



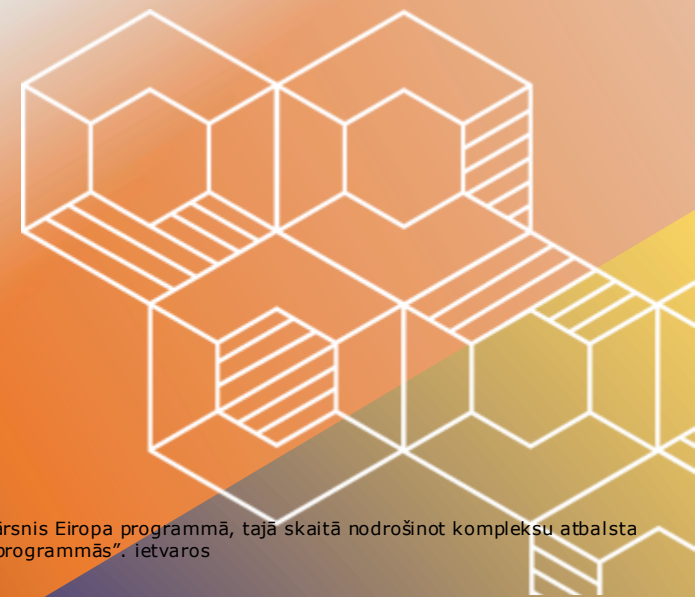
Horizon Europe Cluster 6: “Advancing Biotechnology for a Sustainable Future”

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Cluster 6

**FOOD, BIOECONOMY,
NATURAL RESOURCES,
AGRICULTURE &
ENVIRONMENT**



Lāsma Brenča

Vecākā eksperte - Klimats, enerģētika un mobilitāte; Pārtika, bioekonomika, dabas resursi, lauksaimniecība un vide

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Cluster 5

**CLIMATE, ENERGY
& MOBILITY**



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Horizon Europe Strategic Plan 2025-2027

Purpose:

Provides a strategic framework to align Horizon Europe R&I activities with EU priorities, supporting green and digital transitions and enhancing Europe's resilience.

Key orientations:

Green Transition: Focuses on sustainable climate and environmental goals, aiming for Europe to become the first climate-neutral continent by 2050.

Digital Transition: Enhances competitiveness through investment in digital technologies, AI, and cybersecurity.

Resilience and Inclusiveness: Promotes a democratic, competitive, and inclusive Europe, addressing health, security, and economic challenges..





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Green Transition

Digital Transition

A more Resilient, Competitive, Inclusive,
& Democratic Europe

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CLUSTER 1	CLUSTER 2	CLUSTER 3	CLUSTER 4	CLUSTER 5	CLUSTER 6
<p>Health</p> <ol style="list-style-type: none"> 1. Staying healthy in a rapidly changing society 2. Living and working in a health-promoting environment 3. Tackling diseases and reducing disease burden 4. Ensuring equal access to innovative, sustainable, and high-quality healthcare 5. Developing and using new tools, technologies and digital solutions for a healthy society 6. Maintaining an innovative, sustainable, and competitive EU health industry 	<p>Culture, Creativity & Inclusive Society</p> <ol style="list-style-type: none"> 7. Reinvigorating democratic governance 8. Realising the full potential of cultural heritage, arts, and cultural and creative sectors 9. Strengthening social and economic resilience and sustainability 10. Boosting inclusive growth and reducing vulnerabilities effectively 	<p>Civil Security for Society</p> <ol style="list-style-type: none"> 11. Reducing losses from natural, accidental and human-made disasters 12. Facilitating legitimate movement of passengers and goods into the EU, while preventing illicit acts 13. Tackling crime and terrorism more effectively and increasing the resilience of infrastructures 14. Increasing cybersecurity and making the online environment more secure 	<p>Digital, Industry & Space</p> <ol style="list-style-type: none"> 15. Achieving global leadership in climate-neutral, circular and digitised industrial and digital value chains 16. Achieving technological leadership for Europe's open strategic autonomy in raw materials, chemicals and innovative materials 17. Developing an agile and secure single market and infrastructure for data-services and trustworthy artificial intelligence services 18. Achieving open strategic autonomy in digital and emerging enabling technologies 19. Achieving open strategic autonomy in global space-based infrastructures, services, applications, and data 20. Digital and industrial technologies driving human-centric innovation 	<p>Climate, Energy & Mobility</p> <ol style="list-style-type: none"> 21. Advancing science for a fair transition to a climate-neutral and resilient society 22. Facilitating the clean and sustainable transition of the energy and transport sectors towards climate neutrality through cross-cutting solutions 23. Ensuring more efficient, sustainable, secure, and competitive renewable and decarbonised energy supply 24. Using energy in buildings and industry in an efficient, affordable and sustainable way 25. Achieving sustainable, inclusive, and competitive transport modes 26. Developing multimodal systems and services for climate-neutral, smart, inclusive, and safe mobility 	<p>Food, Bioeconomy, Natural Resources, Agriculture & Environment</p> <ol style="list-style-type: none"> 27. Fostering mitigation of and adaptation to climate change in areas and sectors covered by Cluster 6 28. Putting biodiversity on a path to recovery, and protecting and restoring ecosystems and their services 29. Achieving healthy soils and forests, as well as clean air, fresh and marine water, whilst ensuring water resilience and the transition to a clean, competitive and circular economy and sustainable bioeconomy 30. Ensuring healthy food and nutrition security by making agriculture, fisheries, aquaculture and food systems sustainable, resilient, inclusive and within planetary boundaries 31. Sustainably developing rural, urban and coastal areas 32. Developing innovative governance models and tools enabling sustainability and resilience



