



# Bioeconomy: A Vision for Austria

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# Motif



## Global

- 🌍 Combat Grand Societal Challenges of the 21<sup>st</sup> century
- 🌍 Translate Sustainable Development Goals into actions
- 🌍 Provide viable solutions for increasing resource scarcity
- 🌍 Introduce a sustainable, smart agricultural production

## Austria

- ▬ Break persistently high GHG emissions levels
- ▬ Reduce high import dependency on coal, gas and oil
- ▬ Use high natural resource potential in Austria and the Danube region
- ▬ Retain large parts of the value cycle in Austria
- ▬ Export leading-edge technology products and services

# Evolution



## Since 2011

The subject area “Biobased Industries” has been developed as part of the RTI initiative “Production of the Future” by the Austrian Ministry for Transport, Innovation and Technology – later accompanied by a Strategy for Bio-based Industries (2014)

## February 2013

Christian Patermann highlights the importance of formulating national bioeconomy strategies at "Science meets Business" in Vienna (Austria)

## November 2013

BIOS Science Austria and AAER present their comprehensive Bioeconomy Policy Paper. Soon after that, the Austrian Government acknowledges the importance of bioeconomy in its Work Programme 2013-18

## September 2014

Interministerial RTI-WG 2 together with BIOS Science Austria drafts Bioeconomy Status quo Report for the Austrian RTI-Task Force

## June 2015

The interministerial RTI-WG 2 Bioeconomy Status quo Report was subject to consultation by stakeholders at national level

# Definition



Bioeconomy benefits from the use of renewable, natural resources to provide food, feed, energy, goods and services.

- to generate new economic growth
- to create new jobs
- to reduce dependency on fossil resources
- to promote innovation

## Economic Data at present

— € 14.6 bn

— 8 % of GDP

— 230.000 jobs

# Vision



- Longterm transformation towards a knowledge-based sustainable economic system
- Match national strategies on the European level
- 3-dimensional societal change towards Eco-social Sustainability
- From Value Chain to Value Cycle – cascade use of biomass
- Cross-linking of sectors – transdisciplinary approach
- Amalgamate Energy Transition, Bioeconomy and Industry 4.0
- Austria as Bio-Innovation Leader
- Boost regional and rural economy
- Attract Foreign Direct Investment for Bio-Innovation infrastructure

# Realization



- Raising awareness and creating political consciousness
  - bottom-up / top down
- Identifying of core competencies and potential capacities
- Referring to societal responsibility and added value
- Adjusting to European and international development
  - Benchmarks
- Increase of biomass production – sustainable intensification
- Reduction of structural deficits
- Network, Joint Projects, Capacity Building – education on all levels towards bio-based economy

# Thank you for your attention

<http://www.bioeconomy-austria.at/>

# Bioeconomy: Consultation Results & Next Steps

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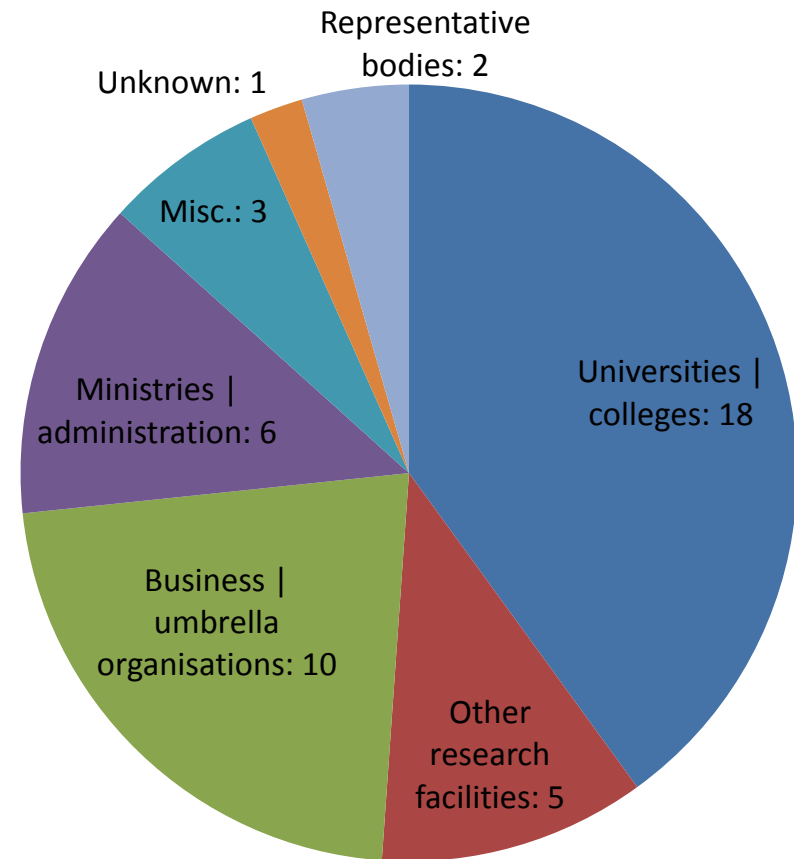
# Current process of implementation



- RTI-Status Report on Bioeconomy

- Open Consultation  
June/July 2015

- Stakeholder contacts: > 400
- Period: 30 d
- Respondents: 45
- Comments: 306
- Votings: 244
- Consensus-oriented response



# Consultation: Main Findings



- Sustainability – 3 dimensions
  - consider & include sustainability into the definition
  - assessments need to be integral part in all fields of action
  - reflect socio-economic and environmental dimensions, in addition to technological innovations
  
- Regional development
  - enable re-industrialisation of rural areas (regionalisation)
  - assume thematic leadership → global marketing options
  - create comprehensive national approach
  
- Cascading use of biomass and waste streams
  - Integrated material and energetic use
  - Promotion of cascading use strengthens competitiveness

# Suggested Research Areas



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# Consultation: Recommendations



- + Generally approved (91:2 positive votings)
- + Additional topics suggested:
  - Consideration of an overall/ comprehensive concept
  - Overall economic effects
  - Distributive justice
  - Soil recovery and sanitation, CO<sub>2</sub>-capture
  - Closed-loop recycling
  - Handling of final waste
  - Technology assessment
  - Adaptability and resilience

# Consultation: Policy Recommendations



- (1) Bioeconomy-specific research programme
- (2) Thematic research-calls
- (3) Stress social scientific and cross-cutting research in bioeconomy research programmes
- (4) Additional measures**
  - Include bioeconomy relevant topics in **education and training**
  - Broad **cross-discipline debate** on bioeconomy
  - **Awareness raising**

# Next Steps



- Evaluation of international feedback on presented consultation results → round table discussion
  
- Stakeholder dialogues considering specific topics
  
- Formulation of RTI-Strategy for Bioeconomy
  
- Vision: Development of a National Bioeconomy Strategy
  - Establishment of a national Bioeconomy Panel
  - Establishment of a national Bioeconomy Observatory / Focal Point for international exchange

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