UNIVERSITY OF LJUBLJANA | BF Biotechnical Faculty

Bioeconomy Strategic Working Group

SCIENCE-BASED PATHWAYS TO POLICY IMPACT

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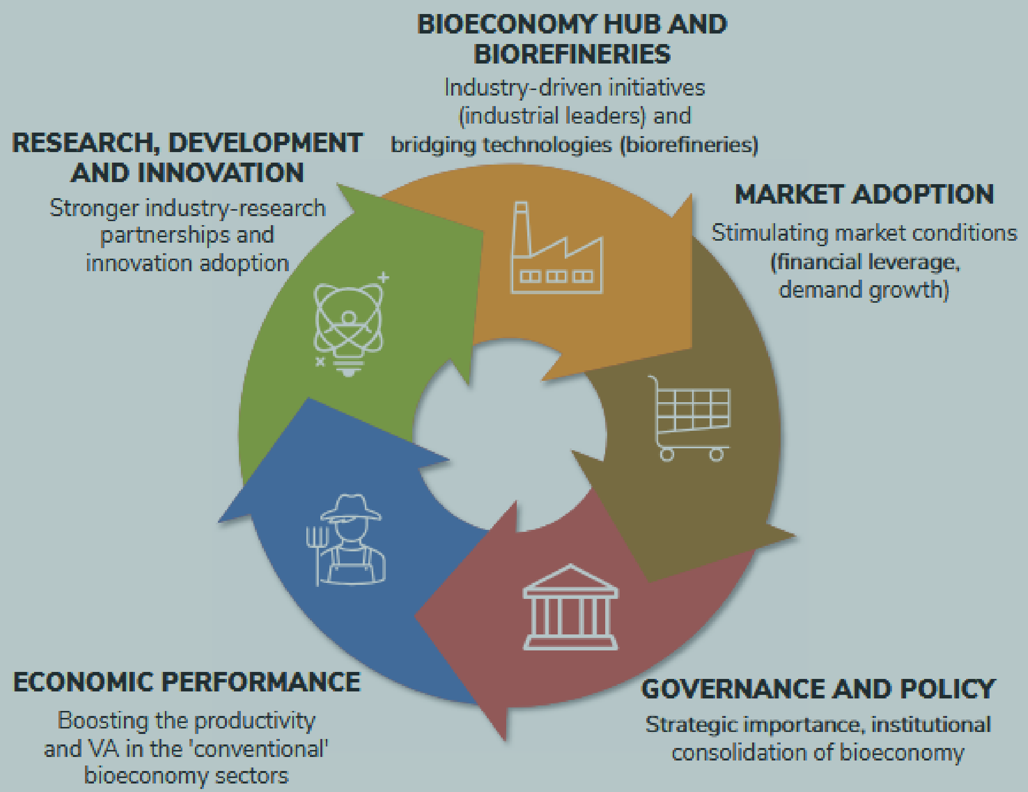
15th ICA Rectors and Deans Forum 2025

