







EUROPEAN REGIONAL DEVELOPMENT FUND

BSR Bioeconomy Boosters

Project idea for Interreg BSR 2021-2027 Priority 1.1

Background to the proposal – Expectations of JAMK University of Applied Sciences





BioPaavo business accelerator

BioPaavo by jamk

Our aim is to accelerate the business development and growth of bioeconomy SME companies. Our operating model connects leading companies that offer new openings by presenting development needs with SMEs, as well as start-ups, researchers, and students, that are developing solutions to meet the development needs.

We strive to initiate and commercialize globally significant solutions for mitigation of climate change in international business context and to generate notable bioeconomy and carbon neutral based business growth throughout Finland.

The accelerator is run by the Institute of Bioeconomy, JAMK University of Applied Sciences. We operate in close co-operation with the Bioeconomy Campus and the expert teams of the Institute of Bioeconomy from JAMK University of Applied Sciences.





Digital Innovation Hub focusing on Smart Agriculture and Smart Bioeconomy

- The applied research team for smart farming is a multidisciplinary actor in Smart Farming (SF) and related digitalization. We aim to speed up smart farming innovations by concentrating our actions on the adoption phase of innovation.
- We offer a Living Lab situated in a rural setting with expertise in agriculture and agricultural education.
 We are harboring an exceptional pilot ecosystem including arable crops, forest, wetland, livestock, machinery, integration of remote, proximate and subsoil sensing, as well as other farming infrastructures and research facilities. The piloting opportunities are enhanced with the high-end expertise in applied cyber security, data analytics and machine learning, automation, and robotics.





Our expectations from BSR networking

- **Building our international network** to find expertise and solutions beyond Finland & have international teams to join our Hackathons and connect Finnish SMEs to solve also international challenges.
- **Building our operational model** to explore and apply tested practices for operating as a meeting point and innovation accelerator as well as to explore and benchmark sustainable funding models for accelerator activities.
- **Support regional bioeconomy development** to establish BSR co-operation initiates that help to build the bioeconomy innovation ecosystem of Central Finland to better respond to the needs of the SMEs in the region and to drive the green and digital transition in our region.
 - Smart Farming test-bed/living lab -> including the potential for Digital Forestry test-bed/living lab
 - Sustainable food system
 - Biogas ecosystem

https://keskisuomi.fi/wp-content/uploads/sites/3/2020/09/26043-Central Finland Strategic Choices.pdf https://keskisuomi.fi/en/strategic-choices-and-success-stories/smart-specialisation-strategy-for-central-finland/



Background to the proposal – Biobord Network Agendas





Biobord network

JAMK University of Applied Sciences, Regional Council of Central Finland Central Finland

Tretorget, Norwegian Wood Cluster, INN University of Applied Sciences Inland Region, Norway

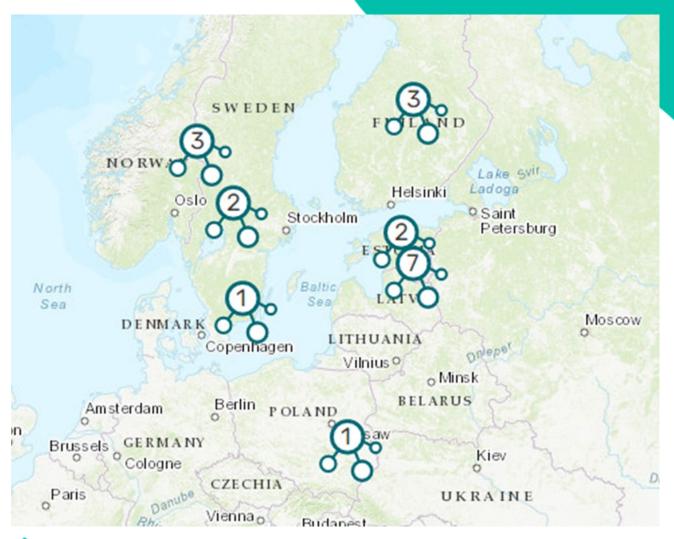
Vidzeme Planning Region, Institute of Environmental Solutions Vidzeme, Latvia

Pro Civis Świętokrzyskie, Poland

SEI Tallinn, Pärnu County Development Center Estonia

Krinova Incubator and Science Park, Skåne, Sweden

Paper Province Värmland, Sweden





From project co-operation to network co-operation

Mission to boost rural bioeconomy development—results: Joint Action Plans and a digital co-operation platform with joint operating model