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CLUSTER IMPACT SUMMARY

R&I in Cluster 6 is one of the key enablers to developing, demonstrating and upscaling the solutions needed to navigate the necessary transitions to a sustainable future underpinned by the European Green Deal. Cluster 6 supports the ambition of Europe to become the first climate-neutral and climate-resilient continent by 2050, taking into account the current political, legal and economic context, with a long-term vision for a greener, fairer, more resilient society ensuring that no person or place is left behind.

HOW WILL CLUSTER 6 MAKE A DIFFERENCE?

Expected impacts

Cluster 6 will programme investment to achieve the below expected impacts.

27. Fostering mitigation of and adaptation to climate change in areas and sectors covered by Cluster 6

Cluster 6 contributes significantly to the objectives enshrined in the European Climate Law and the 'Fit for 55' package⁹⁶ by bringing transformative changes and increasing sustainability and efficiency in the use of natural resources on land and at sea, while maintaining food safety and security and without harming biodiversity and people. Thanks to R&I, climate adaptation and mitigation – including loss and damage – will be supported by environmental observations, by taking advantage of progress on artificial intelligence, and in accordance with climate prediction models. Ecosystem restoration activities increasing biodiversity and their



Expected impact (Strategic Plan 2025-2027)	Destination (Cluster 6 work programme)
27. Fostering mitigation of and adaptation to climate change in areas and sectors covered by Cluster 6.	Destination 5: Land, oceans and water for climate action
28. Putting biodiversity on a path to recovery , and protecting and restoring ecosystems and their services.	Destination 1: Biodiversity and ecosystem services
29. Achieving healthy soils and forests , as well as clean air, fresh water and marine water, whilst ensuring water resilience and the transition to a clean, competitive and circular economy and sustainable bioeconomy.	Destination 3: Circular economy and bioeconomy sectors Destination 4: Clean environment and zero pollution
30. Ensuring healthy food and nutrition security by making agriculture, fisheries, aquaculture and food systems sustainable , resilient, inclusive and within planetary boundaries.	Destination 2: Fair, healthy and environmentally friendly food systems from primary production to consumption
31. Sustainably developing rural, urban and coastal areas .	Destination 6: Resilient, inclusive, healthy and green rural, coastal and urban communities
32. Developing innovative governance models and tools enabling sustainability and resilience.	Destination 7: Innovative governance, environmental observations and digital solutions in support of the Green Deal



Strategic Documents

Shaping Cluster 6

- European Green Deal**
A roadmap for making Europe the first climate-neutral continent.
- EU Zero Pollution Action Plan**
Targets cleaner air, water, and soil for healthier environments.
- EU Biodiversity Strategy for 2030**
Aims to restore and protect ecosystems and biodiversity.
- EU Soil Strategy for 2030**
Focuses on sustainable soil management and health.
- EU Farm to Fork Strategy**
Ensures sustainable food systems from production to consumption.
- Circular Economy Action Plan**
Promotes resource efficiency and waste reduction.



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Activities under Cluster 6 will support the new innovation agenda for Europe and help accelerate the ecological transition required by the European Green Deal⁵ in order to achieve climate neutrality by 2050. This will be done by preserving Earth’s natural carbon sinks and stocks in ecosystems, including soils and plants, forests, farmed lands and wetlands and the marine environment. This will substantially reduce GHGs from the forestry and agricultural sectors and transform the food system. In addition, activities will foster innovation to develop the circular economy and exploit the potential of biological resources for renewable products. This will reduce the EU’s dependence on non-renewable resources and help reduce emissions/waste from industrial processes by using more sustainable bio-based systems. At the same time, it will avoid trade-offs that could damage biodiversity and will promote synergistic measures to protect biodiversity. In addition to the EU’s climate policy, R&I will support the objectives of:

- the EU biodiversity strategy for 2030⁶;
- the EU’s new circular economy action plan⁷;
- the EU action plan “Towards a Zero Pollution for Air, Water and Soil⁸ (‘the EU zero pollution action plan’);
- the EU industrial strategy;
- the bioeconomy strategy;
- the EU forest strategy;
- the EU soil strategy for 2030⁹
- the sustainable blue economy strategy;
- the chemicals strategy for sustainability; and
- the EU plastics strategy.



