



REGIONAL BIOECONOMY

OPPORTUNITIES FOR COMPANIES AND THE REGION

We support the transformation to a
circular, biobased economy



Model region for sustainable bioeconomy
regional. innovative. circular.



Regional bioeconomy

ON THE WAY TO A CIRCULAR ECONOMY WITH BIOBASED RAW MATERIALS

What can the economy look like after the fossil fuel era? Regional bioeconomy is one of the answers to this question. Its hallmarks are value chains built on regionally available biobased raw materials and capabilities. The goal is a sustainable, biobased circular economy within the region.

RESOURCE TRANSITION IN THE RHENISH MINING REGION

The Rhenish mining region is at the forefront of the transformation to a bioeconomy. Due to the lignite phase-out, the region has adopted an economic and structural program („Wirtschafts- und Strukturprogramm“, WSP) that foresees an extensive withdrawal from fossil resources such as crude oil, natural gas and coal. For the regional economy of the future, non-fossile, biobased resources such as renewable raw materials, biological residues or biotechnological processes are to be used as a matter of priority – ideally via coupled recycling stages.

BUILDING ON REGIONAL STRENGTHS

BioökonomieREVIER ties in with the goals stated in the WSP. We are working on a rapid transfer of scientific innovations into commercially available products and processes. In doing so, we are building on existing strengths and potentials of our region: from a productive agriculture and food economy, a traditionally strong paper and packaging industry, the mechanical and plant engineering up to chemical, pharmaceutical and cosmetics companies.

A SYSTEMIC APPROACH TO BIOECONOMY

As a nucleus interlinking innovation of an entire region, bioeconomy offers opportunities for a successful transformation. This requires new cooperation and networking between companies, agriculture, science and society. Bioeconomy conceptually links parallel transition processes in the areas of food, raw materials and energy in the sense of a systemic regional development.



Leading by example

A MODEL REGION FOR THE BIOECONOMY IS EMERGING

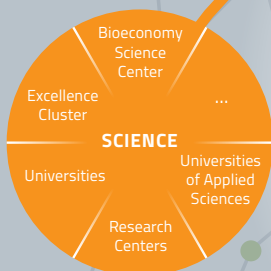
THE RHENISH MINING REGION AS A SHOWCASE

Fertile farmland, large recultivation areas, strong industrial sectors, cutting-edge research right on our doorstep – our region has unique preconditions for a biobased economy. We make these visible and use this potential for a regional transformation.

EUROPEAN INNOVATION REGION

The European Commission has recognized BioökonomieREVIER as a model initiative for implementing transformation in greenhouse gas intensive regions. Together with other regions in Europe, we are forming a network to mutually benefit from strengths. Here, the European Green Deal in terms of competitiveness and climate protection is to be shaped concretely with measures. Learn more here: www.Bio2Reg.eu.

FINANCE & INVESTMENT



REGION

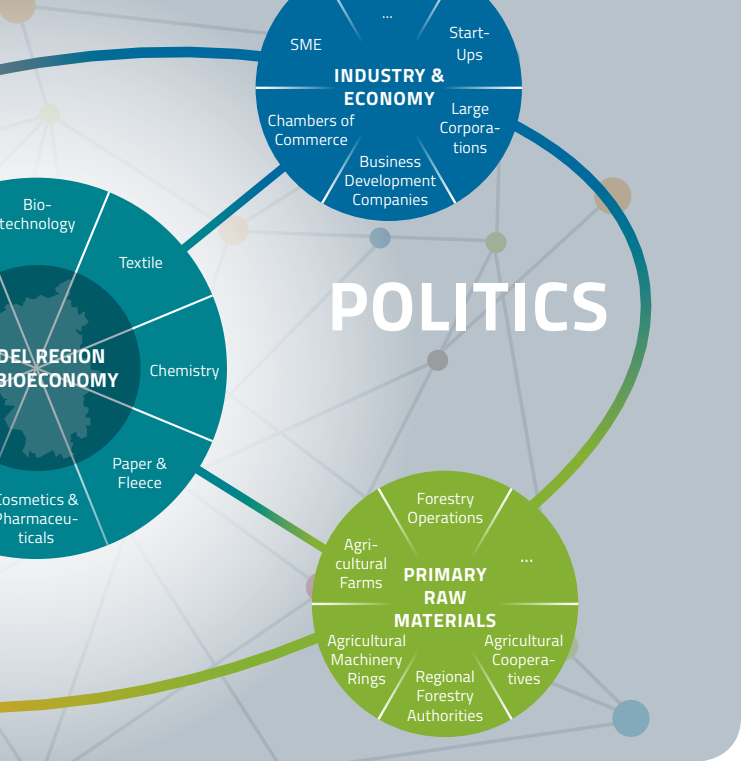
We connect YOUR BUSINESS WITH PARTNERS FOR THE FUTURE

The signs are pointing to change: As a global example, the model region for bioeconomy will serve as a global example to demonstrate the opportunities but also the requirements that result from the „biologization“ of industries by companies and agriculture.