16 – 17 November 2025, BOKU University, Vienna

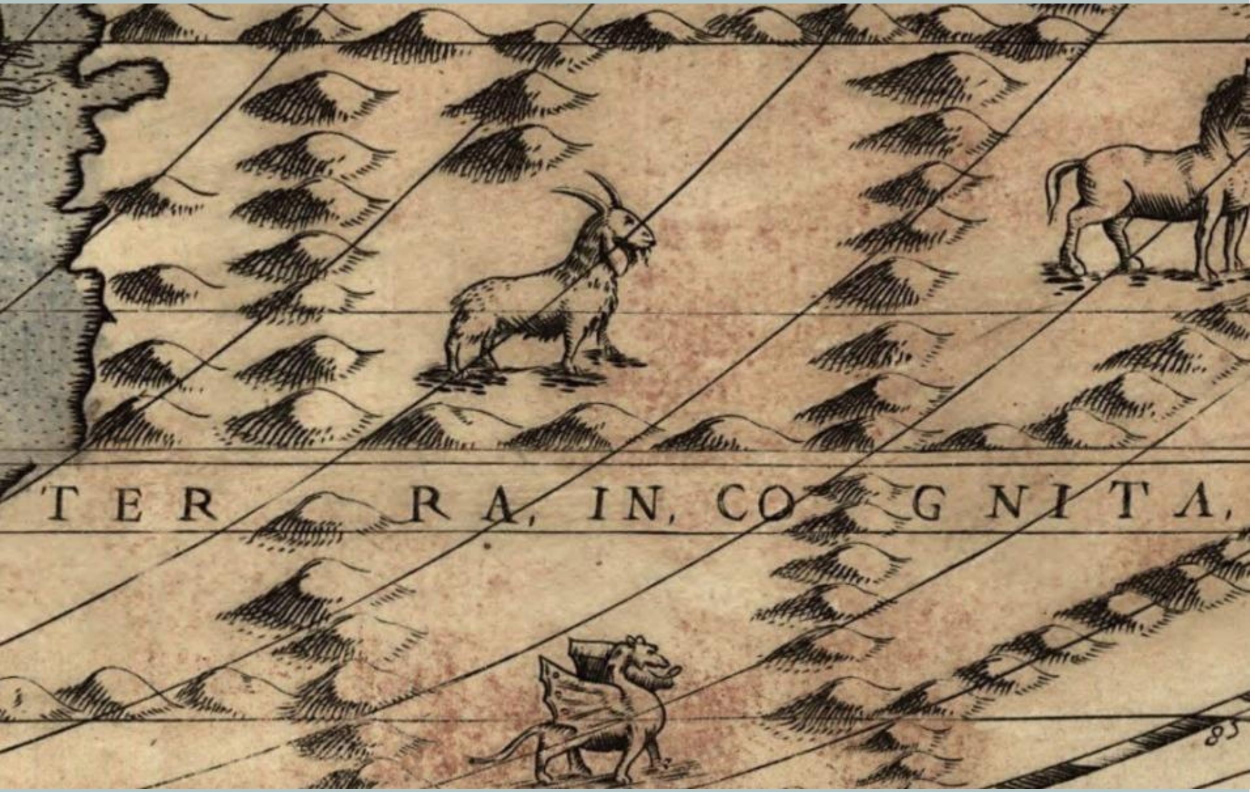


From a patchwork of good practices to an integrated, sustainable and robust Bioeconomy System

Slovenia Bioeconomy Strategy Concept Paper (BIOEASTsUP, 2023)

The Circular Bioeconomy: from concept to transformation

- Redesigning production, use, and regeneration of biological resources
- Beyond substitution — toward systemic circularity
- Linked to EU Green Deal, EU Bioeconomy Strategy, Circular Economy Action Plan
- Role of Universities: providing scientific knowledge → practice, policy, investment

