



Horizon Europe Brokerage Event
Cluster 6 Calls 2025

Warsaw , 27 May 2025

INDECO & REBORN

Tracking Progress, Restoring Nature

– Integrated Solutions for a Sustainable Bioeconomy –

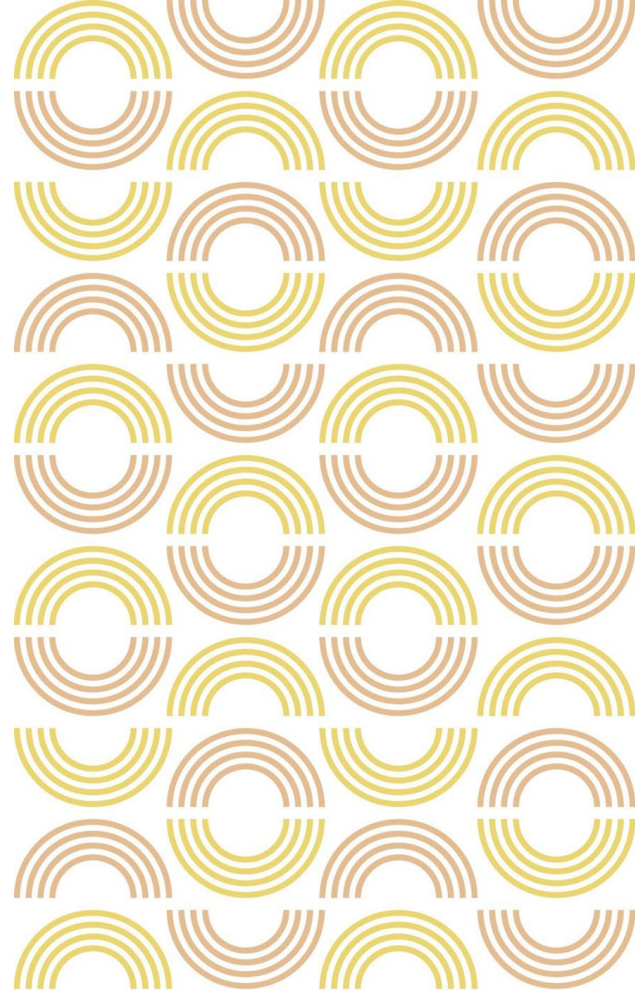
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Topics addressed :

- HORIZON -CL6-2025-01-CIRCBIO -07: Demonstration, deployment and upscaling of circular systemic solutions in cities and regions (Circular Cities and Regions Initiative)
- HORIZON -CL6-2025-01-ZEROPOLLUTION -04: Towards a comprehensive European strategy to assess and monitor aquatic litter including plastic and microplastic pollution

Other topics of interest:

- HORIZON-CL6-2025-01-CIRCBIO -06: Indicators for the transition to sustainable and circular economy
- HORIZON-CL6-2025-01-CIRCBIO -09: Unleashing the potential and advancing the impact of digitalization/Artificial Intelligence in climate-neutral bio-based value chains
- HORIZON-CL6-2025-01-ZEROPOLLUTION-03: Environmental biotechnology applications in service of remediation of polluted ecosystems
- HORIZON-CL6-2025-01-ZEROPOLLUTION-05: Cumulative impacts of marine pollution on marine organisms and ecosystems
- HORIZON-CL6-2025-03-GOVERNANCE-04: Operationalisation of bioeconomy sustainability principles

INDECO – Integrated Indicators for Tracking and Enhancing the Circular Bioeconomy Transition

✦ Project Overview

| Challenge: | Need | Impact Gap | Our Solution |
|--|---|--|---|
| <p>▲ Current indicators focus on macroeconomic aggregates</p> <p>▲ Lack of tools to assess circularity at micro and meso levels</p> | <p>!Harmonised , multidimensional indicators</p> <p>!Tailored to the complexity of circular bioeconomy value chains</p> | <p>Existing frameworks ≠ suitable for</p> <ul style="list-style-type: none"> • Local authorities • SMEs • Bio -based sectors | <p>✓ Develop robust indicators to guide decisions</p> <p>✓ Enable sustainability tracking at all levels</p> |

INDECO – Integrated Indicators for Tracking and Enhancing the Circular Bioeconomy Transition

