Österreichische Mitarbeit in IEA Bioenergy Task 42 „Biorefining“

10 aktuelle Highlights 2014

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Produktion der Zukunft
Stakeholderdialog Biobased Industry
Graz 22. September 2014

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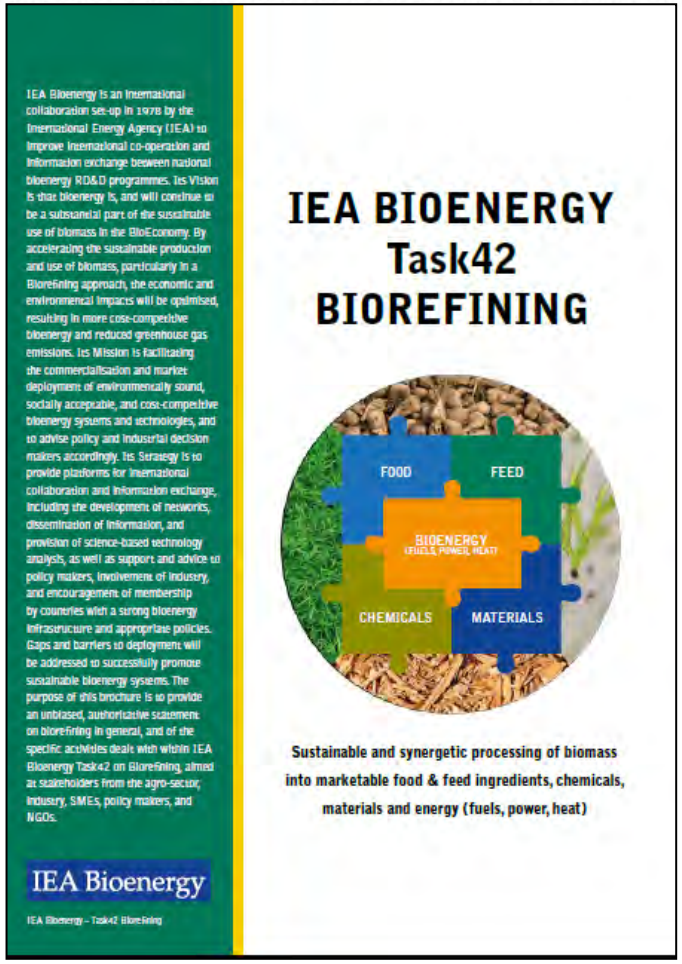
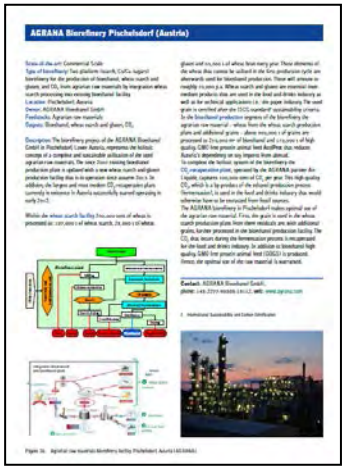
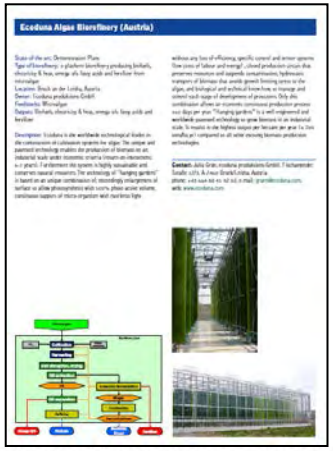
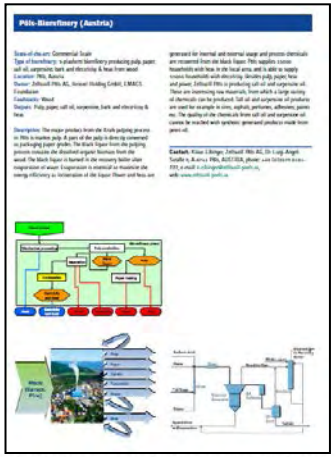
Hightlight # 1: New Task 42 Brochure 66 pages with 4 Austrian Biorefineries









