

BERST - Final conference

October 14, 2015 - Brussels



ERRIN European Regions
Research and Innovation Network

 **BERST**
Building Regional BioEconomies



80 participants



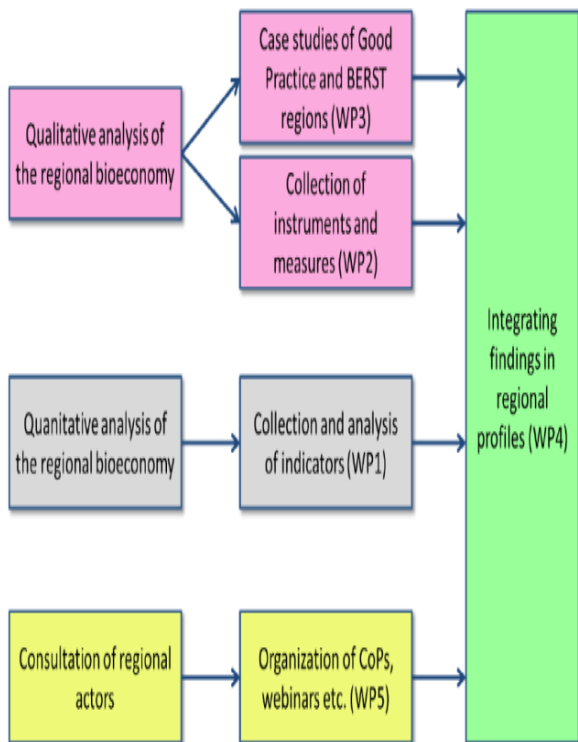
AIM

Get in touch with BERST Bioregions
Learn about tools to build bioeconomies
Be updated about news on bioeconomy development

BERST – Products

From concepts to toolkit

BERST approach of the analysis of bioeconomy clusters



Enabling factors for bioeconomy clusters

- active actors organize the cluster as a bottom-up process and keep it moving by intensive networking;
- the presence of a cluster board that takes care of the organization of the cluster and communication;
- the cluster makes use of the strong points of the region;
- the cluster starts with activities in one economic sector;
- first, the cluster is mainly supported by public funds; later private funds become also available;
- biomass resources may originate from both local and external supply.

Barriers to bioeconomy clusters development

- lack of active participation of entrepreneurs in the cluster;
- lack of an innovation culture among entrepreneurs;
- lack of cooperation and trust among firms and R&D institutes;
- bioeconomy clusters that are set up as a politically-led top-down initiative in an environment of entrepreneurs and R&D institutes which are not convinced of its usefulness and who show a low sense of ownership of the cluster;
- difficulties in biomass supply, such as varying quality, fluctuations in the supply, the collection of the supply from a large number of suppliers, and competition with other users of biomass resources.

Bioeconomy readiness check <http://berst.databank.nl>



■ much lower ($z < -1$) than national ■ some ($-0.2 < z < 0.2$) as national ■ much higher ($z > 1$) than national
 ■ lower ($-1 < z < -0.2$) than national ■ higher ($0.2 < z < 1$) than national

Figure 3. Bioeconomy readiness for Central Finland in 2013 compared to Finland



■ much lower ($z < -1$) than national ■ some ($-0.2 < z < 0.2$) as national ■ much higher ($z > 1$) than national ■ Unknown
 ■ lower ($-1 < z < -0.2$) than national ■ higher ($0.2 < z < 1$) than national

Figure 4. Bioeconomy readiness for Straubing in 2013 compared to Germany



■ much lower ($z < -1$) than national ■ some ($-0.2 < z < 0.2$) as national ■ much higher ($z > 1$) than national ■ Unknown
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Figure 5. Bioeconomy readiness for Western Macedonia in 2013 compared to Greece



■ much lower ($z < -1$) than national ■ some ($-0.2 < z < 0.2$) as national ■ much higher ($z > 1$) than national
 ■ lower ($-1 < z < -0.2$) than national ■ higher ($0.2 < z < 1$) than national

Figure 6. Bioeconomy readiness for Madrid 2013 compared to Spain

BERST – Products

From concepts to toolkit

BERST - Catalogue of Instruments & Measures

About General search Search by Objective Search by Criteria Case Studies Good Practices

Search Instruments & Measures by information fields

Search here in a targeted way for Instruments & Measures that foster the development of regional set of differentiating information fields. For each Instrument & Measure a detailed factsheet will be provided.



