

Towards a Danube bioeconomy RTI strategy for appropriate regional added value chains

Danube-INCO.NET, WP3, T3.3 Pilot Action

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Bratislava, 2016-11-30



Cornerstones of the Pilot Action

- **Objective:** supporting activities towards a bioeconomy RTI-strategy and a related research and innovation agenda for the Danube Region
- **Partners:** ZSI, BIOS Science Austria, BOKU, ICA-CASEE Network



Universität für Bodenkultur Wien



- **Project start:** January 1, 2016
- **Project duration:** 10 months
- **Funding:** 50.000 €



Activities in the Pilot Action

1. Development of a **position paper** on bioeconomy strategies in the Danube Region (Lead: BIOS Science Austria/BOKU)
2. Three strategy **workshops** (Lead: BIOS Science Austria/BOKU)
3. Danube-wide virtual stakeholder **consultation** to collect input to the research agenda (Lead: ZSI)

1. Position Paper: Bioeconomy for the Danube Region

- **Aim:**

- mapping of bioeconomy-related, national policy initiatives and strategies,
- discuss key challenges, further needs and requirements for developing bioeconomy RTI strategies
- identify relevant stakeholders to implement a bioeconomy RTI agenda in a multi-actor approach
- A basis for coming steps and processes

2. Three strategy Workshops

- **Workshop 1, 14 March 2016 in Vienna, Austria**
 - 16 participants from ICA CASEE network
 - share experiences, identify relevant stakeholders, discuss further needs and requirements for developing a bioeconomy RTI strategy for the Danube Region
- **Workshop 2, 24 May 2016 in Timisoara, Romania**
 - 19 participants from ICA CASEE network and Danube-INCO.NET
 - Draft position paper presented and discussed, information about and discussion of funding schemes and relevant bioeconomy research programmes
- **Workshop 3, 13 October 2016 in Vienna, Austria**
 - 22 participants from ICA CASEE network and Danube-INCO.NET
 - Presenting and discussing consultation and final position paper, discussing possible steps after the PA, coaching for research proposals

3. Online Consultation (I)

- platform www.discuto.io
- open from 11 July till 19 September 2016
- 715 bioeconomy experts from the Danube Region were invited to comment on the paper, contacts were from
 - ICA CASEE network,
 - all participants from the triple Helix conference on biobased economy in July 2016 in Budapest,
 - and contacts from the Energy and Bioeconomy News Alert from the Danube-INCO.NET

3. Online Consultation (II)

- Response to the consultation
 - 49 contacts registered
 - 15 participants became active and contributed with 54 comments and 75 votes
 - Comments constructive, important, improvement of the position paper

Selected results: Bioeconomy strategies and related policies in the Danube Region

- Position paper gives an overview of bioeconomy related policies in Danube region countries
 - strategies explicitly addressing the bioeconomy
 - bioeconomy related strategies and policies
- Mapping of policies and strategies is non-exhaustive and covers only policies that have been mentioned in previous surveys, the Danube-INCO.NET workshops and the online consultation

Bioeconomy strategies and related policies in the Danube Region

Sector	Policies, strategies and action plans
Primary production (agriculture, forestry, fisheries and aquaculture)	Strategies addressing the renewable energy supply from the agricultural and forestry sector (10 examples from Germany, Austria, Bosnia H., Croatia, Romania, Serbia, Slovenia, Ukraine, Hungary, Slovenia)
Conversion technologies (bioenergy, biofuels, biotechnology, biorefineries)	Strategies for promoting biobased industries (e.g. biorefineries, biotechnology) (Germany, Austria, Croatia, Romania, Bulgaria, Bosnia H., Serbia, Ukraine) and renewable energies (Bosnia H., Croatia, Serbia, Bulgaria, Romania, Ukraine)
Research and Innovation	Dedicated bioeconomy RTI Strategies in Germany, Baden-Württemberg, Austria. More general science and research strategies in (Croatia, Serbia, Romania) The engagement of Universities in the ICA CASEE network
Environment (resource efficiency, sustainability, water use)	Strategies addressing: resource and energy efficiency, Sustainable Development, Climate Change Adaptation, Biodiversity and Environment Protection (7 examples from Austria, Germany, Croatia, Bosnia)
Cross-sectional	Strategies explicitly addressing the bioeconomy (Germany and Bavaria) and other strategies relating to technology Innovation, Rural Development, Sustainable Transport (9 examples from, Albania, Bosnia H., Croatia, Hungary, Czech Republic)

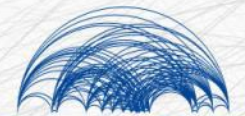
Priority fields of action

- The scientific partners identified the following priority areas for developing RTI strategies:
 - mapping the sustainable biomass potential of the region
 - analyse the impacts on the climate, agriculture, soil fertility, biodiversity, water use and sustainability
 - development of harvest and storage machinery that allows the sustainable offtake of crop residues and preserves soil fertility
 - optimize feedstock transport logistics (e.g. biomass transport on the Danube River)
 - comparing and assessing the techno-economic efficiency of different technological options (e.g. bioenergy and novel biorefinery systems)
 - risk management associated with climate change
 - involve social sciences to address the acceptance of novel technologies, consumer preferences and behavioural changes for developing a sustainable low carbon economy

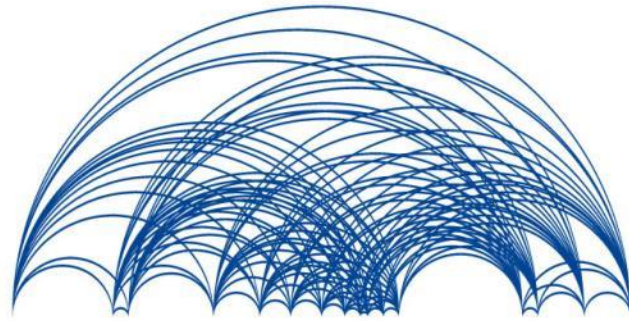
Recommendations

- Initiate new and use existing networks and programmes to strengthen the cross-border collaboration, dialogue and knowledge sharing between science, industry and society in the Danube region
- Develop institutional framework conditions and international clusters on specific priorities to foster the participation in European and international research programmes
- Make optimal use of research funding opportunities to develop curricula and strengthen the profile of universities in the priority fields of the bioeconomy
- Raise awareness for the grand societal challenges and develop a common understanding of the bioeconomy to enable behavioural change and to create the political framework conditions for the transition to a sustainable bioeconomy

Thank you for your attention



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