Hightlight # 2: Classifications System is used more and more…

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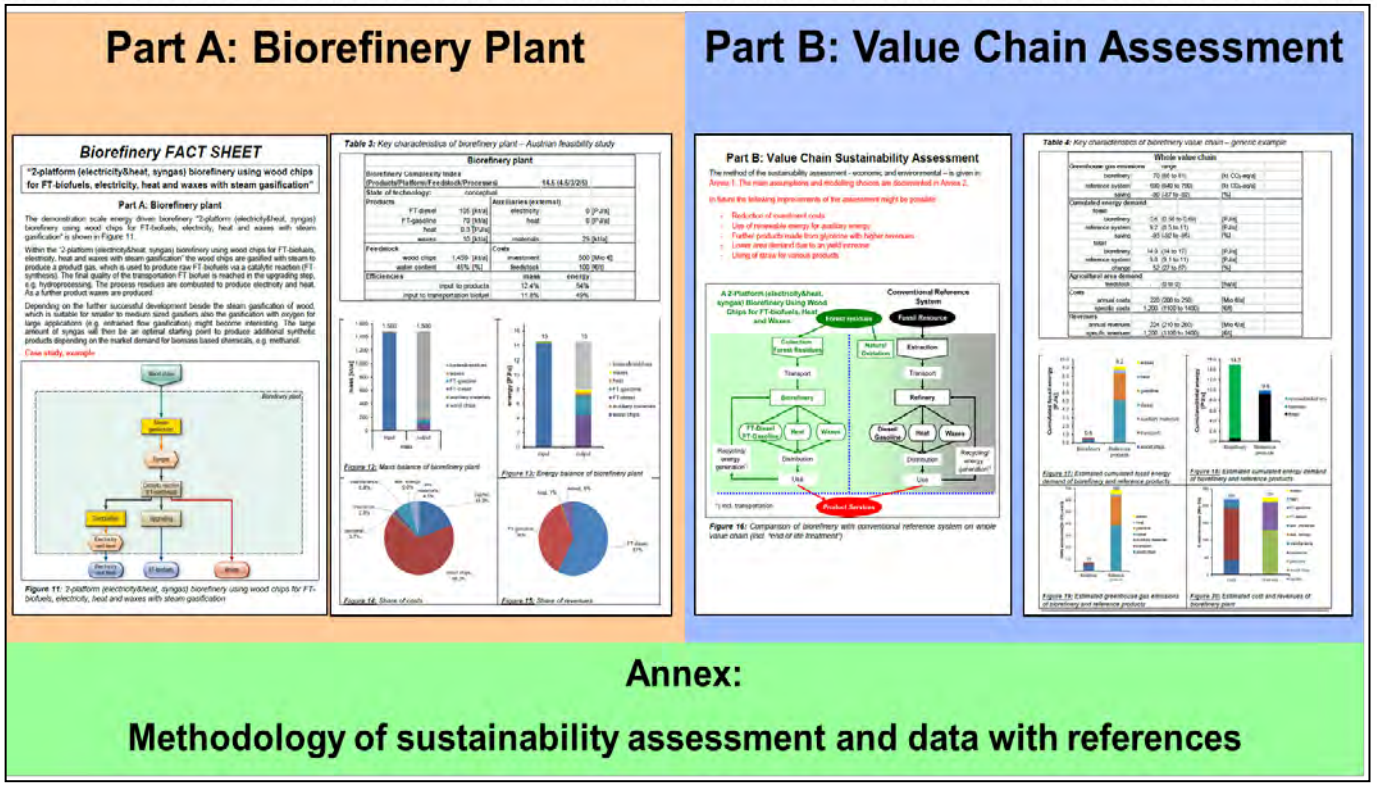
Highlight #3: Biorefinery Fact Sheets



