Österreichische Mitarbeit in IEA Bioenergy Task 42 „Biorefining“

10 aktuelle Highlights 2014

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Produktion der Zukunft
Stakeholderdialog Biobased Industry
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The Austrian participation in Tasks 42 of IEA Bioenergy is financed by the Federal Ministry for Transport, Innovation and Technology / Department for Energy and Environmental Technologies
Highlight # 1: New Task 42 Brochure
66 pages with 4 Austrian Biorefineries
Highlight # 2: Classifications System is used more and more...
Highlight #3: Biorefinery Fact Sheets

- 8 Biorefinery Fact Sheets are ready
- Cooperation with Task 34 “Liquid Fuels” and Task 37 “Pyrolysies”: identify 2 – 4 common biorefinery fact sheets
Highlight #4: Austrian Country Report 2014
Highlight #5: Working Document "Biorefinery Complexity Index"

**The Biorefinery Complexity Index**

Gerfried Jungeheim

with contributions from: Ralf van Rees, Henning Jørgensen, Eel de Jong, Heinz Stichnothe, Marie Weltha

1. Introduction to Biorefinery Concepts
2. Biorefinery Complexity Index (BCI)
3. Calculation of the Biorefinery Complexity Index (BCI)
4. Example
5. Assessment of the Technology Readiness Level (TRL)
6. Biorefinery Complexity Index of selected biorefinery concepts
   6.1 "1-platform" biorefinery using oilseed crops for biodiesel, glycerin and feed
   6.2 "1-platform" biorefinery using oil based residues for biodiesel, glycerin, bio oil and fertilizer
   6.3 "1-platform" biorefinery using starch crops for bioethanol and feed
   6.4 "1-platform" biorefinery using wood chips for biorefinery, electricity, heat and process
   6.5 "1-platform" biorefinery using pyrolysis oil, syngas, electricity & heat, lignin biorefinery using straw for FT-synth and methanol with oxygen gasification

**Complexity Profile**

- **Platforms**: 5
- **Feedstocks**: 6
- **Products**: 12
- **Processes**: 12
- **Biorefinery BCI**: 35
Highlight #6: 3rd European Biorefinery Training Course

- Presentations:
  - 9 Plenary presentations
  - 18 presentations in parallel modules
- 80 participants
- Task 42 contributions:
  - „IEA Bioenergy Task 42 Biorefining – Sustainable Processing of Biomass for Food and Non-food Applications“, Rene van Ree, Task leader
  - „Value Chain Assessment of Biofuel-driven Biorefineries“, Gerfried Jungmeier, Austrian Team Leader
Highlight #7: Integration of Biorefineries into Existing Industrial Infrastructure

Example Austria:
232 Sites in the 10 Main Industry Sectors

Coverage:
14 Biorefineries and 31 Industry Subsectors
Highlight #8: Stakeholder-Workshop

Scope
- What are the opportunities for upgrading existing industrial infrastructures to sustainable biorefineries?
- What are the changing roles of the different industrial stakeholders (agro, energy, chemical, feed/food industry) in the transition to a BE?

Approach
- The Role of the Energy Sector
- Approach Integration of Biorefineries in Existing Industrial Infrastructures
- Questionnaire
Highlight #9: Presentations of Austrian Task 42 Participation


- The Possible Role of Wood-biorefining in a Biobased Industry, International Conference on Processing Technologies for the Forest and Bio-based Products Industries (PTF BPI) Kuchl, September 24 -26, 2014
Highlight #10: IEA Bioenergy and BioEconomy

Identification BioEconomy Strategies in IEA Bioenergy Member Countries

- current status
- approaches
- opportunities for IEA Bioenergy

Cooperation Italy and Austria

- JOANNEUM: 11 Task 42 countries (Australia, Austria, Canada, Denmark, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, United States)
- ITABIA/ENEA: 11 non-Task 42 of IEA Bioenergy (Belgium, Brazil, Croatia, Finland, France, Korea, Norway, South Africa, Sweden, Switzerland, UK)
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www.IEA-Bioenergy.Task42-Biorefineries.com