



01 THE CHALLENGE

Regional bioeconomy strategies

The 2018 Bioeconomy Strategy highlights the importance of **regional bioeconomy strategies**, rural renaissance and sustainable management of natural resources. As is shown in the Figure below dedicated bioeconomy strategies or other policy initiatives exist or are under development in many European countries and regions.



Norway, Finland, Latvia, Ireland, UK, Netherlands, Germany, Austria, France, Spain, Italy



Lithuania, Poland, Czech Republic, Slovakia, Croatia, Switzerland, Turkey



Sweden, Estonia, Denmark, Belgium, Hungary, Slovenia, Romania, Bulgaria

In addition, more than 50 regions have a bioeconomy-related strategy and almost all regions foresee bioeconomy research & innovation (R&I) in their R&I Smart Specialisation Strategy (R&IS3).

In particular in Central and Eastern Europe (CEE) as well as in South Europe there are many regions with a middle and low level of maturity in bioeconomy strategic planning and governance. To address this gap and to help building an innovation ecosystem boosting national and regional bioeconomies several CSA and INTERREG projects were, or are being, implemented. Two further initiatives that need mentioning are BIOEAST and the European Bioeconomy Forum.

The **BIOEAST Initiative** assists Central and Eastern European countries to implement their bioeconomy vision, strategies and Action Plans for 2030, offering support for a sustainable increase of biomass production and circular processing of the available biomass in rural areas.

The 2018 Bioeconomy Strategy supports the creation of a **European Bioeconomy Forum** of Member States, which will facilitate networking of Member States and regions, also capitalising on existing groups, to exchange knowledge and best practices, facilitate interaction and mutual learning, and enhance interregional cooperation.

02 HOW COORDINATION AND SUPPORT ACTIONS (CSAs) ADDRESS THE CHALLENGE

Relevant CSA projects include one or more the following activities, that all are building blocks to create an innovation ecosystem boosting regional bioeconomies:

- Benchmarking regional potential (actors, infrastructures, biomass feedstocks¹, etc.)
- Creation of regional networks and clusters
- Development of regional bioeconomy profiles, strategies, roadmaps and action plans

BERST developed regional bioeconomy profiles in seven regions across Europe. These profiles can be used as input for further steps in developing the regional bioeconomy cluster. They are included in the BERST database to serve as benchmark for other European regions that strive to develop their bioeconomy potential. The database comprises:

- Catalogue of criteria and indicators that describe regions in terms of their bioeconomy potential;
- Catalogue of good practices and case studies on bioeconomy that can be used as inspiration for the development of regional smart specialisation (RSS) strategies;
- Benchmark tool supporting regions implementing their bioeconomy potential.

BioSTEP aimed to promote a public dialogue on the goals of the bioeconomy and the steps needed to move towards a sustainable economy and lifestyle. BioSTEP identified case studies of both national and regional bioeconomy strategies. Based on the outcomes of public debates, the project also assisted two regions, in Italy and Bulgaria, formulating appropriate and effective programmes of measures to foster their regional bioeconomies.

The objective of **CASA** was a consolidated common agricultural and wider bioeconomy research agenda within the European Research Area (ERA), improving the alignment and interoperability of the respective national research programme(s). CASA used the Standing Committee of Agricultural Research (SCAR) and its various working groups as conduit.

The **CELEBIO** project aims at fostering the bioeconomy in six Member States (MS) through the development of fact-based **action plans** and the dissemination of information on the opportunities offered by BBI JU. The project creates a network of BBI Ambassadors to promote the uptake of innovative technologies in the field of bio-based products and energy, but also raises awareness on the opportunities that the valorisation of sustainable biomass resources offers.

POWER4BIO and **BE-RURAL** aim at empowering EU regions to maximise the use of their locally available biomass feedstock and supporting policy makers and other regional stakeholders to foster the transition to a bioeconomy era.

POWER4BIO will develop a catalogue of business model pathways to fully realise the bioeconomy potential of partner regions.

BE-RURAL aims to understand the potential of regional and local bio-based economies by supporting relevant actors in the participatory development of inclusive and balanced regional bioeconomy strategies and roadmaps. The project will build on the results and lessons learned in the BioSTEP project.