- 8 Biorefinery Fact Sheets are ready
- Cooperation with Task 34 “Liquid Fuels” and Task 37 “Pyrolyses”: identify 2 – 4 common biorefinery fact sheets

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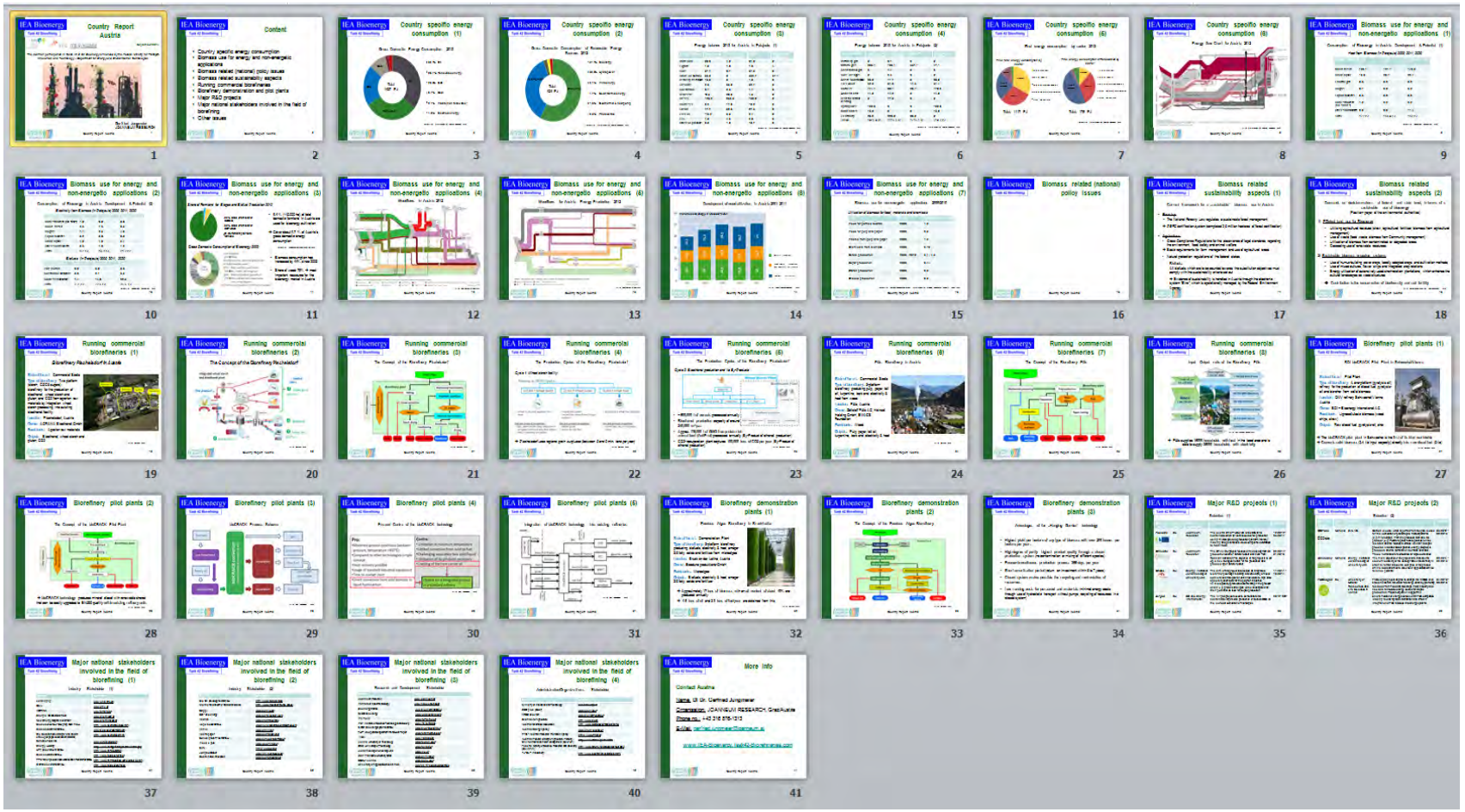
Highlight #4: Austrian Country Report 2014