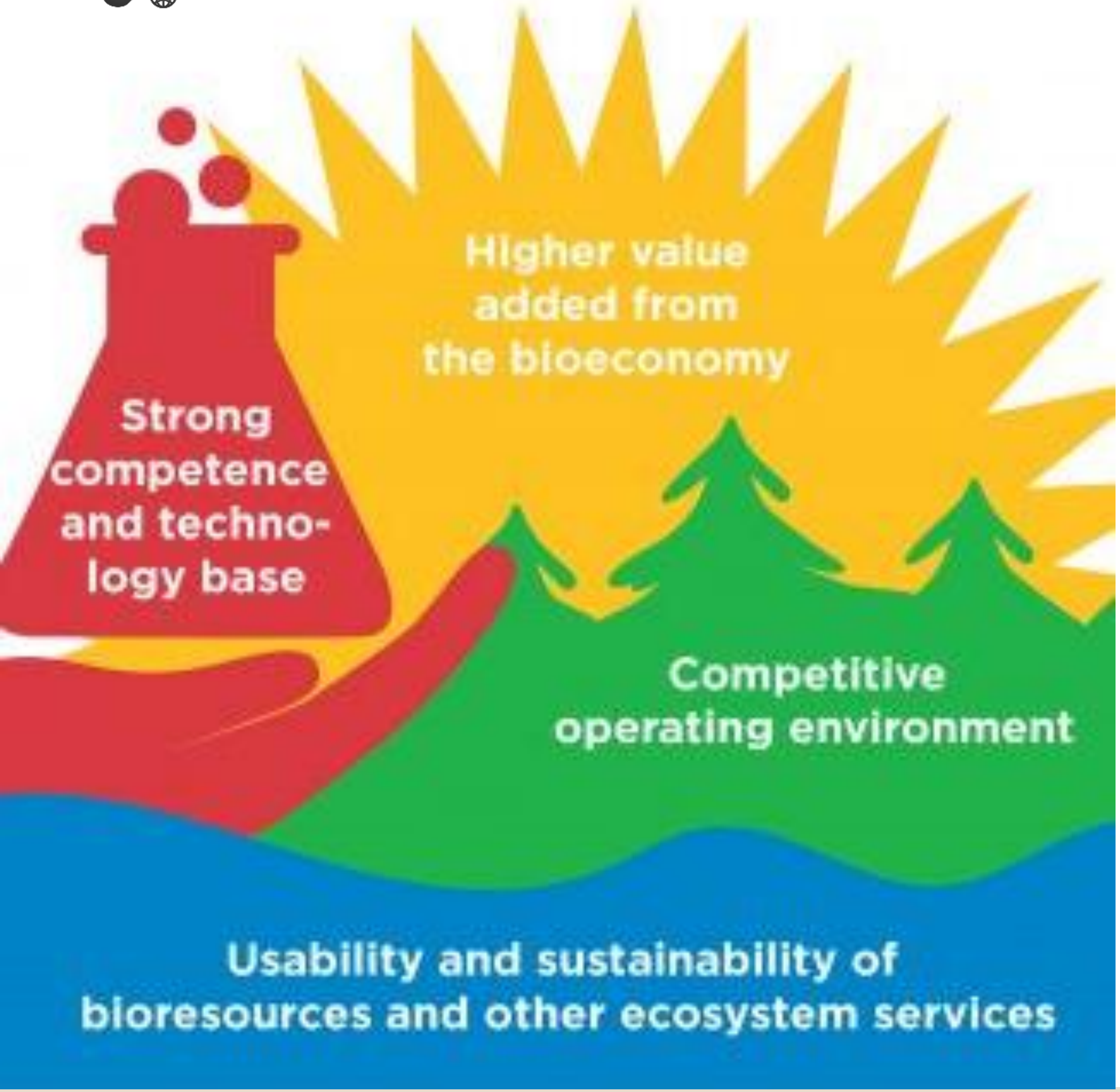


The missing middle between science and policy

- Scientific progress in circular bioeconomy is advancing rapidly across disciplines.
- Yet, research often underestimates how crucial translation into policy instruments really is.
- Without integration into regulation, incentives, and implementation, impact remains limited.
- The Science–Policy Interface bridges this gap — turning evidence into enabling policy.

Elements of the Science–Policy Interface

Element	Purpose	Examples
Knowledge generation	RD&I, data / evidence base, foresight	Horizon Europe, JRC
Synthesis and assessment	Translate findings (innovation adopters, facilitators, general public)	EC Knowledge Centre for Bioeconomy, EEA reports
Policy advisory	Formal input to policy	Chief Scientific Advisors, SCAR Working Groups
Stakeholder engagement	Co-creation and inclusiveness (including general public, consumers)	CBE JU, EuBioNet, National Bioeconomy Councils/Hubs
Monitoring & feedback	Learning from implementation	Bioeconomy Monitoring System (JRC)
Capacity building	Strengthening interfaces	ICA CoP BioEdu, Policy labs, DG collaborations



Good practice: Finland's Bioeconomy Strategy (2022)

- Co-created by ministries, universities, industries
- National Bioeconomy Panel provides continuous evaluation
- Example of long-term science–policy dialogue

Good practice – EU: Knowledge Centre for Bioeconomy

- Collects data, synthesizes evidence, produces policy briefs
- Model for rapid, trusted knowledge brokerage

From Science to Policy Impact: What works

1. **Co-creation of knowledge** – involve policymakers and stakeholders from the start.
2. **Knowledge brokers and translators** – roles that bridge scientific and policy languages.
3. **Integration across scales** – local innovation ecosystems linking to EU frameworks.
4. **Education and institutional commitment** – universities embedding science–policy competences.
5. **Evidence to narrative** – transforming data into policy stories that drive political attention.

Structural challenge: aligning academic reward systems and policy impact

Universities - traditional academic Incentives:

- Rewarding scientific excellence through:
  - High-impact publications (mostly disciplinary, journal-based)
  - Competitive research grants
  - Citation metrics and rankings
- Incentive towards academic performance - not necessarily societal or policy impact.

Competences associated with Policy impact:

- Policy engagement needs:
  - Interdisciplinary collaboration;
  - Co-creation with non-academic actors;
  - Responsiveness, synthesis, and communication — often not publishable in traditional journals.
- ...often time-consuming and not career-rewarding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Predstavili vizijo nove skupne kmetijske politike in ukrepov

