

Bioeconomy Strategy in a global perspective

- Austria's Case -

- è The global perspective
 - Societal challenges
 - Bioeconomy – the worldwide overview à Central Europe
- è Framework *EU Strategy for the Danube Region*
- è Austrian Bioeconomy Strategy
 - Initiatives
 - Framework and realisation
- è (Case examples)

The global perspective: Societal challenges



| Global challenges | National challenges |
|---|--|
| <ul style="list-style-type: none"> • Dependency on fossil resources (but dwindling supply and market volatility) | |
| <ul style="list-style-type: none"> • Increasing demand for resources and energy | |
| | <ul style="list-style-type: none"> • Dependency on imports (commodities, energy,...) |
| <ul style="list-style-type: none"> • Ecological impacts effected by <ul style="list-style-type: none"> - Land consumption / soil degradation - Biodiversity loss - Water consumption and pollution - Waste arisings (plastic waste) | |
| <ul style="list-style-type: none"> • Climate change / greenhouse gas emissions | |
| <ul style="list-style-type: none"> • Demographic change and migration | |
| <ul style="list-style-type: none"> • Food supply of the growing world population | <ul style="list-style-type: none"> • Food safety / nutrition security • Guarantee of existing high standards |

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| <p style="text-align: center;">Implication of the economic crisis / labour market issues</p> | |

The global perspective: Bioeconomy – the worldwide overview



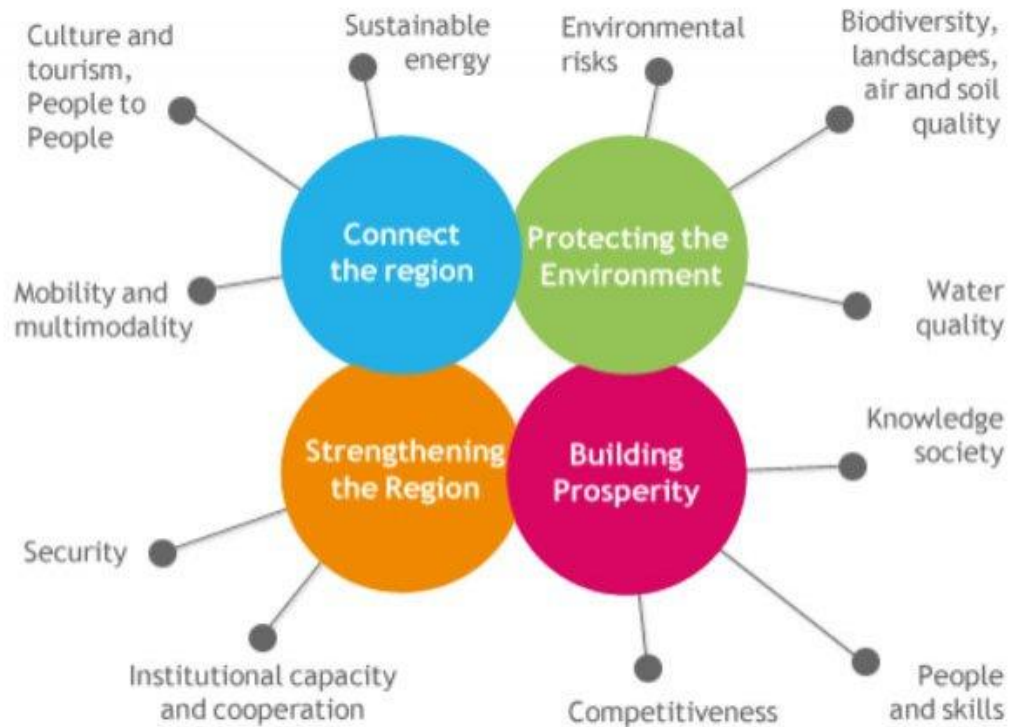
The global perspective: Bioeconomy – the worldwide overview → Situation in Central Europe