BIOEASTsUP supports the deployment of bioeconomy on national, macro-regional and EU levels. It addresses challenges related to national and regional strategy as well as to research and innovation. The overall objective is to support the BIOEAST initiative and Action Plan for transition of 11 CEE countries to a sustainable circular bioeconomy.

SHERPA aims to gather relevant knowledge and information towards future pertinent policies for EU rural areas. It will establish multi-actor platforms in 20 EU countries where citizens, stakeholders, policymakers and scientists meet in the development of strategic thinking and practical recommendations to be transferred to the national/regional level and EU level as input for the policy formulation.



¹ For details on work in various bioeconomy CSAs that specifically focused on feedstock availability please refer to the dedicated LIFT factsheet discussing Biomass availability, quality, supply and sustainability

Beyond Coordination and Support Actions (CSAs)

To encourage the less mature countries to participate in EU bioeconomy research projects and identify opportunities for expanding the bio-based industry, BIC commissioned **country-specific reports** in Poland, Portugal, Romania (published in 2018) and the Baltic States Estonia, Latvia and Lithuania (forthcoming).

In 2017, the EC funded study “**Mapping of EU Member States’ / regions’ Research and Innovation Plans & Strategies for Smart Specialisation (RIS3) on Bioeconomy**” described the intended priorities and activities of EU Member States (MS) and regions with regard to research and innovation (R&I) on bioeconomy.

To support policy development the 2018 EU Bioeconomy Strategy proposed a Policy Support Facility (PSF) that would serve as a platform for discussion of the challenges that Member States across Europe face in developing their dedicated national/regional bioeconomy strategies. The PSF could be used also by MS that have already developed their bioeconomy strategy to facilitate cooperation, mutual learning, innovation in addressing policy implementation and future monitoring and follow-up.

In 2019 the Standing Committee on Agricultural Research (SCAR) Bioeconomy Strategic Working Group (BSW), supported a series of workshops aiming to facilitate Member States and Associated Countries to develop national bioeconomy strategies in 11 CEE countries, Greece and Portugal.

The interregional co-operation programme, INTERREG Europe, provides a framework for exchanging experiences between regional and local bodies in different countries. Several INTERREG Europe projects target exchanging experiences in the field of bioeconomy policies, including:

- **SMARTPILOTS** with a focus on improving policies in support of shared pilot facilities to increase their impact on industrial biotech and the European bioeconomy. Main countries targeted: Belgium, Finland, Italy and The Netherlands.
- **BIOREGIO** with a focus on regional circular economy models and best available technologies for biological streams. Main countries targeted: Finland, France, Greece, Romania, Slovakia and Spain.
- **BIO4ECO** with a focus on sustainable regional bioenergy policies. Main countries targeted: Bulgaria, France, Italy, Latvia, Romania, Slovenia and Spain.
- **RD2CLUB** mission is to help rural areas in the Baltic Sea Region to reach their full potential in bioeconomy. It aims to achieve this through building capacity for transnational cooperation in innovation management and smart specialisation in bioeconomy. It makes use of the methods developed and results obtained in the earlier BERST project.
- **DANUBIOVALNET** with a focus to enhance the transformation from fossil-based economy towards an economy using renewable resources by creating Danube bio-based value-added networks.



03 MAIN OUTCOMES FROM THE COORDINATION AND SUPPORT ACTIONS (CSAs)

- Development of tools, instruments and approaches for benchmarking regional potentials, strategies, and roadmaps
- Establishing networks/clusters and facilitating regional stakeholders' engagement





04 GAPS TO BE ADDRESSED

- It is difficult to deploy the political strategies into Action Plans and Roadmaps.
- “Green” is perceived by society as something secondary after primary needs. Bioeconomy is not prioritised enough in policy agendas as potential solution to address other urgent priorities (economic growth, unemployment, pollution, climate change).
- Policies like the Common Agricultural Policy (CAP), tourism, rural and coastal development are not integrated. Several often-contradictory strategies may confuse stakeholders.
- Some countries have already made advancements in the bioeconomy but there is a need to better integrate circularity and sustainability in the bioeconomy political agendas.
- There is the need to have macro-regional specialisation as well as differentiation when designing policies, strategies and funding schemes.
- There is a lack of real collaboration involving all relevant stakeholders, including primary producers, different industries, end users, consumers as well as regional authorities.
- Mutual learning and knowledge sharing is not easy, because the stakeholders have different interests, languages, motivations and agendas.
- Supporting Infrastructures and Clusters facilitating mutual learning and sharing of good practices are needed. There is a lack of inter-regional and intra-regional mutual learning.