RDI2CluB

Interreg BSR, smart specialization priority

PA Bioeconomy flagship

2017-2020

ConnectedByBiobord

Interreg BSR, smart specialization priority

PA Bioeconomy flagship

2020-2021

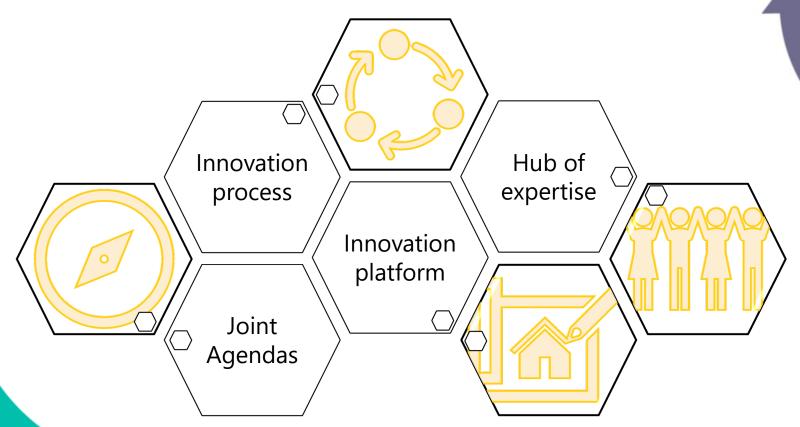
Biobord network agreement 2020-2025

(to be updated for 2022)

Inter-regional innovation cooperation pilots -results: Innovation process and Joint Agendas for future cooperation



Tools and benefits to Partners







Joint Agendas

Together we are stronger; A wider expertise and reference portfolio opens doors and facilitates partner searches



Digital Forestry

New technologies in wild-life monitoring

Sustainable Food System

Innovation cooperation



Project planning and preparation as a team effort;

resources, networks, new ideas, tested working methods, and support



Social capital – trust supports co-operation



Innovation platform BIOBORD.EU

- <u>Biobord Network map</u>
- <u>Biobord Services</u>
- Biobord News
- Results at <u>Resources</u> (for registered users)
- Forum <u>Biobord Forum</u>
 - Biobord user support
 - Open Biobord Forum
 - Biobord On Stage
 - Regional forums
 - Biobord network (closed)
 - Project-based closed co-working areas











CONTEXT OF THE PROPOSAL: Interreg BSR 2021-2027 funding call (expected to open in Nov 2021; closing in March 2022; projects would start in late 2022/JAN 2023)

PRIORITY 1.1: RESILIENT ECONOMIES AND COMMUNITIES





How to improve resilience?

Our approach to resilience emphasizes economic development that builds on sustainable use of locally sources bio-based resources, establishing value-chains and business networks on the BSR region to avoid reliance of global distribution chains as well as strengthening ability to challenge-driven innovation to improve the business sectors capacity to respond to changes in their operational environment.

Challenge-driven innovation capacity supporting business sector transition

BSR supply chains and business networks

Sustainable use of locally sourced biobased resources

Alleviating uneven territorial development

BSR innovation networks and cooperation



Responding to the Priority 1.1

Adapting smart specialization approaches to strengthen inter-regional co-operation and to drive green transition.

We aim to reach a level of co-operation where regions have established joint investment and co-operation agendas to support transition to bioeconomy through strong dialogue with business sector and an inter-regional value chain mapping.

Joint investment and co-operation agendas identify e.g., joint needs for RDI environments and facilities that can be shared, possibilities to leverage the RDI environments and facilities of other regions and possibilities to connect the RDI environments and facilities of two or more regions to provide a better innovation service for the business sector.

We are responding to the common challenge of how to effectively involve the business sector to the smart specialization dialogue. We are co-designing (planning, testing, and evaluating) approaches, such as a value-chain mapping and business-interest driven inter-regional Hackathon, to engage the business sector and to build the dialogue on smart specialization from the business perspective.