Destination - Biodiversity and ecosystem services

The biodiversity and ecosystem services destination of the 2023-2024 Cluster 6 work programme will support R&I for the EU environment and biodiversity protection framework and the European Green Deal. It is based on the vision developed in the EU biodiversity strategy for 2030 and will support its implementation, furthering the orientations of the 2021-2022 work programme. It will also take into account new European Green Deal initiatives, notably i) the EU forest strategy for 2030¹⁸, ii) the EU action plan: “towards zero pollution for air, water and soil”, iii) the EU climate adaptation strategy and iv) the EU soil strategy for 2030. Connections are expected to be made with the EU proposal for a nature restoration law¹⁹, which includes binding targets, and environmental reporting, and the new approach for a sustainable blue economy in the EU²⁰.

It will support R&I activities that help maintain ecosystems in good ecological condition and a clean and healthy environment for the EU, including water, soil and air. This will contribute to the implementation of relevant policies such as health, climate adaptation and mitigation, disaster risk reduction, sustainable circular bioeconomy and blue economy. The R&I activities will also reflect the strong interconnections between, e.g. the EU biodiversity strategy for 2030²¹ and the farm to fork strategy²², as well as the pollinators initiative²³.

R&I supported under this destination will ensure that mainstreaming biodiversity in society and the economy takes into account justice, fairness and global aspects. This is to ensure the "just transition" emphasised in the European Green Deal is achieved.

Destination - Clean environment and zero pollution

Anthropogenic pollution undermines the integrity of Earth's ecosystems and severely affects natural resources essential for human life. Keeping our planet clean and our ecosystems healthy will not only help addressing the climate crisis but also help regenerate biodiversity, ensure the sustainability of primary production activities and safeguard the well-being of humankind. In line with the objectives of the European Green Deal and related initiatives targeting environmental challenges, particularly the EU zero pollution action plan, the 2030 climate target plan, and other relevant EU legislation, this destination seeks to halt and prevent pollution by focusing on:

- removing pollution from fresh and marine waters, soils, air, including from nitrogen and phosphorus emissions;
- substituting harmful chemicals;
- improving the environmental sustainability and circularity of bio-based systems;
- reducing environmental impacts of and pollution in food systems.

Synergies with other clusters (notably 1 for health issues and 5 for air pollution from urban sources), relevant destinations, missions (particularly ‘A Soil Deal for Europe’ and ‘Restore our Ocean and Waters by 2030’) and partnerships will be exploited.



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Annotated Templates (RIA, IA & CSA)

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Here you will find annotated proposal templates for both **first stage** and **full proposals** for Research and Innovation Actions (RIA) / Innovation Actions (IA) and Coordination and Support Actions (CSA).



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care4bio-ria-ia-annotated-template_final-version.pdf



care4bio-ria-ia_1st-stage-annotated-template_final-version.pdf



CARE
4 BIO

Annotated templates – 2025 update

TOP 10 PARTICIPANTS IN CLUSTER 6 (INCLUDING THEMATIC PARTNERSHIPS)