Framework: EU-Strategy for the Danube Region since 2010



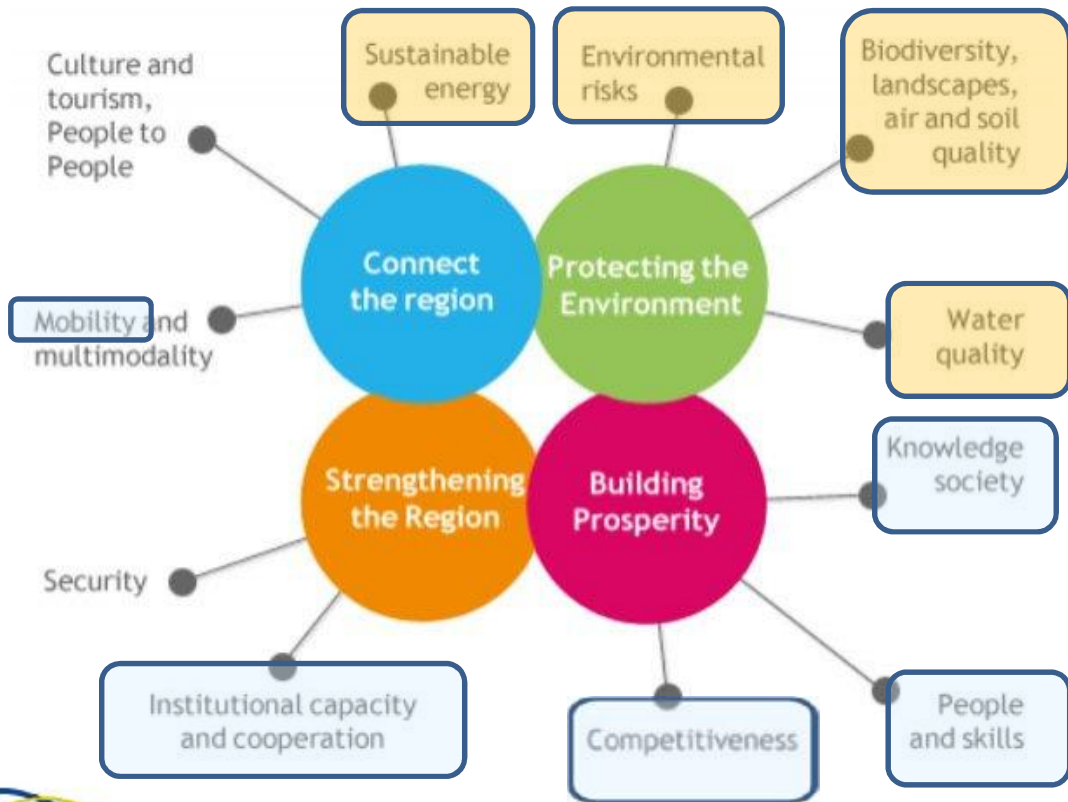
Action plan: 4 pillars, 11 Priority Areas (Implementation reports), Actions and projects



Framework: EU-Strategy for the Danube Region since 2010



Action plan: 4 pillars, 11 Priority Areas (Implementation reports), Actions and projects



What is related to bioeconomy issues?



Austrian Bioeconomy Strategy: Initial process



February 2013

Dr. Christian Paternmann highlights the importance of formulating national bioeconomy strategies at the public event "Science meets Business" (organized by BOKU)

November 2013

BIOS Science Austria and ÖVAF present their Bioeconomy Policy Paper

November 2013

The Austrian government acknowledges the importance of bioeconomy in its working programme

September 2014

Cooperation of BIOS/ÖVAF/ÖSF with interministerial RTI-Working Group 2 to work on a bioeconomy position paper for the RTI-Task Force

August 2015

European Forum Alpbach - Technology Symposium à Breakout Session "National Bioeconomy Strategies – a comparison"

