



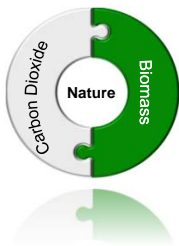
Insights from the Global Bioeconomy Summit for future strategies

Building the bioeconomy: insights from European strategies
Helsinki, 7 June 2016

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Chair, German Bioeconomy Council

Vision of a sustainable bioeconomy

Reconciling Human Living with Nature



Bioeconomy aims at:

- restoring natural capital & ecosystems
- innovation & green growth
- inclusive & healthy societies

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Changing perspective on bioeconomy policy

2005	2016
<ul style="list-style-type: none"> • „Peak Oil“, scarcity • prices will steadily increase • Biotechnology • substitution of fossil fuels 	<ul style="list-style-type: none"> • new explorations, availability • low, volatile prices • Digitalization, converging technologies • Paris climate agreement: CO₂ neutrality by 2050

**Comprehensive
Substitution!**

**Innovation for sustainable
development!**

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How does bioeconomy contribute to sustainability?

- Food security & nutrition
- Health & well-being
- Clean water & sanitation
- Affordable & clean energy
- Economic growth
- Industry, innovation & infrastructure
- Responsible consumption & production
- Climate action
- Life below water (aquatic resources)
- Life on land (terrestrial resources)



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Bioeconomy Policies around the World



Source: German Bioeconomy Council (2015) Bioeconomy Policies – Synopsis of National Strategies in the World

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Latest policy developments in Europe

- Spain: dedicated BE strategy & action plan adopted in March 2016
- France, Norway: dedicated BE strategy expected in the coming months
- Germany: evaluation of BE research strategy in 2016
- Italy, Austria, Estonia, Ireland: strategy development in progress
- Macro-regions:
 - West Nordic Countries: BE strategy in 2015
 - Baltic Sea Region: formation of Bioeconomy Council in February 2016
 - Nordic countries: blue bioeconomy roadmap development in 2016
 - Poland, Czech Republic, Slovakia and Hungary: "Bioeconomy Regions Forum", Lodz, 7 October 2016

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Challenges for bioeconomy development

- Support & buy-in from society
- Know-how
 - technological break-through required in many areas
 - circular approaches & sustainable use of scarce resources
 - efficient biobased processes & scaling-up
- Cost competitiveness
 - fossil fuel prices & subsidies
 - path dependencies (infrastructure, supply-chains, investments)
 - development process (timing)
 - standards & safety requirements
- Monitoring & managing complex systems to solve goal conflicts for sustainable development (Good Governance)

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Motivation and Goals



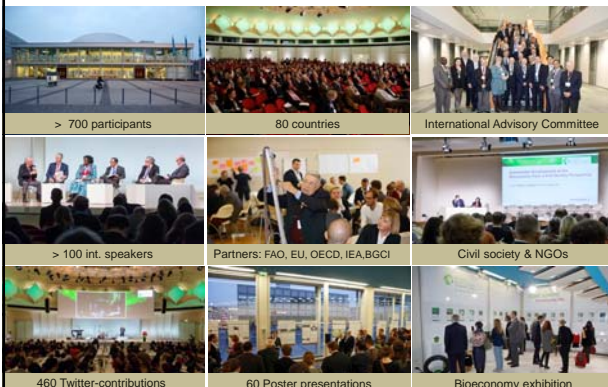
- First global policy meeting on bioeconomy
- Dynamic, but fragmented development
- Connecting actors globally to unleash potential of BE
- Embracing diversity, promoting a systematic & collaborative approach
- Alignment with broader sustainability policy agendas (SDGs, COP21)



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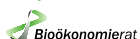
Participation & Attendance



Lessons learned from the Global Bioeconomy Summit

- ✓ **Common goals:**
sustainable development esp. food security, competitiveness, jobs, ecological transformation, health & well-being
- ✓ **Many bioeconomies, huge diversity:**
 - definitions (e.g. health, biomass, technology, knowledge focus)
 - emphasis on sectors and feedstock (agriculture, forest-based, marine, life-sciences & health, bio-industry, etc.)
 - approaches and society involvement (e.g. top down strategy, industry-led, grass-root movement)
- ✓ **Little policy coordination & integration in multilateral processes**

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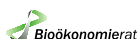


How can political strategies foster sustainable BE

Communiqué: “Making Bioeconomy Work for Sustainable Development”

- 1) Promoting innovative and proven technologies
- 2) Establishing good governance nationally and internationally
- 3) Initiating and strengthening international dialogue and cooperation

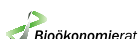
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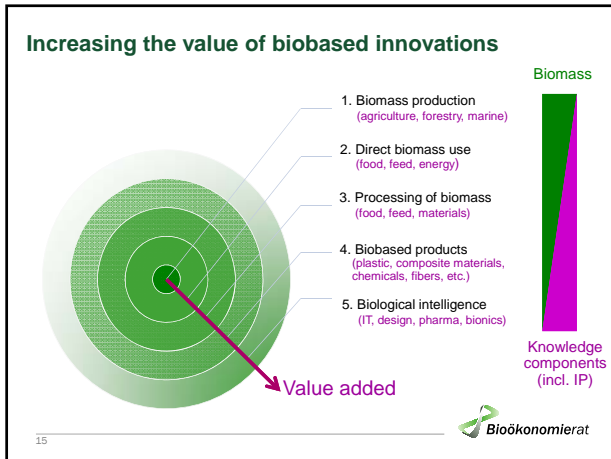


1) Promoting innovative and proven technologies

- Investing in R&D
 - converging technologies
 - PPP, open innovation, interdisciplinary approaches, support infrastructure
 - international consortia, networks
- Expanding education
 - connecting stakeholders involved in education
 - inter-disciplinary & international study programs
 - sharing curricula & contents, open learning platforms
- Funding for innovation and capacity development
 - leveraging international funding mechanisms for BE
 - Mobilizing capital market
- Strengthening the role of business
 - creating an enabling business environment
 - empowering SMEs to participate in BE development
- Increasing value, reducing structural costs

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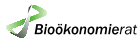
- ### 2) Establishing good governance
- Societal needs & market development
 - inclusive dialogue with civil society
 - transparent, international assessments: safety & sustainability of technologies
 - harmonization of standards, regulations
 - Sustainable production & use of natural resources
 - international cooperation regarding regeneration of soil, air, water and biodiversity
 - integrated approaches
 - biodiversity knowledge in libraries
 - motivate behaviour changes
 - Multilateral policy processes
 - BE as part of international policy and trade agendas
 - Mechanisms to support funding, skills & technology transfer, IP partnerships
 - Policy impact assessment
 - international agreement on monitoring approaches
 - stakeholder involvement
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- ### 3) Strengthening international dialogue & cooperation
- Cooperation in research, innovation and policy-making
 - Setting up a platform or international body
 - Global Bioeconomy Summit
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Cornerstones for bioeconomy development

- Potential of biological resources, incl. functions and knowledge
- Addressing societal needs, open dialogue
- Interdisciplinary education & research
- Value networks & cross-sector innovation
- Circular economy approaches
- Policy alignment: bioeconomy, sustainable development, climate action

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Thank you for your attention!

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