Short name of Instrument or Measure	ISO	Country/Region	Type of Instrument or Measure
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How to use the Catalogue?

- To provide an On-line Catalogue allowing stakeholders to search in a targeted way for Instruments & Measures enabling regional bioeconomy development;
- To support stakeholders to develop their own strategies & business plans, and to learn from and get inspired by other regions.

The Catalogue as an open community

To complete the Catalogue as much as possible an open community strategy was chosen. After a simple log-in you can freely add Instruments & Measures from your own region/country. After a quality check these will be published in the Catalogue.

**BIOBASED
TUESDAY**

🕒 - 14:30 - 15:30 CET -



Webinars

Sharing lessons learned

Field visits

Activities of Bioregions Network

BERST – Needs on further bioeconomy development



Topics to monitor:

Bioeconomy sectors and ...

- increasing populations that must be fed;
- depletion of natural resources;
- impacts of ever increasing environmental pressures;
- climate change.

Bioeconomy Information System Observatory (BISO)
is closing data gaps on bioeconomy

DataM: biomass estimates database

ASBIO study: provision of data and analysis on biomass supply and demand by JRC;
mandate given by all Commission DGs with interest in bioeconomy.

Study of the EU biobased industry

survey to identify main drivers and barriers affecting the development of biobased products within the EU and to benchmark EU's biobased industry against the biobased industries in key competitor regions

Speakers

1. Saana Alaranta – (Errin – biobased working group) talked about strategic activities of ERRIN to support the bioeconomy development.

2. Manuel Gomes Barbero (from JRC-IPTS in Seville) talked about the data needs to measure and monitor the bioeconomy, and about the efforts of the Commission to close data gaps.

3. Christophe Luguel (from the 'Industries & Agro-Ressources' (IAR) biocluster in France) gave insight in how this cluster has developed into Good Practice biocluster

4. Lambert van Nistelrooij (Member of the European Parliament) spoke about bioeconomy strategies

Inventories on

- Different use and products of biomass
- Locations of bioeconomy activities
- Comparison between bioeconomy investments in EU vs USA
- Different phases of bioeconomy development: research, pilot, demo, commercial activities

BERST – Needs on further bioeconomy development

ERRIN Bioeconomy WG activities 2015

- **RIS3 Bioeconomy mapping**
 - State of play in regions
 - Activities for the working group
 - Policy influencing
 - Project Development
 - Matchmaking regions with complementing priorities



**BERST tools are in line with
ERRIN bioeconomy working
group activities**

BERST – Needs on further bioeconomy development

MISSION: connect the different actors of the bioeconomy chains in order to develop long-term collaborations

IAR is a competitiveness Cluster:

- a network of companies, education centres, public and private R&D units, on an identified territory;
- to support innovation by developing products and technologies, partnerships and creating a favourable environment for innovation;
- on a given topic: biomass valorisation within the Biorefinery concept.



Building the EU bioeconomy takes time

- Network development (3 years)
- R&D (3 years)
- Business development (3 years)

The EU Bio-Based Economy

Hurdles to unlock the potential

Bring all actors / sectors together to **build** new biobased value chains

Invest in R&D, pilot, **demonstration** and first **industrial** units

Create a favourable policy environment for **market deployment**



Source: Biobased Industries Consortium

The EU is supporting bioeconomy innovations by:

- **Biobased Industries**
- **RIS3**
- **ESIF**

The EU wants to increase the use of these innovation instruments by regions.