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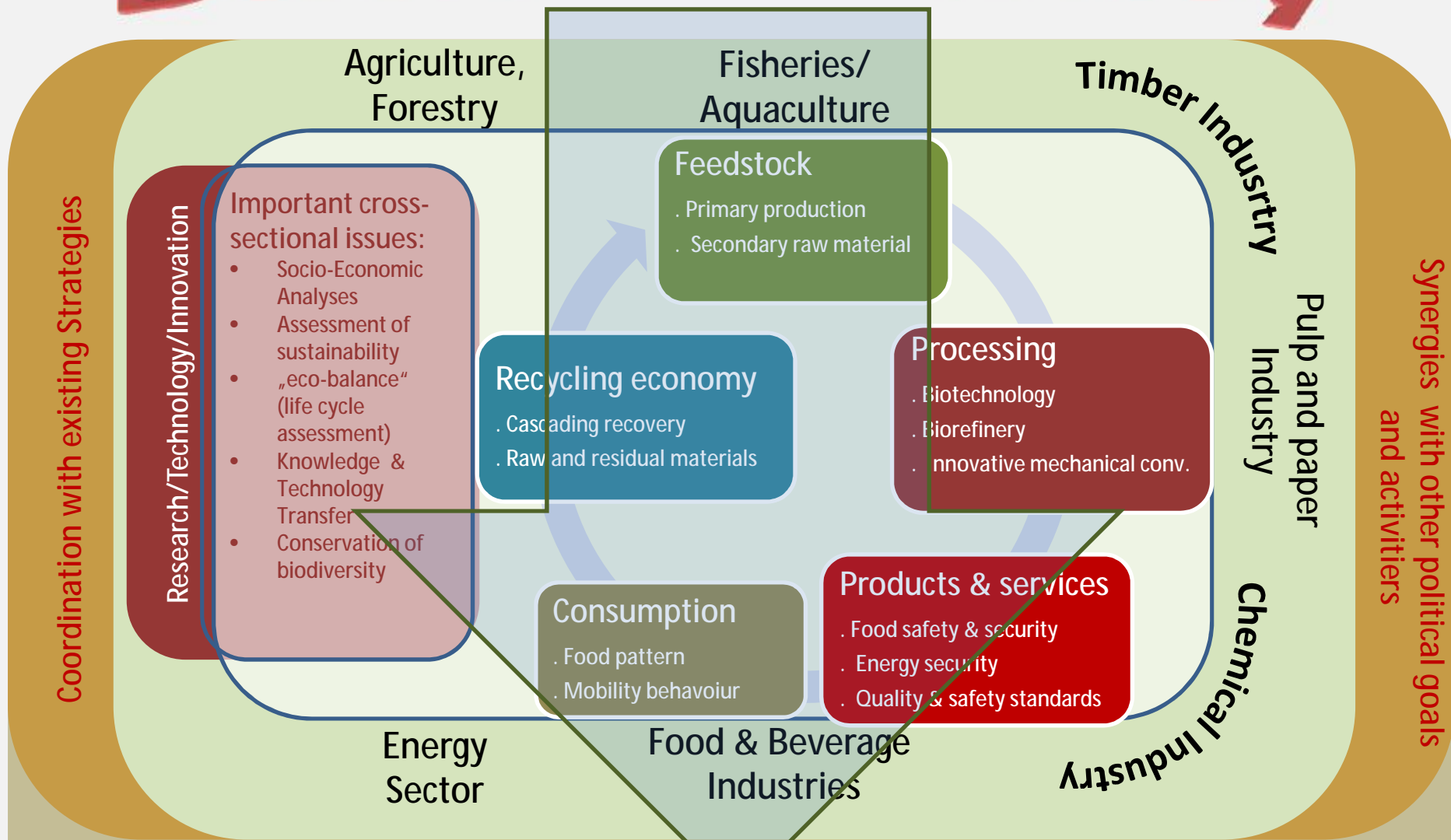
Political
Process &
Commit-
ments

2016

07.07.2015

Hubert Dürrstein
Vienna, Danube S3 Workshop

Bioeconomy



Coordination with existing Strategies

Research/Technology/Innovation

Important cross-sectional issues:

- Socio-Economic Analyses
- Assessment of sustainability
- „eco-balance“ (life cycle assessment)
- Knowledge & Technology Transfer
- Conservation of biodiversity

Recycling economy

- Cascading recovery
- Raw and residual materials

Feedstock

- Primary production
- Secondary raw material

Processing

- Biotechnology
- Biorefinery
- Innovative mechanical conv.

Products & services

- Food safety & security
- Energy security
- Quality & safety standards

Consumption

- Food pattern
- Mobility behaviour

Strategy



Action Plan

Sectoral Action Schedules

Synergies with other political goals and activitiers

Austrian Bioeconomy Strategy: Realisation



- Considering Austrian core competences (*à niche strategy*), e.g.:
 - Energy recovery of renewable resources
 - Water-management (integral approach)
 - value-added chain „wood“
 - Food technology and security
- Consistent implication of the RTI – strategy (thematic and institutional coordination)
- Coordination with existing national policies
 - Austrian Energy Strategy
 - Austrian Strategy for Sustainable Development
 - Energy Efficiency Act *à* Reduction of energy by 20 % up to 2020
- Considering the European context
 - EU Strategy for the Danube Region
 - Innovating for Sustainable Growth: A Bioeconomy for Europe
 - Benchmarks

