

# Promotion of circular economy initiatives in EUSBSR Policy Area Innovation

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# EUSBSR Policy Area Innovation

## Action 1: Challenge-driven innovation

Macroregional challenge-driven innovation policies and actions **aiming at fostering disruptive, breakthrough and market-shaping innovations to respond to the 21st century social, environmental, and economic grand challenges in the BSR** (e.g. climate change, resource efficiency, demographic change, pandemics, rapid urbanization, healthy living and aging, clean energy, inclusive societies, sustainable food and feed production and various environmental challenges of the Baltic Sea).

### Potential topics

- **Sector/S3 priority-specific S3/4 initiatives (e.g. on blue growth, circular economy/industrial symbiosis, health, industry 4.0, smart cities, low carbon energy) having the potential to solve BSR challenges, to generate new business, and to encourage the development of BSR value chains**
- **Promotion of stronger BSR value/supply chains that would be able to respond to future undesired external disruptions**
- **Methods and tools for the facilitation of the systemic change needed for green transition and sustainable and inclusive growth**
- **Initiatives on public procurement for innovation (challenge-based procurement)**

## Action 2: Digital innovation and transformation

**Digital transformation is a societal change in BSR. Emerging digital technologies** such as AI, VR/AR, blockchain, robotics and Internet of Things (IoT) are key tools to tackle societal challenges, facilitate new businesses, innovations, services and more sustainable, usable and vital living environments and infrastructures, and develop BSR innovation (e.g. smart city initiatives) and startup ecosystems.

### Potential topics

- **Real-Time Economy; Development of common standards for interoperable public and private solutions**
- **Joint development and implementation of Digital Innovation Hubs (DIHs)**
- **Digital, data-driven solutions for sustainable business and growth in BSR (promoting the twin transition in BSR), e.g. Digital transformation of (blue) bioeconomy /circular economy in BSR**

## EUSBSR Policy Area Innovation

### Action 3: Co-creative innovation

Ecosystems and platforms are emerging as key frameworks for economic and innovation activity also in BSR. **Transnational platforms and change agents are needed to connect Baltic Sea region innovation ecosystems** and having access to public, research and business groups, to engage them in the collaborative process of co-creation to bridge the existing knowledge, skills and market access gaps for SMEs. **Efficient transnational linkages and matching of end users, innovative firms and research partners** for team co-creation, and access to other resources such as knowledge and prototyping is a critical success factor for co-creation scale up and growth. Transnational linkages allow organisations to **tap into a larger base of ideas and technology, find complementary expertise and pool competencies** in order to overcome barriers, such as lack of management resources.

### Potential topics

**Co-creation as a horizontal theme / overarching approach to all EUSBSR PA INNO actions, it can be applied in any topic/project**

- **To scale up the use of co-creation among BSR SMEs** through improving their capabilities and absorptive capacities to efficiently turn market demand driven ideas into innovations
- **To connect innovation ecosystems across BSR** through developing and piloting systematic models and practices to engage BSR SMEs, researchers, test facilities and end users in co-creation activities
- **To facilitate the understanding and change of mindset among policy-makers** and SMEs to scale up practical co-creation activities in BSR and
- **To promote transnational cooperation and SMEs access to RDI infra**, and transnational exchange and joint development between Innovation Infrastructure Organisations and incubators.

# EUSBSR PA INNO and circular economy in EU 2014-2020



**Smart specialization in bio-, circular- and digital economy in the Baltic Sea region through business-research-public co-creation and innovation ecosystem management.**

**About the project**

BSR Stars S3 - Smart specialization through cross-sectoral bio-, circular- and digital economy ecosystems.

Lead partner: The Baltic Institute of Finland  
Web site: [www.bsr-stars.eu](http://www.bsr-stars.eu)

Duration: May 2016-April 2019

Total budget: EUR 2,8 Million

European Regional Development Fund: EUR 2,2 Million

Norwegian Funding: EUR 145 000



## Nordregio #01

POLICY BRIEF JAN 2019



### Industrial Symbiosis in the Baltic Sea Region

Current Practices and Guidelines for New Initiatives

Industrial symbiosis (IS) is vitally important in facilitating the move towards a circular economy by helping industries and businesses cooperate in the exchange of natural resources and production infrastructures. Strong public and private sector leadership and firm links between industry and research institutes are essential for the formulation of effective IS initiatives.

European Future  
Innovation System  
Centre

## High level value chain mapping in the Baltic Sea Region: Pilot exercise on circular bioeconomy

Elina Griniece, Alasdair Reid and Vladimir Cvijanović



**BSR S3 Ecosystem**

Brussels - June 2020



## EUSBSR PA INNO topics on Greener Europe (2021-2027)

- **Industrial symbiosis (IS)**, i.e. the transition move towards a circular economy by helping industries and businesses cooperate in the exchange of natural resources and production infrastructures
- **Circular bioeconomy (CBE)** - the circular economy is not complete without the bioeconomy and vice versa. The huge volumes of organic side and waste streams from agriculture, forestry, fishery, food and feed and organic process waste can only be integrated in the circular economy through bioeconomy processes, while the bioeconomy will hugely profit from increased circularity.
- **Blue economy**: sustainable use of the Baltic Sea resources, carefully combining ecosystem services and protection of the unique environment by realising blue bioeconomy concepts
- **Digital transformation** of, for example, IS, CBE and blue growth in BSR; including the establishment of more efficient and effective data and information generation and provision based on new ICT solutions

