with relevant public authorities to protect their environment in the context of environmental compliance assurance
- Project budget: 7 million EUR
- Funded project: 1
- Type of action: RIA
- An increase in empowered citizens, communities and intermediaries
- More relevant (*in-situ*) datasets and information, to be used in the context of policy shaping
- Tested FAIR data governance and management mechanisms
- Better/larger engagement of citizens and communities with regional and local authorities to develop local actions for green and digital transformation



D7: Digital and data technologies as key enablers

- Open source solutions for edge, cloud and mixed model applications to strengthen production and administrative capacities in agriculture
- Project budget: 5 million EUR
- Funded projects: 2
- Type of action: RIA
- Expected TRL: 5-7
- Enhanced sustainability performance and competitiveness of the sector
- Increased and enhanced use of digital tools in areas with weak connectivity
- Improved energy balance of data-based solutions used in agricultural production
- New approaches towards the development of software for the agriculture contributing to improving operational effectiveness and efficiency in the sector
- Facilitated deployment of digital applications for farmers and actors related to the agricultural sector
- Decision-making support, particularly for policy-makers, farm advisors, farmers, and public administration



D7: Digital and data technologies as key enablers

- Digital and data technologies for livestock tracking
- Project budget: 5 million EUR
- Funded projects: 1
- Type of action: CSA
- Strengthened sustainable livestock production
- Strengthened the resilience and transparency of supply chains through the use of digital technologies
- Enhanced capacities in policy monitoring and evaluation in the field of agriculture, environment, climate, and sustainable finance



D7: Digital and data technologies as key enablers

- Digitalisation in agriculture and forestry: markets for data, and digital technologies and infrastructure – state of play and foresight in a fast changing regulatory, trade and technical environment
- Project budget: 5 million EUR
- Funded projects: 1
- Type of action: RIA
- Expected TRL: 3-5
- Analyses of global markets through innovative approaches including trends, potential barriers and risks
- Increased transparency in data sharing and in the markets for digital and data technologies in the agricultural and forestry sectors in support of healthy competition
- Contribution to an increased uptake of digital and data technologies in agriculture and forestry
- Strengthened policy-making and -monitoring and foresight capacities



D7: Digital and data technologies as key enablers

- Digital technologies supporting plant health early detection, territory surveillance and phytosanitary measures
- Project budget: 5 million EUR
- Funded projects: 2
- Type of action: RIA
- Increase the availability of large-scale and robust plant scanning methods to monitor plant pests
- Enhance innovative and cost-efficient integration of methods
- Strengthen capacities to prevent entry and spread and to monitor EU regulated plant pests
- Foster transdisciplinary cooperation in the fields of plant health, environmental sciences and earth observation
- Support relevant EU and Associated Countries' plant health policies



D7: Digital and data technologies as key enablers

- Data-driven solutions to foster industry's contribution to inclusive and sustainable food systems
- Project budget: 4 million EUR
- Funded projects: 2
- Type of action: RIA
- Increased insights into the potential benefits and feasibility of data and technology employed by the private sector together with public stakeholders to drive sustainable food system transformation while respecting the relevant legal and policy frameworks
- Enhanced transition towards sustainable healthy diets for all by using data driven solutions in the food sector



D7: Strengthening agricultural knowledge and innovation systems (AKIS)

- Broaden EIP Operational Group outcomes across borders by means of thematic networks to compile and share knowledge ready for practice
- Project budget: 2 million EUR
- Funded projects: 2
- Type of action: CSA
- Contribution to the cross-cutting objective of the CAP on modernising the sector by fostering and sharing of knowledge, innovation and digitalisation
- Collection and distribution of easily accessible practice-oriented knowledge
- Maintenance of practical knowledge in the long-term
- Increased flow of practical information between farmers/foresters in the EU
- Greater user acceptance of collected solutions and a more intensive dissemination of existing knowledge, by connecting actors, policies, projects and instruments



D7: Strengthening agricultural knowledge and innovation systems (AKIS)