Towards a Bioeconomy Strategy: Final keywords and messages



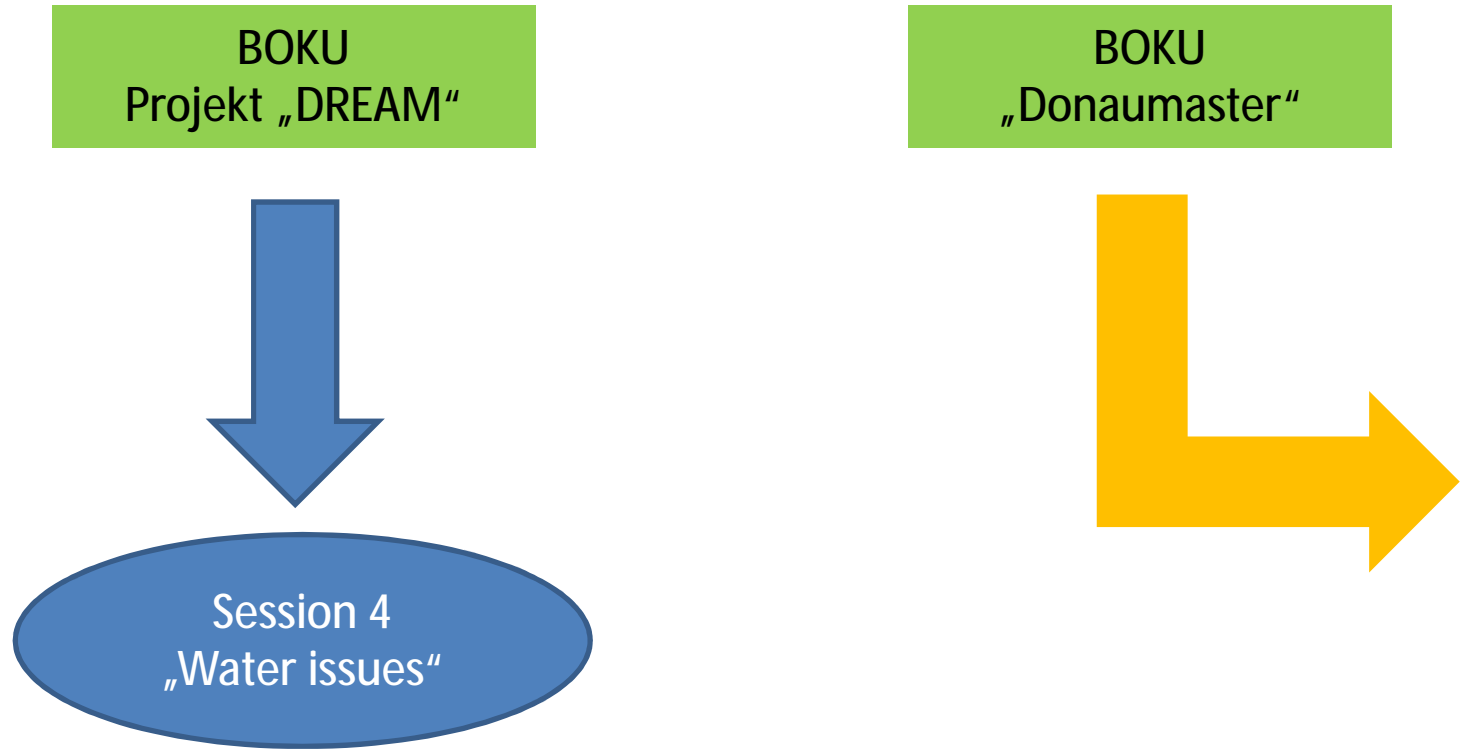
- Raising awareness and creating political consciousness (bottom-up / top down)
- Identifying and pointing out potential capacities
- Referring to societal responsibility and added value
- Referring to European and international development (à benchmarks)

Towards a Bioeconomy Strategy: Final keywords and messages



- Raising awareness and creating political consciousness (bottom-up / top down)
- Identifying and pointing out potential capacities
 - Increase of biomass production
 - Reduction of structural deficits
 - Networking → joint projects
 - Capacity building
- Referring to societal responsibility and social value
- Referring to European and international development (→ benchmarks)