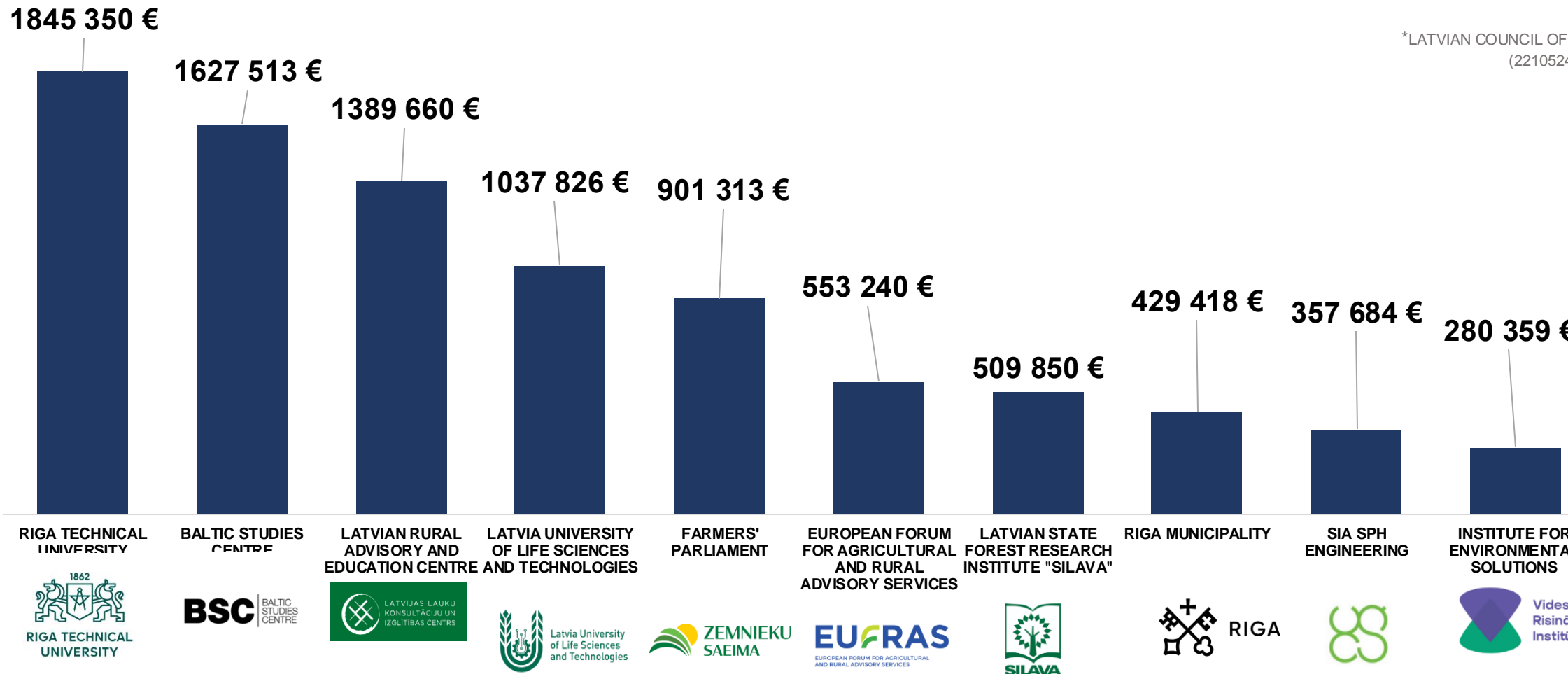


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■ EU NET CONTRIBUTION, EUR

eCORDA data 12.01.2025.

*LATVIAN COUNCIL OF SCIENCE
(2210524,17 EUR)





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TOP 5 LATVIAN PROJECTS IN CLUSTER 6



Role	Project	EU FUNDING, EUR	Section
COORDINATOR	CIRCLEUP	1255350	CIRCBIO
PARTICIPANT	CELLFIL	590000	CLIMATE
PARTICIPANT	NENUPHAR	478337,5	CIRCBIO
PARTICIPANT	PREMIERE	400125	GOVERNANCE
PARTICIPANT	CODECS	363125	GOVERNANCE



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LU PROJECTS IN CLUSTER 6

PARTICIPANT LEGAL NAME	ROLE	EU CONTRIBUTION (EUR)	ACRONYM	SECTION
LATVIJAS UNIVERSITATE	PARTICIPANT	148085	GeneBEcon	ZEROPLLUTION
LATVIJAS UNIVERSITATE	PARTICIPANT	65250	EO4EU	GOVERNANCE
LATVIJAS UNIVERSITATE	PARTICIPANT	59375	Tools4CAP	GOVERNANCE

eCORDA data 12.01.2025.





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WP2025 TOPICAL AREAS



D1: Biodiversity and ecosystem services

- Putting biodiversity on a path to recovery;
- protecting and restoring ecosystems and their services



D3: Circular economy and bioeconomy sectors

- Achieving healthy soils and forests, as well as clean air, fresh water and marine water;
- ensuring water resilience and the transition to a clean, competitive and circular economy and sustainable bioeconomy

D2: Fair, healthy and environmentally friendly food systems from primary production to consumption

- Ensuring healthy food and nutrition security by making agriculture, fisheries, aquaculture and food systems sustainable, resilient, inclusive and within planetary boundaries



D4: Clean environment and zero pollution

- Achieving healthy soils and forests, as well as clean air, fresh water and marine water;
- ensuring water resilience and the transition to a clean, competitive and circular economy and sustainable bioeconomy





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WP2025 TOPICAL AREAS



D5: Land, oceans and water for climate action

- Fostering mitigation of and adaptation to climate change in areas and sectors covered by Cluster 6