The above topics, as examples, present **game changing opportunities for BSR regions** – underlined by the recent policy developments at the EU level – the adoption of the European Green Deal, new Circular Economy Action Plan For a cleaner and more competitive Europe, EU Blue Bioeconomy Roadmap and Bioeconomy Strategy, the adoption of an EU Industrial Strategy, Digital Single Market, as well as **a high priority of Greener Europe topics in BSR S3s**

## EUSBSR Policy Area Innovation: Potential project topics in EU 2021-2027

- Sector/S3 priority-specific S3/4 initiatives (e.g. on blue growth, **circular economy/industrial symbiosis**, health, industry 4.0, smart cities, low carbon energy) having the potential to solve BSR challenges, to generate new business, and to encourage the development of BSR value chains
- Promotion of stronger BSR value/supply chains that would be able to respond to future undesired external disruptions
- Methods and tools for the facilitation of the systemic change needed for **green transition and sustainable and inclusive growth**, and transformation of business models
- Initiatives on public procurement for innovation (challenge-based procurement)
- Real-Time Economy; Development of common standards for interoperable public and private solutions (e.g. on smart green mobility and harmonising of mobility systems)
- Joint development and implementation of Digital Innovation Hubs (DIHs) (e.g. to promote **data-driven solutions and business models for sustainable industry**)
- Digital, data-driven solutions for sustainable business and growth in BSR (promoting the twin transition in BSR, e.g. **digital transformation of bio and circular economy in BSR**)

## EUSBSR PA INNO and smart specialisation

- In 2014-2021, **EUSBSR PA INNO has prioritised Smart Specialisation** to secure that innovation measures are designed to better meet the local and subregional level need of actions
- The same **regional/S3 focus continues in EU 2021-2027**, and is relevant in all three priority innovation actions/themes of the new EUSBSR Action Plan (2021): **Challenge-driven innovation; Digital Innovation and transformation; Co-creative innovation**
- Supported by EUSBSR PA INNO, **BSR sub-regions have been actively developing their S3** in line with the EU Green Deal and with increasing focus on interregional cooperation
- Various EUSBSR S3 projects have facilitated the **building of long-term strategic innovation cooperation** and partnerships that **can eventually lead to joint investments**, as well as provided insights and tools for regions to develop their smart specialization strategies for sustainability (S4), with **a strong focus on inclusive sustainability, green and digital transition**
- **Regions have an important role in strengthening the commitment of all actors in BSR innovation ecosystems**, including the business sector, to move forward with selected strategic direction with interregional cooperation





## BSR S3 Ecosystem

- The flagship EUSBSR PA INNO platform project on S3, 'BSR S3 Ecosystem' (Interreg Baltic Sea Region, 2018-2022) was aligning various EUSBSR S3 initiatives to better steer investments across BSR
- The platform was built on the experiences of Interreg BSR funded EUSBSR S3 projects LARS, **BSR Stars S3**, Smart-up BSR and GoSmart BSR/ GoSmart&Excel BSR, as well as S34 Growth, **BIOREGIO**, ClusterFy and TraCS3, funded by Interreg Europe
- The key outputs from the project included a **first-stage value chain mapping exercise across key territories of the macro-region in the area of Circular Bioeconomy**; an associated guidance report to support BSR actors in undertaking value chain analysis; a good practice evidence report highlighting strengths and challenges in S3 interregional collaboration and regional approaches to the 'Entrepreneurial Discovery Process'
- Experiences and results of BSR S3 Ecosystem platform project, offer valuable tools and guidance for the effective and coordinated utilisation of EU 2021-2027 opportunities in BSR sub-regions, including utilisation of the new EU instrument for interregional innovation investments (I3)
- Recommendations and results of BSR S3 Ecosystem project, materialized as
  - '**BSR Innovation Hub**', as a source of strategic advice and support for the macro-region's innovation community, which also constitute a basis for the EUSBSR PA INNO's S3 agenda and actions from 2022 onwards, and as
  - related **BSR S3 Ecosystem based consortia/proposal selected to take part in the Partnership for Regional Innovation (PRI) Pilot Action** co-sponsored by the EC's Joint Research Centre and the EU Committee of the Regions





## The BSR S3 Ecosystem Innovation Hub: a test-case in building the EU's Innovation Valleys?

- **The European Commission's July 2022 Communication on the New Innovation Agenda** contains five Flagship actions to upgrade the EU's innovation performance, in the context of significant global challenges. One of these Flagships is dedicated to strengthening European Innovation Ecosystems by creating **regional innovation valleys**
- The learning and evidence from the BSR S3 Ecosystem project and the core objectives the BSR Partnership for Regional Innovation (PRI) pilot aim to facilitate the EUSBSR/MRS contribution the EU's new Innovation Valley architecture
  - **Exploring how S3 can be better aligned to SDG and Green Deal objectives**, providing new tools and upgrading capacity across BSR territories to realise these objectives
- Upgraded support and cooperation infrastructures are needed, including strategic connections to wider EU 'pathways' and 'valleys', **to join up efforts across EU value chains linked to twin transitions**
- **Cross macro-regional cooperation (linked to S3 alignment)** is very important opportunity and policy framework in this





# **EUSBSR**

## **EU STRATEGY FOR THE BALTIC SEA REGION**

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