□ Project Concept & Objectives

| Goal | Approach | Key Objectives | Consortium – partners with expertise in |
|---|---|--|---|
| <p>Develop, test & validate a lifecycle -based indicator framework for circular bioeconomy sectors:</p> <ul style="list-style-type: none"> 🌾 <i>Agriculture</i> 🌲 <i>Forestry</i> 🐟 <i>Fisheries</i> ♻️ <i>Biowaste</i> 🏭 <i>Biorefineries</i> □ <i>Bio-based products</i> | <ul style="list-style-type: none"> ✓ □ Co-creation with stakeholders ✓ □ Alignment with key EU policies: <ul style="list-style-type: none"> • European Green Deal • EU Bioeconomy Strategy • Circular Economy Action Plan | <ul style="list-style-type: none"> ⚡ Harmonised indicators for all governance levels ⚡ Evidence-based policymaking & business planning ⚡ Tracking of: <ul style="list-style-type: none"> ♻️ □ <i>Circularity</i> 🌍 <i>Sustainability</i> 💶 <i>Socioeconomic impacts</i> | <ul style="list-style-type: none"> • Circular bioeconomy policy and practice • Environmental and economic modelling • Regional development and stakeholder engagement • Data science, digital tools, and sustainability metrics |

REBORN – Remediation of Ecosystems through Regeneration of Nature-sited BIOTECHNOLOGY for the

✦ Project Overview

| Challenge: | Need | Impact Gap | Our Solution |
|---|--|--|--|
| <ul style="list-style-type: none"> ▲ Widespread ecosystem degradation (soil, water, sediment, groundwater) ▲ Pollution from chemicals, plastics, pharmaceuticals ▲ Climate-related stressors (floods, fires, droughts) | <ul style="list-style-type: none"> ! Scalable, sustainable solutions for remediation and regeneration ! Tools adaptable to both chronic pollution and emergency response | <ul style="list-style-type: none"> △□ Conventional remediation methods are limited, costly, and often unsustainable △□ Lack of integrated strategies combining biotech, nature-based approaches, and digital tools | <ul style="list-style-type: none"> ✓ Develop and deploy bio-based & nature-based solutions (Bb/ NbS) ✓ Integrate AI-driven tools for real-time monitoring and optimisation ✓ Collaborate with stakeholders for local adaptation and uptake |

REBORN – Remediation of Ecosystems through Regeneration of Naturesition

BIotechnology for the

Project Concept & Objectives

| Goal | Approach | Key Objectives | Consortium - partners with expertise in |
|---|---|---|--|
| <p>☞ To restore polluted ecosystems and strengthen their resilience using integrated biotechnology and nature-based innovation.</p> | <p>☐ Combine microbial biotechnologies, plant - based remediation, and AI-enabled digital platforms</p> <p>☐ Co-create solutions with public authorities, researchers, companies, and communities</p> <p>☐ Align with EU policies: Zero Pollution, Biodiversity Strategy, Nature Restoration Law</p> | <p>☞ Design and validate innovative Bb/NbS across different ecosystem types</p> <p>☞ Support emergency and long-term remediation planning</p> <p>☞ Quantify environmental, health, and socio-economic impacts</p> <p>☞ Enable policy integration and stakeholder adoption across Europe</p> | <p>☐ Environmental biotechnology and ecosystem remediation</p> <p>☞ Nature -based solutions for soil and water restoration</p> <p>☐ AI & digital tools for environmental monitoring and modelling</p> <p>☐ Sustainability assessment and impact evaluation (environmental, economic, social)</p> <p>☐ Policy integration and regional governance for Green Deal alignment</p> |

Main expertise offered

- **The expertise possessed by INCDSB** - extensive expertise in biotechnology, environmental science, and the circular bioeconomy // multidisciplinary team integrates biological research, www.incdsb.ro

Core Expertise Includes:

- ✓ Microbial biotechnology (e.g., microbial consortia, enzymatic solutions)
- ✓ Bio-based product development and circular bioprocesses
- ✓ Design and application of sustainability and circularity indicators
- ✓ Environmental monitoring (soil, water, biodiversity)
- ✓ Nature-based solutions for land and water remediation
- ✓ Molecular modeling and life cycle impact assessments

- **Involvement in previous/ongoing projects** in the area : <https://www.incdsb.ro/en/proiecte/>
- **Role in projects:** ☒ Open to act as **Coordinator** or **Key Scientific Partner** ☒ Lead tasks related to R&I, indicator development, biotechnological solutions, and impact evaluation



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Thank you for your attention!

Vă mulțumesc pentru atenție !

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