

BIOECONOMY CONCEPT PAPER

POLAND



Mission

To develop a preliminary impact assessment and to set the framework for a national bioeconomy strategy and action plan development, aiming to generate a deeper discussion in Poland on the necessity of paradigm shift in economic thinking regarding the sustainable valorisation of biomass as renewable natural resources.



Strengths in bioeconomy

- Poland has a high potential in the production and use of waste biomass resources.
- Highly qualified scientific personnel. Agricultural and biological sciences as well as biochemistry, genetics and molecular biology are the most studied topics in Poland.
- High potential to implement innovations by sectors such agriculture, food, forestry, renewable energy.



Opportunities foreseen in bioeconomy

- Increasing level of implementation of solutions for biomass production and use.
- Increasing business expenditure in science, technology and innovation.
- Growing number of cooperation initiatives between science and policy makers – HUB, technology centres, clusters.



Strategic directions

To develop over-arching intersectoral bioeconomy appropriate strategic actions can be supported in three areas with regard to:

- **Market intervention:** introducing sustainability criteria for the national production system could help the deployment of bio-based products; the high added value products and related delivered ecosystem services should be promoted; special programs to be launched to support new business models and cooperation's in local/micro cluster partnerships.
- **Research, innovation and education:** research agenda as a functional part of the macro-region Strategic Research and Innovation Agenda (SRIA) with the most important elements for bioeconomy:
 - 1 increasing the agricultural productivity through sustainable intensification;
 - 2 cascading the use of agricultural and forest residues potential (increasing circularity) and the added value of biomass through innovative bio-products and technologies;
 - 3 new and modern bio-refinery technologies and products. Significantly strengthen the relationship between business and science and educational activities in the field of sustainability and climate change.
- **Governance and policy actions:**
 - 1 set up a Polish Bioeconomy Council to ensure long-term engagement at the national level to act as a catalyser for interministerial coordination;
 - 2 enforce the relationship between the main sub-sectors of bioeconomy and niche sectors in frame of bioeconomy strategy or action plan;
 - 3 evaluate and monitor policy adoption by appropriate indicators valid for different environmental policies, e.g. sustainability indicators (carbon footprint, water footprint, energy footprint), annual expenditure on education in individual departments/sectors, added value of products from bioeconomy sectors, number of newly created jobs.

Endorsement

The BIOEAST Initiative aims to build knowledge-based agriculture, forestry and aquaculture in the bioeconomy. For this reason, the BIOEASTsUP Horizon 2020 EU project was launched under the auspice of the macro-regional governmental initiative to support eleven countries in building up their own bioeconomy strategies and action plans.