D6: Resilient, inclusive, healthy and green rural, coastal and urban communities

- Sustainably developing rural, urban and coastal areas



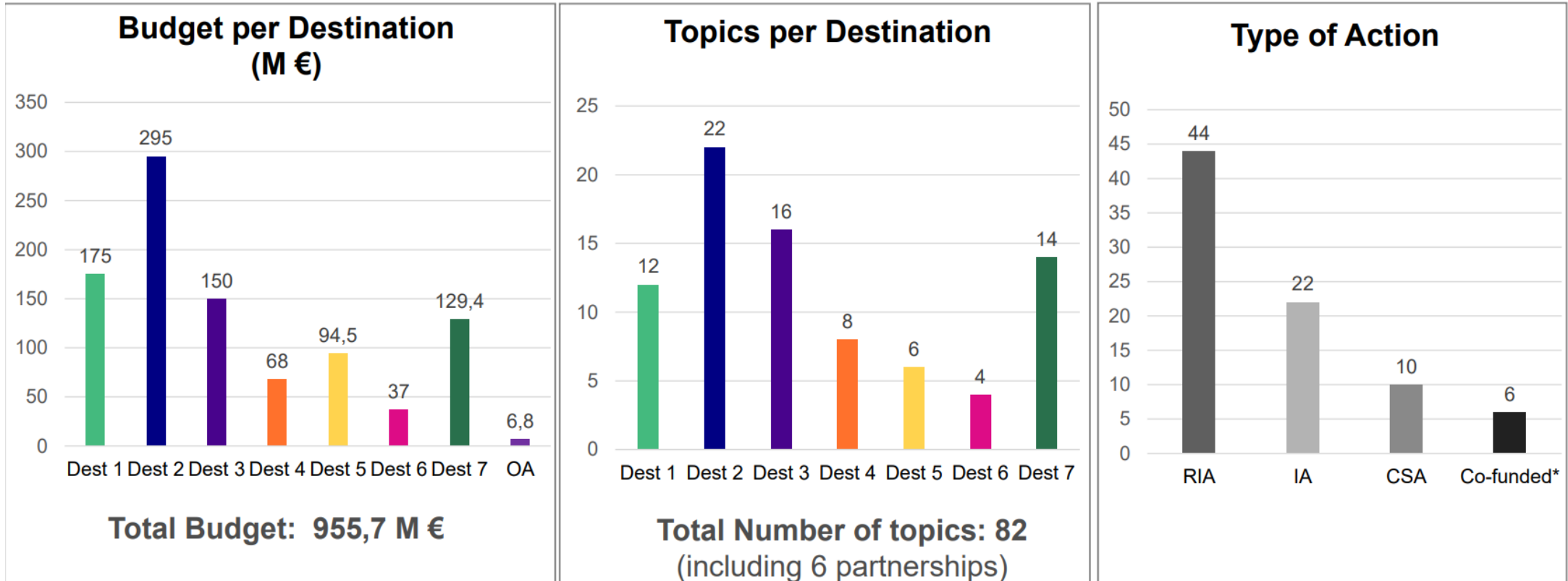
D7: Innovative governance, environmental observations and digital solutions in support of the Green Deal

- Developing innovative governance models and tools enabling sustainability and resilience

WORK
PROGRAMME
2025



Overview of the 2025 work programme



- Partnerships: 1 New Co-fund (Sustainable Forests and Forestry) and 5 top-up Co-fund (Biodiversa+, Agroecology, PAHW, SFS, Water4All)
- Other Actions (6): 1 expert contract actions, 2 grants to identified beneficiaries, 2 public procurements, 1 subscription action



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D1 - Biodiversity and ecosystem services



Expected impacts

- Improved **knowledge** and **innovations, methods, pathways, models** and **tools** are available and used to **protect healthy ecosystems** and to **restore degraded ones**
- **Ongoing biodiversity crisis**, benefits of **healthy ecosystems** and their services, and need to **protect, restore and sustainably use biodiversity** are **better understood**
- **Policymakers**, relevant **economic sectors** and **society** are well **informed of challenges** and **opportunities of biodiversity protection, restoration and sustainable use**
- **Farmers, foresters, land and sea managers, fishers and aquaculture producers** test and implement **biodiversity-friendly practices**
- Progress towards the goals and targets of **Kunming-Montréal Global Biodiversity Framework** contributes to **reducing the pressure on biodiversity** and **ensuring sustainable development**

Policy Context

- EU Biodiversity Strategy
- EU Nature Restoration Regulation
- Climate Adaptation Strategy
- European Oceans Pact
- European Water Resilience Strategy
- Vision for Agriculture and Food
- Vision for Fisheries and Aquaculture
- Kunming-Montreal Global Biodiversity Framework
- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services



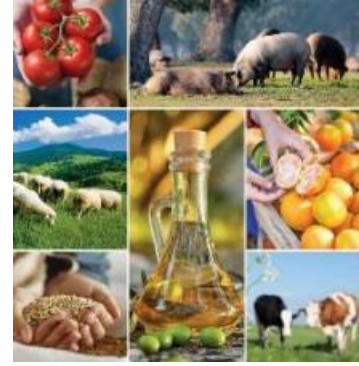
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D2 - Fair, healthy and environmentally-friendly food systems from primary production to consumption



Expected impacts

- **Agriculture and food systems** contribute to **ensuring** a secure, safe, nutritious and affordable **supply of healthy food** in Europe and beyond.
- **Farmers** are empowered to ensure the **competitiveness, resilience and sustainability** of the **farming sector**.
- **Sustainable fisheries and aquaculture** contribute to **fair, healthy, resilient** and **environment-friendly food systems** in healthy aquatic ecosystems.
- Tools for the **transformation of food** are provided so that **citizens and communities** are empowered to move **towards healthy, nutritious, accessible, affordable and sustainable diets**.
- **Food businesses** are supported to increase their **resilience and competitiveness**, while ensuring sustainability, food safety as well as **human, animal and ecosystem health** is preserved.