Building inter-regional S3 co-operation

Value –chain mapping on selected bioeconomy valuechains Tapping to arising opportunities with Hackathons

Business-researchpolicy dialogue in innovation camps Joint investment and co-operation agendas

Capacity building and groundwork for utilization of the Interregional Innovation Investments (I3) funding instrument



Responding to the Priority 1.1

Adjusting the circular bioeconomy innovation ecosystems to boost their capacity for innovation with interregional co-operation. We are connecting the regional innovation ecosystems through bridging the innovation events, hubs, and platforms of the regions. The inter-regional co-operation will allow a greater number of creative encounters in innovation processes as well as offer enhanced access to talent, expertise and RDI environments to solve the innovation challenges and support the transition to circular bioeconomy.

We are piloting models for enhancing the challenge-driven innovation activities with inter-regional connections and co-operation as well as new models for inter-regional co-operation between the regional innovation systems. These pilots include joint innovation events, inter-regional innovation calls and inter-regional matchmaking for innovation brokerage. Tested practices are applied in the Biobord network after the project.



Responding to the Priority 1.1

Increasing innovativeness of the region by building the capacity for innovation process as well as developing and improving the operational models of bioeconomy focused innovation acceleration. Innovation hubs are key players in driving the transition to a low-carbon and resource-efficient society and a sustainable economy. The innovation hubs will take part in a benchmarking tour to identify best practices that can help them to solve their operational challenges or to enhance their innovation processes. The innovation hubs will then pilot new practices with the support of inter-regional mentor from another innovation hub.

With the benchmarking actions and piloting, we strive to define the needed conditions and enabling policies as well as co-operation and operational models that are needed for effective acceleration of green transition in the regions. The gained insights are applied in regional and accelerator level as well as shared and disseminated to BSR and EU levels to boost the European green transition.



Connecting the innovation hubs accross the BSR

CO-LEARNING

Benchmarking activities and practices; testing and refining co-operation on Biobord platform

CO-DESIGN

Regional piloting of upgraded operating models and innovation processes with mentoring support

Joint piloting inter-regional innovation events, innovation calls and matchmaking

CO-EFFECTUATE

Sustainable application of workable models

Innovation hub's Operational model for supporting green transition

Inter-regional co-operation model



Boosting the impact

VISUALISATION OF INTER-REGIONAL VALUE-CHAINS

Showcasing the value-chain maps as interactive videos

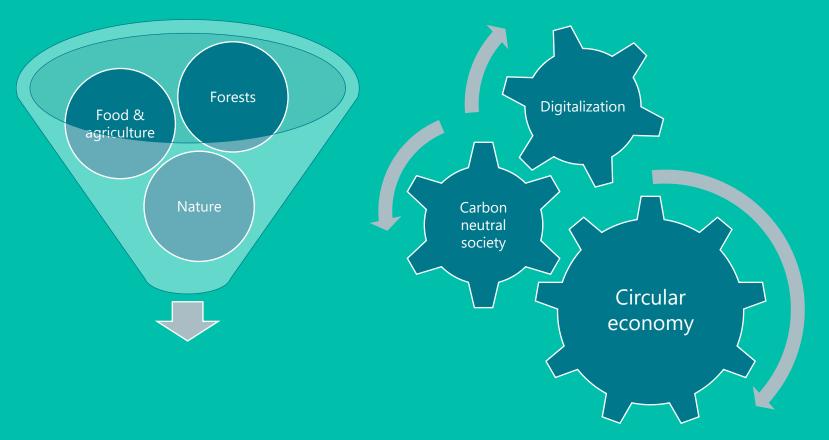
BSR NETWORK STORY

Creating an impact platform to showcase the societal impact of the challengedriven innovation activities and bioeconomy RDI environments and innovation hubs

IMPACT STORIES ON CB INNOVATION

Showcasing the sustainability impact of innovations accross the BSR. Innovation cases highlighted come from piloting actions and events of innovation hubs.





Thematic focus within Bioeconomy?



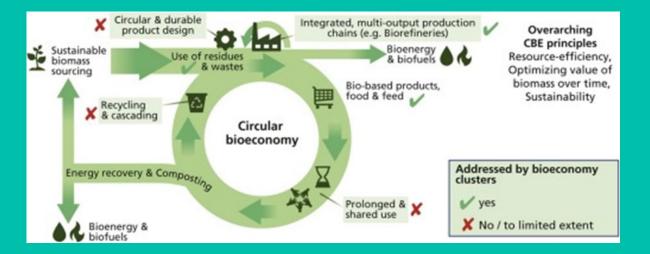


Circular bioeconomy

- Valorization of side streams
- Optimizing the value of biobased products (e.g. local food)
- Multi-output production chains
- Alternative biofuels



Circular bioeconomy offers many opportunities for addressing all aspects of sustainability from economic and social to environmental impacts. Our definition of circular bioeconomy focuses on the sustainable, resource-efficient valorization of biomass (e.g., in integrated, multi-output production chains such as in forest sector), making use of residues, waste and side streams (e.g., for energy recovery) as well as optimizing the value of bio-based products (e.g., added-value food production).





