Corn cobs to blow-in insulation: A new value chain for the rural bioeconomy

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Triple-Helix Conference “Supporting the development of bio-based economy partnerships in the Danube Region through a triple-helix approach”

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Introduction DBFZ
Introduction
Research Departments & Focus Areas

- Founded in 2008
- Owner: Federal Ministry of Food and Agriculture
- Staff: 190

- 130 ongoing projects
- Third-party funding: 6 Mio. €/year
- Turnover: 12 Mio. €/year

UFZ – Centre for Environmental Research, MicAS – Working Group Microbiology of Anaerob Systems
Introduction
DBFZ Innovation Ecosystem

1. National HTP Innovation Plattform
2. Energy & Environment Network Leipzig
3. Business Incubator
4. DBFZ SMILE BUSINESS COACH
5. Leading Edge Cluster of the BMBF
6. Transnational Renewable Energy Cluster Danube
7. SOJUS - International Scientific Network
The Bio-based Economy in the Danube Region
A New Value Chain
New Value Chain
Bio-based economy in the Danube Region

Corn cobs to blow-in insulation: A new value chain for the rural bioeconomy
Advantages
A truly integrated & circular value chain

Corn cobs – A promising resource for the bioeconomy

- Valorisation of agricultural residues
- Increasing field hygiene
- Substitute for mineral/wood insulation
- CO2 storage
- Low-tech application
- Additional value chain
Supply Side
Danube Region among top producers of corn

Corn cobs – An abundant resource for the bioeconomy

Depending on variety 1.200 – 2.200 kg/ha (Germany)

Corn cobs (remaining moisture 12-13%) reaches a price of around 115 Euro/1000 kg
Demand Side
Growing market for insulating materials

Corn cobs – A possible niche market within the bioeconomy

In 2010 the market for insulating material reached 34 million m³ in Germany and 193 million m³ in the European Union.

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R&D Cooperation
Upgrading and optimising rural value chains

Corn cobs – An interesting topic for R&D cooperation in the Danube Region

Certification & Regulation

R&D

Building Industry

Data & Markets

Farm operators

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Thank you for your attention!

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