Policy Context

- European Green Deal
- EU Vision for Agriculture and Food
- Common agricultural policy
- Common fisheries policy
- EU Communication on Boosting Biotechnology and Biomanufacturing in the EU
- Bioeconomy Strategy
- European Oceans Pact
- European Life Sciences Strategy
- EU Biotech Act
- EU Water resilience strategy



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D3 – Circular economy and bioeconomy sectors



Expected impacts

- Improved **climate change adaptation/mitigation** through transition to sustainable and **circular economy** and **bioeconomy**
- Improved **industrial competitiveness** and **strategic autonomy** are improved through the **development of safe, sustainable, circular and bio-based value chains**
- **Living conditions** for individuals and communities are improved through **innovative, affordable and sustainable products and services**
- Advanced **societal transformation** based on a systemic approach and integration of **social sciences and humanities** for fair, sustainable and circular value chains

Policy Context

- European Green Deal
- Circular Economy Act
- Clean Industrial Deal
- Ecodesign for Sustainable Products Regulation
- EU Bioeconomy Strategy
- EU Biotechnology and Biomanufacturing Initiative
- Sustainable Blue Economy
- EU Forest strategy and EU Forest monitoring
- EU Soil Monitoring and resilience laws
- European Water Resilience Strategy



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D4 – Clean environment and zero pollution



Expected impacts

- Advancing **scientific understanding** and **innovative solutions** for identifying and mitigating **pollution**
- Innovative **circular bio-based systems** and **biotechnologies** are developed and made available to stakeholders to progress towards the **clean environment** and **zero-pollution ambition**
- **Farmers** and **actors in the food chain** make informed decisions and apply **novel strategies to prevent, reduce and remediate pollution** from agriculture and the food system
- Effective **solutions to remediate** and **decontaminate aquatic pollution** are developed, made available and implemented contributing to reducing pollution

Policy Context

- Zero Pollution Action Plan
- Chemicals Industry package
- Ambient Air Quality Directive
- Industrial and Livestock Rearing Emissions Directive
- Bioeconomy Strategy
- EU Forest Strategy for 2030
- Strategy on Life Science and Biotech Act
- Water Resilience Strategy
- Vision for EU Agriculture and Food



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D5 – Land, waters and ocean for climate action



Expected impacts

- **Strengthened knowledge** and understanding and reduced uncertainty about the future of **Antarctica** and **Southern Ocean** in the short, medium, long term, and its **impacts** on the **Global Ocean** and the **Earth System** is **available** and **used**, alongside identified commensurate management responses to **prevent the Southern Ocean and the Antarctic cryosphere from reaching a point of no return**.
- **Carbon footprint** and **greenhouse gas emissions** from **land and water activities** and **infrastructures** are minimised in **rural, urban, and coastal areas** while the monitoring, reporting and verification of the emissions is improved.
- Medium- and long-term **adaptation and resilience** of **agriculture and forestry** to challenges related to climate change is further addressed with regard to scientific knowledge, public policy and economic practices.

Policy Context

- European Climate Law
- Nature Restoration Regulation
- amended Regulation on LULUCF
- Regulation on carbon farming and carbon removals
- European Green Deal
- Paris Agreement
- Antarctic Treaty
- European Oceans Pact
- Water Resilience Strategy





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D6 – Resilient, inclusive, healthy and green rural, coastal and urban communities



Expected impacts

- **Rural, urban and coastal communities** are empowered to act for a **transformative change** to increase their sustainability and resilience and better prepared to **adapt to climate change** and to achieve **climate neutrality and environmental objectives**.
- **Rural communities** are more **attractive to young people** and innovators.
- **Urban and peri-urban communities** can access **affordable, healthier, nutritious and environmental-friendly food**, and benefit from a **systemic approach** reducing the societal divide across the urban-rural divide.
- **Coastal communities** are **resilient, inclusive, healthy and green**.

Policy Context

- Long-term Vision for EU's rural areas
 - EU Climate Law
 - EU Climate Adaptation Strategy
 - Nature Restoration Regulation
 - EU Bioeconomy Strategy
- Upcoming:
- EU Vision for Agriculture and Food
 - Commission Strategy for Generational Renewal in Agriculture
 - European Oceans Pact
 - European Life Sciences Strategy
 - EU Biotech Act



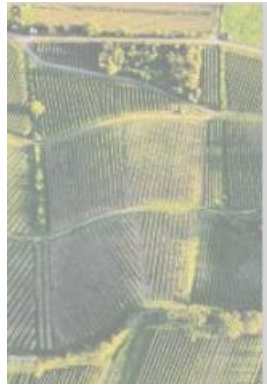
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D7 – Innovative governance, environmental observations and digital solutions in support of the Green Deal



Expected impacts

- Effective **policy mixes** and multi-level **governance** capable of anticipating a changing world and enabling a **just sustainable transition for all**, engaging society at large and balancing economic, social, environmental goals.
- **Sustainability** and **resilience** of the **economy**, supporting **competitiveness**, are enabled by more accessible **environmental observations** and improved interoperable Earth Intelligence.
- **Productivity** is boosted and **transformative changes** required by the EGD are facilitated, leaving no one behind.
- The **European Research Area** is further integrated, and the **global efforts** are well-coordinated for **impact-oriented science** on food, bioeconomy, natural resources, agriculture and environment.