Digital bioeconomy

Boosting data collection, flow and application for data-based decision-making & business in

- Food system
- Forest bioeconomy
- Natural resources



- Applying data flow throughout the value chains to enable economic, social and environmental benefits, such as:
 - Responsible business and consumerism
 - Sustainable use of natural resources
 - Economic optimization for competitiveness
 - Carbon-neutral products and services
 - Biodiversity
 - Local branding



Beneficiaries

- Bioeconomy business sector, especially SMEs & start-ups
 - o Participation in Hackathons and international innovation events inter-regional connections and networks
 - Business sector innovation challenges solved in the piloting of innovation co-operation and innovation process upgrades
 - Access to necessary RDI environments and facilities to support innovation
- Bioeconomy innovation hubs (including accelerators, incubators, science parks, clusters and platforms that have operations related to challenge-driven innovation)
 - Improving operating models and innovation processes; piloting new practices with mentoring support
 - o Enhancing innovation processes and events with new practices and international connections, enhanced access to talent and expertise and ability to generate greater numbers of creative encounters
 - New opportunities created by co-operation with other regions wider networks to respond to the needs of the customers
- The actors of the regional innovation systems focusing on the bioeconomy (S3 strategy)
 - Inter-regional co-operation Joint investment and co-operation agendas to support the smart specialization strategy implementation



Building the Partnership – involved at this point

Central Finland (S3 in bioeconomy)

JAMK University of Applied Sciences

- BioPaavo Bioeconomy Accelerator
- Network secretary for Biobord
- Past projects: RDI2CluB, ConnectedByBiobord (PA Bioeconomy Flagships)

Discussions ongoing with: Regional Council of Central Finland

Pirkanmaa (S3 circular economy)

Baltic Institute of Finland

- PA Innovation for EUSBSR
- Past projects: Baltic Sea Region S3 Ecosystem Platform, BSR STARS S3

Discussions ongoing with:

TAMK Tampere University of Applied Sciences

Circular and Bioeconomy Actions

Business Tampere

• ECO3 accelerator - A bio and circular economy pioneer



Building the Partnership

- Innovation hubs with bioeconomy focus from regions with smart specialization focus in bioeconomy
 - Hubs— including accelerators, incubators, clusters, science and business parks, innovation hubs and business development agencies with challenge-driven innovation activities and processes.
 - Scope of partnership: at least 6 countries with at least 8 regions, approximately 12-15 partners with focus on the business sector representation and innovation hubs
- Regional 3-helix involvement is requested
 - Regional authorities and research institutes could join in as supportive partners and as associated partners



Join the planning!

Share with us:

- Regional strategy and innovation hub descriptions:
 - What are your best practices how does your innovation hub operate?
 - What are the special expertise areas and key networks of your innovation hub?
 - Your regional smart specialization strategy related to bioeconomy
- Needs and interests:
 - What practices or aspects of your operational model would you like to develop further?
 - What events or innovation processes of you would you like to boost with international connections?
 - What regional initiatives would you like to boost with international co-operation?
 - What is your main thematic interest? What thematic areas would you like to be involved in? (e.g. forest, food, energy)

Role:

- Would you be interested in a work package leader or group of activities leader role?
- Do you have experiences with a specific working method or activity that could be used in the project?
- What are the key triple helix actors and stakeholders that should be engaged from your region? What roles do you see for them in the project?
- Please share with us any references to projects, networks, or activities that could be used to boost the project impact.
- Who will be the contact persons to involve in the planning?

Next steps

- Updated project idea paper shared with interested potential partners by end of June 2021
- Potential partners provide the information listed in 'Join the planning' by September 10, 2021. -> consultation can be held one-one as short online meetings to answer any questions.
- Late September/early October, a joint meeting with the forming consortium to update the planning based on the provided information and to share roles and address gaps in the partnership













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