In practice, biological resources, renewable raw materials and innovative deep-tech approaches are already being used to manufacture and defossilize products and services. The opportunities here range from natural fibers to biobased chemicals, to solutions for a sustainable agriculture, novel foods and functional materials.

With BioökonomieREVIER, we bring together what belongs together in terms of sustainability. For example, agriculture with the cosmetics industry, municipal waste water disposal with the chemical industry, or the food industry with paper production.

In the bioeconomy connections grow between industries that do not even exist today. This is your chance! Let's dare to take a look into the economy of tomorrow.



We coordinate THE REGIONAL TRANSITION

Building a bioeconomy is not easy. The profound change is a challenge for all of us. It requires a broad understanding of the interactions between society, technology, economy and ecology. BioökonomieREVIER works to increase the acceptance and appreciation of biobased business models and innovations.

- We further develop the regional innovation network.
- We make the green transition a collective concern and transfer knowledge from science to society.
- We are the main cooperation partner for local and regional actors in the Rhenish mining area.
- We inform and involve citizens and teach basic knowledge of the bioeconomy in schools.
- Together with partners, we work on the vocational training and professional development of tomorrow.

We support YOU IN PROMISING PROJECTS

The BioökonomieREVIER coordination office is driving forward the transition to a bioeconomy in the Rhenisch mining region in a practical and implementation-oriented manner. Precise matching of researchers and companies increases the chances of success of regional innovation partnerships and transfer projects.

The activation and networking of interested actors takes place along key topics and in cross-innovation processes. Promising product and service ideas reach application maturity via transition projects with subsequent qualification.

Examples of key topics are:

- Natural fiber-based industrial applications
- Plant-based ingredients for chemicals, pharmaceuticals and cosmetics
- Innovative food systems
- Upcycling of organic residues
- Demonstrators and practical plants
- Productive design of residual opencast mining areas with marginal soils



“BioökonomieREVIER pursues a multi-actor approach to initiate various projects that promote the implementation of a sustainable bioeconomy in the Rhenish Mining Region. Circularity and efficiency of resources are key guiding principles here.”

Prof. Ulrich Schurr, Director at the Institute of Plant Sciences at Forschungszentrum Jülich and Initiator of BioökonomieREVIER.

We provide impetus FOR PROFILE SITES AS LIGHTHOUSE PROJECTS OF THE BIOECONOMY

In the model region, the bioeconomy can be experienced on the ground. Regional pilot projects are concentrated at thematically oriented profile locations distributed throughout the Rhineland. Here, biobased value chains and sustainable economic cycles can be experienced in practice.

The focus of the respective profile locations derives from the environmental characteristics of the particular location, such as accessibility to technology, infrastructure, industries involved, logistics or municipal strengths.

SCIENCE FOR TRANSITION

The German Federal Ministry of Education and Research bundles its regional, bioeconomy-related transition projects in a consortium called „Bioeconomy research alliance for a model region in the Rhenish mining area“.

Economically promising research projects derived from the „Innovation Cluster BioökonomieREVIER“ are included here as well. In total, 14 interdisciplinary teams are working in three future fields:

- Innovative Agriculture
- Biotechnology and Plastics Technology
- Integrated Biorefinery

All of those projects have a good chance of accelerating transition in the Rhenish mining region. Other regions can also benefit from these results.

The accompanying economic research project “Bioökonomie-VVU Understanding, Connecting and Supporting the Bioeconomy”, coordinated by the RWTH Aachen University, investigates the conditions for a successful establishment of the model region and develops recommendations for action.

SPONSORED BY THE



Federal Ministry
of Education
and Research

BioökonomieREVIER – Your partner for green transition

The BioökonomieREVIER coordination office is driver of the green transformation and a central network partner in the Rhenish mining region. We advise companies, farmers and municipalities on the conversion from a fossil-based to a bio-based economy. Our goal: to jointly create new entrepreneurship and jobs for the post-lignite future.

OUR MISSION:

- Facilitate knowledge transfer in business, agriculture, education and society
- Advise and network companies and regional players
- Support and accompany cities and communities
- Raise regional innovation potential for a sustainable industrial bioeconomy
- Develop and implement transformation projects in partnership
- Informing the public and stakeholders

YOU WOULD LIKE TO PARTICIPATE?

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