BERST – Bioregions



jamk.fi

The bioeconomy cluster in Keski-Suomi started in 1992 as a cooperation of R&D institutes, the Regional Council of Central Finland and entrepreneurs. The cluster aims at valorizing the forest biomass resources, especially in the bioenergy sector. Recently the focus has changed towards industrial symbiosis, in particular with the pulp and paper industry.

The Straubing-based cluster “Renewable Raw Materials” was initiated in 2009 as a politically-led top-down initiative. The cluster is managed by the BioCampus Straubing GmbH, which closely works together with the state-run Competence Centre for Renewable Raw Materials in Straubing. As a flagship activity, a lignocellulosic ethanol demoplant has been built on the BioCampus in the Straubing port area in 2012 by Clariant. The cluster is located in an agriculture and forestry-rich region and there is a direct inland waterway access via the Danube port. The cluster aims to transform biomass resources into competitive biobased products in the energy and chemical sectors.



Straubing-Sand

BioCampus



The Westland region is a main centre of greenhouse horticulture. The municipality of Westland took the initiative to start a bioeconomy cluster in 2013 with the intention to use residue materials from greenhouse horticulture and to grow new crops with valuable ingredients. At the moment, the municipality is exploring the perspectives of a wide range of biobased products with high value added.



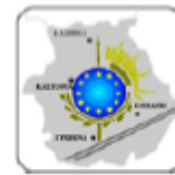
BERST – Bioregions



Biobased Delta was set up as an informal collaboration of the provinces of Zeeland and North Brabant in 2010; the province of South Holland joined in 2014. The three provinces covered by Biobased Delta combine a strong agricultural sector, a large and innovative agro-food industry, a large chemical industry and extensive well-developed infrastructure, including deep sea harbours. Given these favourable conditions, new bioeconomy and biobased activities do and will emerge in the region.



The bioeconomy cluster Bioenergy and Environment of Western Macedonia (CluBE) was established in 2014 as a non-profit company by 21 Triple Helix members from the public sector, R&D institutes and the private sector. It builds upon an informal collaboration of regional players in projects on bioenergy. The focus of the cluster is on R&D and energy. It is foreseen that in 2016 its members will increase to 40, mainly with the addition of SMEs.



HELLENIC REPUBLIC
REGION OF WESTERN MACEDONIA
REGIONAL DEVELOPMENT FUND



CERTH
CENTRE FOR
RESEARCH & TECHNOLOGY
HELLAS



CPERI
Chemical
Process and
Energy
Resources
Institute



PARQUE
CIENTÍFICO
DE MADRID

In 2007, Madrid Regional Government promoted the incorporation of eleven cluster associations for those economic sectors identified as strategic for the Region. The aim of the clusters is to improve competitiveness of the economy of Madrid. The Biotechnology Cluster and the Renewable Energy and Sustainability Cluster are closely related to the bioeconomy. From the start of the clusters, all significant regional agents such as policymakers, knowledge providers, technology generators and entrepreneurs have been involved in the day-to-day activities.



Madrid
Network

MADRID
BIOCLUSTER



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The case of the PoliMat Center of Excellence is indicative for discussing the potentials of bioeconomy clusters in Slovenia, both regionally and nationally.

CE PoliMat was established in 2009, following a successful bid for EU funding (ERDF). Its mission is to transform research excellence in polymer technology (in particular bio-polymers) into products and services in high-tech niche markets. CE PoliMat gathers the leading national teams from four public research institutions, and sixteen private firms, including the leading firms in the chemicals & polymers sector.



BERST consortium



Myrna van Leeuwen, project manager BERST summarizes main results:

- 1. Insight in enabling factors and barriers of bioeconomy clusters in EU regions;**
- 2. Identification and collection of quantitative indicators for analysing the regional bioeconomy in the EU;**
- 3. A Network of Bioregions with approx. 200 members for exploring and sharing experiences on the development of regional bioeconomies in the EU;**
- 4. Recommendations for the further development of the bioeconomy cluster in the seven BERST regions.**