
EBU POSITION PAPER

The societal impact of European Bioeconomy University (EBU) - Knowledge transfer for the sustainability transformation

The current pandemic shows under a burning glass the vulnerability of 21st century societies as well as the urgent need to move on fast in the transformation towards sustainability. In this respect, the knowledge-based bioeconomy is highly relevant and is offering a large set of opportunities which support resilience and sustainability. In this transformation process the European Bioeconomy University (EBU) is a competence hub which brings together six leading European Universities in all fields of the bioeconomy and jointly pushes forward the interdisciplinary bioeconomy knowledge frontier. The six partners are: AgroParisTech (Paris Institute of Technology for Life, Food and Environmental Sciences), Alma Mater Studiorum - University of Bologna, University of Natural Resources and Life Sciences (BOKU) in Vienna, University of Hohenheim in Stuttgart, Wageningen University and Research, University of Eastern Finland in Joensuu.

Interactions between science and society are indispensable for safeguarding the relevance of and for successfully deploying scientific knowledge. To explore and exploit the promising opportunities of the European Bioeconomy faster and herewith accelerate the sustainability transformation, the EBU enables the following stakeholders and networks for an effective realization of university-society interactions:

- (i) Young university graduates with transdisciplinary innovation competences, which provide European companies and public authorities with bioeconomic knowledge,
- (ii) Pan-European networks of research and education institutions that leverage real European experts and solutions and diffuse technical and social innovation to all European regions,

(iii) University spin-offs, responsible for knowledge transfer into emerging start-ups and established industries in order to strengthen the maturation of knowledge from invention to innovation and to support the emergence of competitive European bioeconomy sectors,

(iv) European university-industry innovation networks, which discover new applications and push a creative search process for new solutions and address existing bottlenecks,

(v) Knowledge exchange with consumer associations to guidepost the search process and to support the relevance, the acceptance and the diffusion of European bioeconomy solutions complementary to the emergence of new lifestyles, and

(vi) Research-based policy consulting to discover promising areas of future research and to support intelligent policy decision making in Europe for mastering the underlying complexity of the transformation.

The EBU establishes a comprehensive competence centre experienced in university-society interactions which is crucial for creatively mastering the

transformation challenge. The EBU is prepared to cooperate with new and established firms, with industry associations and civil society organizations.

The variety of competences gathered within the EBU and the coverage of all fields of the knowledge-based bioeconomy offers the best prerequisites to generate synergies and cross-fertilization. Close contacts with bioeconomy users and policy makers provide a prolific environment to implement bioeconomy knowledge in a way that triggers mutual benefits in a future-oriented European society in accordance with the Green Deal. The knowledge-based bioeconomy is both, a stepping stone to entrepreneurship and a seedbed for Responsible Research and Innovation. EBU partners are fostering, among others, the following concrete activities to realize the above mentioned university-society interactions:

(i-ii) Training of university graduates, professionals and pan-European cooperation:

- ✓ Novel multidisciplinary degrees that train students with high-value profiles for the growth and development of the bioeconomy in Europe.

- ✓ Dual degree programs with European as well as international partners.
 - ✓ Innovative, international education services for life-long-learning fitted to the needs of companies and communities, including flexible education programs for professionals, conferences and workshops with companies, consumers, users, policy agencies about the most critical aspects of sustainability transformation, like innovation, business and governance models of bioeconomy.
 - ✓ Pan-European Doctoral training programs.
- (iii) Supporting the development of university spin-offs:
- ✓ Entrepreneurship training to spur the launch of path breaking business ideas.
- (iv) European university-industry innovation networks:
- ✓ Cooperative research with industry actors (e.g. Industry PhD projects, mutual use of research facilities, joint information campaigns).
- ✓ Hybrid multidisciplinary scientific research centres covering both fundamental and applied research, and having (semi)pilot-scale equipment.
- (v - vi) Exchange with consumer associations and research-based policy consulting:
- ✓ Conferences, workshops and citizen science activities with consumers, users, policy agencies, regulation and certification etc.
 - ✓ Knowledge briefs, think tank contributions and involvement in policy consulting bodies.
- The EBU is the knowledge platform aiming at fostering and shaping the various ideas in an emerging and multifaceted bioeconomy and combining scientific knowledge with innovative ideas from industries and civil society. Involving all stakeholders broadens the applications and increases chances for a fast and pervasive transformation towards higher degrees of sustainability.