Policy Context

- European Green Deal
 - Common agricultural policy
 - EU Bioeconomy Strategy
 - European Data Strategy
 - Europe's Digital Decade Policy Programme
 - AI innovation package
 - Joint communication on the EU Arctic policy
- Upcoming:
- European Ocean Pact
 - Vision for Agriculture and Food
 - European Life Science Strategy



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Call opening & closing dates – overview

CL6 WP 2025	Opening date	Call deadlines
Call 01 – single stage HORIZON-CL6-2025-01	6 May 2025	17 September 2025
Call 02 – single stage HORIZON-CL6-2025-02	6 May 2025	16 September 2025
Call 03 – single stage HORIZON-CL6-2025-03	6 May 2025	24 September 2025
Call 01 – two-stage HORIZON-CL6-2025-01-two-stage	6 May 2025	18 February 2026 (cut off first stage 4 September 2025)
Call 02 – two-stage HORIZON-CL6-2025-02-two stage	6 May 2025	18 February 2026 (cut off first stage 4 September 2025)



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NCP Network

Conferences and Meetings

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CBE JU Info Day 2025

The CBE JU Info Day 2025 will take place on Thursday, 3 April 2025, in the Charlemagne building, in Brussels, with ample face-to-face networking opportunities. The sessions will be also streamed online. The event will allow you to gain insights into the upcoming call for project proposals 2025 as...

03/04/2025



The Global Bioeconomy's Key Enabling Technologies | Conference & Exhibition

March 11 to 13, 2025

BIOKET: BIOeconomy Key Enabling Technologies

The conference aims to promote the production of high added value products across diverse sectors of the economy through sustainable practices and cutting-edge technologies.

11/03/2025 - 13/03/2025



European
Commission

Stakeholder consultation - Towards a Water Resilience Strategy for the EU

The European Commission will host a dedicated event to provide input on the upcoming European Water Resilience Strategy.

06/03/2025



Key elements that are usually included:

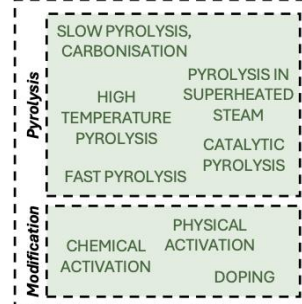
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- CONTACTS / LINKS TO WEBSITE
- TEAM
- ADVISORS
- ORGANIZATION NAME
- VALUE PROPOSITION IN ONE SENTENCE
- IDEA SUMMARY
- PROBLEM
- YOUR PRODUCT / SERVICE
- EXPERIENCE / MILESTONES
- IDEA ADVANTAGES



Research scope of the Thermochemical Process Group at the Latvian State Institute of Wood Chemistry

Different thermochemical processes produce a vast array of biomass-based products from wood, lignin and other raw materials. **LSIWC** is equipped with **laboratory and pilot scale equipment** for performing various pyrolysis processes, including, catalytic and over-heated steam promoted, as well as hydrothermal carbonisation. Additionally, **qualitative and quantitative characterisation** of the obtained products is ensured. These processes can be integrated in a cascade biorefinery, and, depending on the process conditions, they provide such products as **bio-char, nanostructured carbon materials and pyrolysis liquids (bio-oil)**, which are a source of **valuable chemicals** (anhydrosugars, such as, levoglucosan, levoglucosenone, aldehydes, organic acids and phenol derivatives). The obtained carbon materials are also modified by **chemical or physical activation, and doping with nitrogen and metals**, to promote applications of biomass-based carbon materials for **catalysis**, as well as **energy conversion and storage**.

Thermochemical processes



Applications of biomass-based carbon materials:

- Electrochemical devices – batteries, fuel cells, supercapacitors
- Bio-electrodes for hydrolysis to obtain hydrogen
- Activated carbon as a sorbent
- Support for heterogeneous catalysts
- Soil amendment and carbon sequestration



We produce carbons on g/kg scale:

- Porous materials with $S_{BET} > 2000 \text{ m}^2/\text{g}$
 - Hard carbon materials
 - Biochar for multipurpose applications
- Benefits of biomass-based carbon include feedstock availability, low cost, renewability and environmental friendliness. Biomass-based precursors have a hierarchical structure, which also contributes to the formation of the necessary porosity. Carbons are multifunctional materials for sorption, ion-exchange, complexing, electrochemical and catalytic applications.