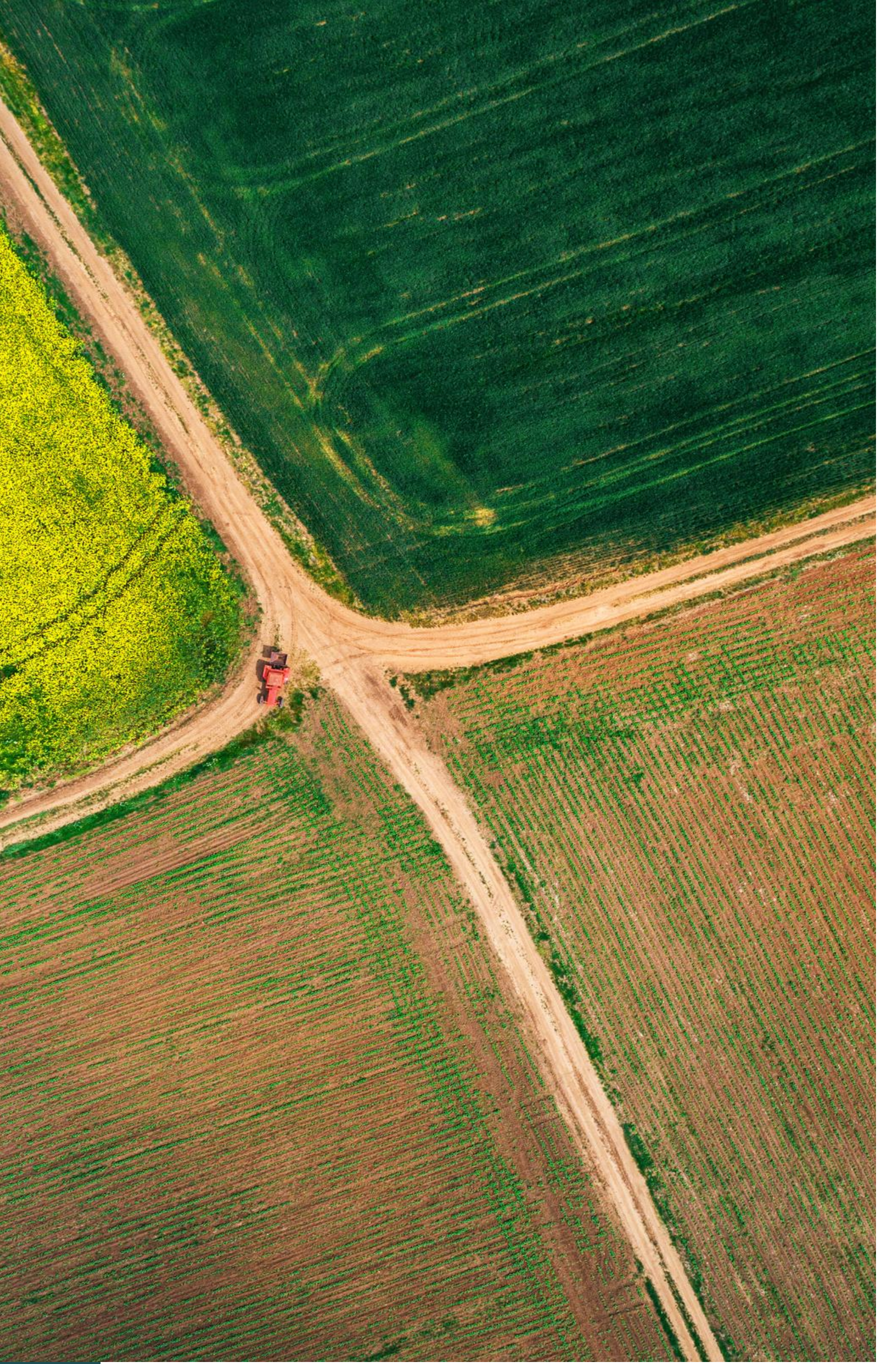
Študentje drugega letnika magistrskega študijskega programa Ekonomika naravnih virov so letošnje študijsko leto pri izbirnem predmetu Javne politike namenili pripravi vizije strateškega načrta za skupno kmetijsko politiko po letu 2020.

Barbara Remec KMEČKI GLAS

BARBARA REMEC Četrtek, 14. maj 2020 ob 07:29

Pathways for Universities to evolve

- Broader definitions of excellence
- Science–policy career paths
- Knowledge brokerage and co-creation structures
- Integrating policy engagement in training
- Foster joint research–policy agendas



Concluding thoughts

- Life Science Universities are **bridges** between **scientific insight and societal transformation**.
- Circular Bioeconomy requires **co-production of knowledge** – not just transfer of results.
- Policy impact grows when **research, education, and engagement act as one mission**.
- **Collaboration with policy bodies** builds mutual capacity and trust.
- Circular Bioeconomy not only evidence-based — but **science-enabled**.

Thank you.