Case Examples: Institutional reference



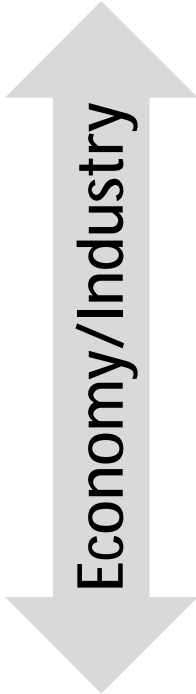
Case Examples: Institutional reference



BOKU
„Donaumaster“



Macro Level



Institutional Level



**Masterstudium Sustainability in Agriculture,
Food Production and Food Technology in the
Danube Region**

Concerted Action

Case Examples: Institutional reference



Regional distribution of founding members of ICA-CASEE



Case Examples: Institutional reference

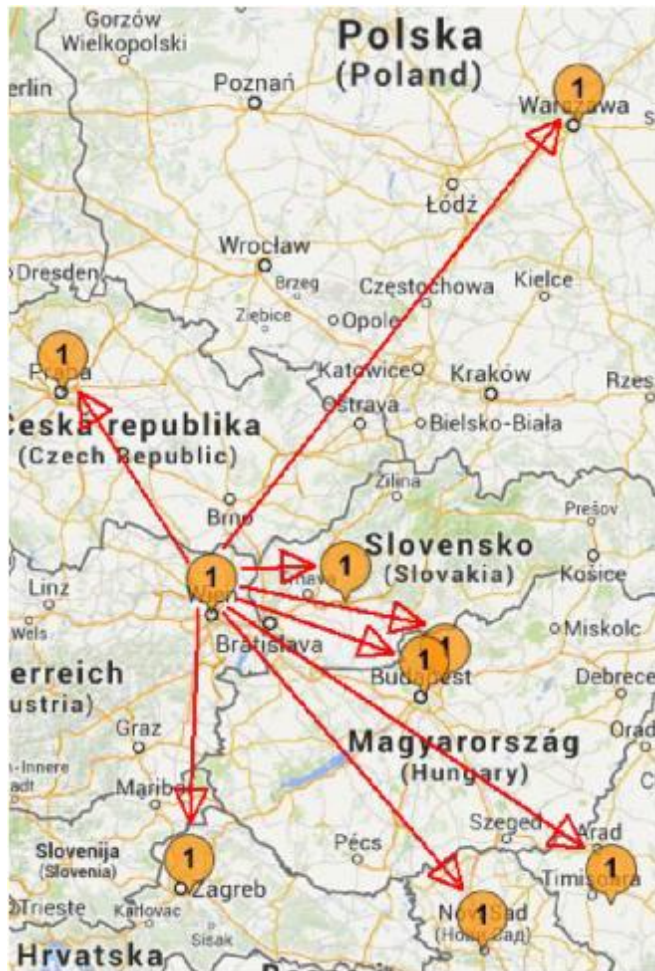


ICA-CASEE is a non profit organisation which aims to stimulate and support its member institutions in the development of a European dimension in education and research through the development of concerted actions and in engaging globally.

- To support the development and implementation of the **EU-Strategy for the Danube Region**
- To strengthen research, education and University development in this region
- To develop joint research, education and other projects (e.g. joint curricula, joint continuous educational offers, structural development, human resource development, QA, know-how-transfer (e.g. via e-plattform...))
- To cross-link and to act complementary with existing networks
e.g. the **Danube Rectors` Conference**
- Use of existing funding instruments

Quelle: BOKU

Case Examples: Institutional reference



Masterstudium Sustainability in Agriculture, Food Production and Food Technology in the Danube Region (BOKU)

- Joint Degree BOKU - Szent István University, Gödöllő
- Additional impact (courses, MSc thesis supervision, summer schools,..) by partner universities
 - Corvinus University Budapest (HU)
 - University Nitra (SK)
 - University of Novi Sad (SR)
 - CULS Prag (CZ)
 - USAMVBT Timisoara (RO)
 - WULS Warschau (PL)
 - University of Zagreb (HR)

Case Examples: Institutional reference



BOKU „Donaumaster“

Learning Outcomes

- graduates have the capability to critically select and apply adequate methods for **sustainability in agriculture, food production and food technology**
- graduates have a deep **knowledge of agriculture and food production under the aspect of sustainability** in the **Danube Region**
- graduates understand the relevance of the **principle of sustainability** generally and especially for **Danube Region**
- graduates understand the development of **Danube Region** from point of view of ecology, rural development and cultural history.
- graduates have the capability **to analyse social interactions** in an intercultural context
- graduates are fluent in English
- graduates convey research proposals, reports and scientific papers to a wider public audience

Quelle: BOKU

Case Examples: Institutional reference



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40 Cooperations filtered from 1457 originally ([Reset All Filters](#))
Selected filters:

- Austrian Partners (Organisational): (Intersection - AND search) BOKU (University of Natural Resources and Life Sciences), Vienna
- International Partners (Geographical): (Union - OR search) Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Hungary, Kosovo, Moldova, Montenegro, Romania, Serbia, Slovakia, Slovenia, Ukraine

Cooperation Partners

- Austrian Partners (Organisational)
- Austrian Partners (Geographical)
- International Partners (Organisational)
- International Partners (Geographical)

Cooperation

- Cooperation Type
- Scientific Discipline
- Programme
- Duration

The map displays red circular markers across Europe, indicating the geographical locations of 40 cooperations. The markers are concentrated in Central and Eastern Europe, with notable clusters in Poland, Germany, Austria, and the Balkans region. The map includes labels for various countries and cities, such as Denmark, Germany, France, Italy, Poland, Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Ukraine, and Moldova.

Thank you for your attention

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