05 RECOMMENDATIONS

- Support regional and national policy makers **to develop strategic circular and sustainable bioeconomy** thinking and to facilitate their interaction with local stakeholders.
- Expand the **assessment of the potential of local resources** (“Bioeconomy Readiness Level”) and the identification of **new opportunities and exploitation routes** to other countries and regions.
- **Design smart specialisation strategies** based on the available local/regional resources and co-created with local stakeholders. Such bottom-up approach in the design of bioeconomy strategies **ensures correspondence to the regional needs, problems, resources and specificities.**
- **Prioritize bioeconomy in policy agenda** as potential solution to address other urgent challenges (rural renaissance, economic growth, unemployment, pollution, climate change). Design bioeconomy policies to support circularity and sustainability.
- Facilitate the deployment of the **political commitment** (strategies) into Action Plans (Contents) and **Roadmaps** (with roles definition for the implementation).
- The impact of Bioeconomy Strategies, Roadmaps and Action Plans as well as the trade-off effects should be **monitored to provide indications for periodic revisions** facilitating the development of local bioeconomy innovation ecosystems.
- **Facilitate the discussion among the projects and initiatives that support the bioeconomy innovation ecosystem**, like the above EU-funded CSA and INTERREG projects, the SCAR Bioeconomy Strategic Working Group (BSW), the States Representatives Group (SRG) of the Bio-based Industries Joint Undertaking (BBI JU), the ENRD Rural Bioeconomy initiative and other relevant stakeholders, to maximise the knowledge sharing and impact of their activities.
- Support macro-regional initiatives to promote **mutual learning, knowledge transfer, common understanding across regions and sectors** building on the extensive results of past and ongoing projects and initiatives.





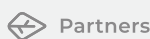
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COORDINATION AND SUPPORT ACTIONS (CSA) IN A NUTSHELL

Acronym/logo	Programme	Duration	Website
CELEBIO	BBI JU	Jun 2019 - May 2020	www.cei.int/events/celebio-kick-off-meeting
	FP7	Dec 2012 - Nov 2015	www.berst.eu
	H2020	Mar 2015 - Feb 2018	www.bio-step.eu
CASA	H2020	Sep 2016 - Aug 2019	www.scar-europe.org/index.php/home-scar/support-activities-to-scar
	H2020	Oct 2018 - Mar 2021	power4bio.e-p-c.de
	H2020	Apr 2019 - Mar 2022	be-rural.eu
	Interreg Europe	Apr 2016 - Mar 2020	www.interregeurope.eu/smartpilots
	Interreg Europe	Jan 2017 - Dec 2021	www.interregeurope.eu/bioregio
	Interreg Europe	Apr 2016 -Feb 2020	www.interregeurope.eu/bio4eco/
	Interreg B	Oct 2017 - Set 2020	http://www.rdi2club.eu/
	Interreg B	Jan 2017 - Jun 2019	www.interreg-danube.eu/approved-projects/danubiovalnet
	H2020	Oct 2019 - Sep 2022	https://bioeast.eu/bioeastsup/
SHERPA	H2020	Oct 2019 - Sep 2023	https://www.nordregio.org/research/the-sustainable-hub-to-engage-in-rural-policies-with-actors-sherpa

This factsheet has been developed by the LIFT project with the information collected from desk research and interviews to the Coordination and Support Actions or similar projects funded by European programmes such as FP7, H2020, BBIJU and Interreg.

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07 RESOURCES

Good practice guidelines for stakeholder and citizen participation in bioeconomy strategies. (December 2016) **BioSTEP project**
http://www.bio-step.eu/fileadmin/BioSTEP/Bio_documents/Barrier-free_BioSTEP_D3.3_Good_practice_guidelines.pdf



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