Liquid pyrolysis products as a source of green chemicals:

- Anhydrosugars – levoglucosan, levoglucosenone and others
- Aldehydes, incl., furan derivatives
- Organic acids, such as, levulinic acid
- Aromatic compounds (phenolic aldehydes and phenolcarboxylic acids, e.g., vanillin and vanillic acid)



Latvijas Zinātnes padome



DAUGAVPILS UNIVERSITY, LATVIA

Expertise offered: Dynamical systems, Chaos theory

University in a challenging geopolitical region in Baltic States
European values, smart & innovative society for a safe and secure place

since 1921
The New Nordic

ABOUT US: BROAD EXPERTISE IN DIFFERENT FIELDS

FACULTIES:
Social Sciences and Humanities
Natural Sciences and Healthcare

SERVICES:
Research and Business Center "REBUS"
Centre of Lifelong Education
UNESCO Chair

RESEARCH INSTITUTES:
Humanities and Social Sciences
Life Sciences and Technology

AGENCIES:
Institute of Aquatic Ecology
Medical College



Students >2200
 Staff > 300
 Partnerships > 150
 Projects > 300
 Publications >3000
 Patents 7

OUR ONGOING HORIZON EUROPE PROJECTS



CLIVIE:
The Cultural Literacies' Value in Europe

GUIDEPREP:
Growing Up in Digital Europe Preparatory Phase

WHY US? EXPERTISE: DYNAMICAL SYSTEMS, CHAOS THEORY

Since over a decade, our interests lie in the mathematical modeling of network processes demonstrating complex dynamics. Chaos phenomena, attractors and processes of formation of structures in phase-space of systems of equations are at the center of our research. Of special interest are studies leading to the development of concrete methods and devices used to solve relevant tasks. **We applied chaos theory e.g., for genetic systems, neural networks and artificial neural networks.**

Profiles of researchers:

Prof. Felix Sadyrbaev, ORCID [0000-0001-5074-804X](https://orcid.org/0000-0001-5074-804X)
Dr. math., researcher Inna Samuilika, ORCID [0000-0002-8892-5715](https://orcid.org/0000-0002-8892-5715)

LOOKING FOR PARTNERS AND COLLABORATIONS

We are looking for R&D project coordinators and co-authors from academia interested to generate new ideas together in a multidisciplinary environment.

CONTACT US

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Latvian Council
of Science

Key Conferences and Meetings

10-14 February: EC/ESA BioSpace25 international conference, Frascati, Italy

25-27 February: Resumed meetings of the Conference of the Parties to the Convention on Biological Diversity, Rome, Italy

3-7 March: 3rd Mission Ocean and Waters Annual Forum, part of the European Ocean Days, Brussels, Belgium

6 March: Stakeholder consultation "Towards a Water Resilience Strategy for the EU", Brussels, Belgium

29-30 April: EU CAP Network Brokerage Event, Prague, Czechia

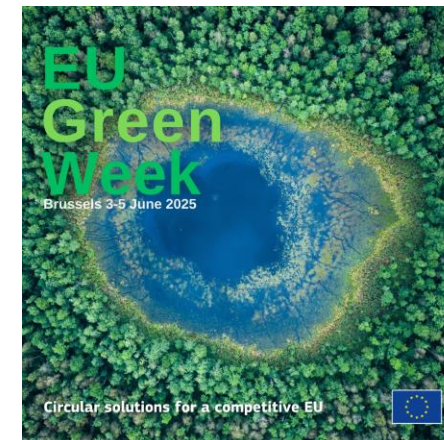
3-5 June: EU Green Week 2025 - Circular solutions for a competitive Europe, Brussels, Belgium

10 June: SCAR Plenary meeting, Warsaw, Poland



Towards a Water Resilience Strategy for the European Union

High-level stakeholder roundtable





Latvian Council
of Science

Circular Bio-based Europe Joint Undertaking

Mission & Objectives

- Accelerate the **transition to a sustainable bio-based economy**
- Support **innovation** in bio-based industries
- Enhance **European competitiveness**
- Promote **sustainability** and **circularity**
- **Key Focus Areas**
 - ✓ Development of **innovative bio-based solutions**
 - ✓ Strengthening **sustainable supply chains**
 - ✓ Boosting **investment in bio-based technologies**
 - ✓ Reducing **fossil-based dependency**

The CBE JU 2025 call for project proposals is scheduled **to open on 4 April 2025**, with a budget of €165 million.

🔗 **More info:** www.cbe.europa.eu



**Circular
Bio-based
Europe**
Joint Undertaking





CBE JU Info Day 2025

Hybrid

Dates

3 April 2025 (Brussels time)

Location

Brussels, Belgium

Organiser

CBE JU

Circular Bio-based Europe JU Info day 2025

7 March, online

Register now!

Organized by Latvia, Lithuania, and Estonia

Who Should Attend?

This webinar is ideal for representatives from industries, the industrial biotechnologies sector, SMEs, start-ups, researchers, scientists, non-governmental organisations, and anyone interested in circular bio-based solutions.

Registration:

[Registration](#) is required and will be open until **5th March 2025**.