- Thematic networks to compile and share knowledge ready for practice
- Project budget: 3 million EUR
- Funded projects: 2
- Type of action: CSA
- Contribution to the cross-cutting objective of modernising the sector by fostering and sharing knowledge, innovation and digitalisation
- Collection and distribution of easily accessible practice-oriented knowledge on the thematic area chosen
- Maintenance of practical knowledge in the long-term
- Increased flow of practical information between farmers/foresters in the EU
- Greater user acceptance of collected solutions and a more intensive dissemination of existing knowledge, by connecting actors, policies, projects and instruments



D7: Strengthening agricultural knowledge and innovation systems (AKIS)

- Developing an EU advisory network on organic agriculture
- Project budget: 5 million EUR
- Funded projects: 1
- Type of action: CSA
- Accelerated progress towards achieving the policy objectives linked to the Farm to Fork Strategy's target on organic farming
- Supported implementation in Member States of the CAP cross-cutting objective of modernising the sector by fostering and sharing of knowledge, innovation and digitalisation
- Enhanced interactions among advisors and other relevant actors in the EU and Associated Countries
- Increased provision of supporting services and materials that facilitate the conversion to and upscaling of organic farming
- Accelerated introduction, spread and implementation in practice of innovative solutions related to organic farming



D7: Strengthening agricultural knowledge and innovation systems (AKIS)

- Developing EU advisory networks on the use of pesticides
- Project budget: 4 million EUR
- Funded projects: 1
- Type of action: CSA
- Progress towards the most urgent policy objectives linked to Cluster 6, as well as the European Green Deal
- Support to the CAP cross-cutting objective of modernising the sector by fostering and sharing knowledge, innovation and digitalisation
- Development of interaction with regional policymakers and of a potential EU network to discuss institutional challenges to the reduction of pesticide use and the associated risks in practice
- Production of supporting services and materials to facilitate the reduction of pesticide use and risk
- Speed up of the introduction, spread and implementation in practice of innovative solutions related to pesticide use



D7: Strengthening agricultural knowledge and innovation systems (AKIS)

- Developing EU advisory networks on the optimal fertiliser use
- Project budget: 4 million EUR
- Funded projects: 1
- Type of action: CSA
- Progress towards the most urgent policy objectives linked to Cluster 6, as well as the European Green Deal
- Substitution of mineral fertilisers with sustainable, affordable high-quality bio-based alternatives from different residue and waste streams
- Support to the CAP cross-cutting objective of modernising the sector by fostering and sharing knowledge, innovation and digitalisation
- Development of interaction with regional policymakers and of a potential EU network to discuss institutional challenges to the reduction of nutrient losses and the use of fertilisers in practice
- Production of supporting services and materials to facilitate the reduction of nutrient losses and the use of fertilisers
- Speed up of the introduction, spread and implementation in practice of innovative solutions related to fertiliser use



Destination 7: Innovative governance, environmental observations and digital solutions in support of the Green Deal

- 2024 calls:
- European Partnership for a climate neutral, sustainable and productive Blue Economy
- Regional ecosystems of innovation to foster food system transformation
- The role of mainstream media, social media and marketing in fostering healthy and sustainable consumption patterns and how to encourage good practices
- Supporting the All-Atlantic Ocean Research and Innovation Alliance and Declaration
- Customisation/pre-operationalisation of prototypes end-user services in the area Climate Change Adaptation and Mitigation
- Develop innovative applications to support the European Green Deal, building on meteorological satellite data



Destination 7: Innovative governance, environmental observations and digital solutions in support of the Green Deal

- Enhancing working conditions and strengthening the work force through digital and data technologies – the potential of robotics and augmented reality in agriculture
- Broaden EIP Operational Group outcomes across borders by means of thematic networks to compile and share knowledge ready for practice
- Thematic networks to compile and share knowledge ready for practice
- Organic farming thematic networks to compile and share knowledge ready for practice
- Biodiversity thematic networks to compile and share knowledge ready for practice
- Developing EU advisory networks on forestry
- Developing EU advisory networks on sustainable livestock systems



Köszönöm a figyelmet!

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