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Highlight #5: Working Document „Biorefinery Complexity Index“

Working Document - 2014-07-09

The Biorefinery Complexity Index

Gerfried Jungmeier[1]

with contributions from: Rene van Ree[2], Henning Jørgensen[3], Ed de Jong[4], Heinz Stichnothe[5], Maria Wellisch[6]

[1]Contact: JOANNEUM RESEARCH Forschungsgesellschaft mbH
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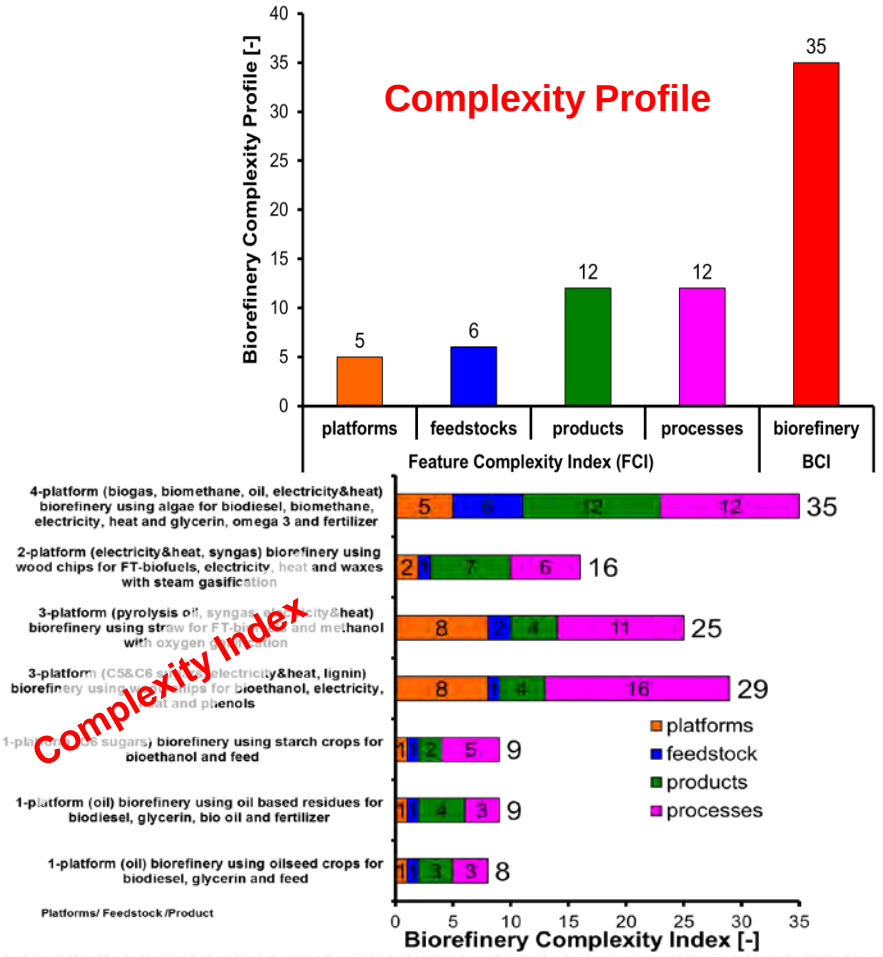
[2]WUR, Wageningen, The Netherlands; [3]University of Copenhagen, Copenhagen, Denmark; [4]Avantium Chemicals BV, Amsterdam, The Netherlands; [5]vTI, Braunschweig, Germany; [6]Agriculture and Rural Development, Edmonton, Canada; all members of IEA Bioenergy Task 42 "Biorefining: Co-production of Fuels, Chemicals, Power and Materials from Biomass" (http://www.IEA-Bioenergy.Task42-Biorefineries.com).

Working document

Content

Summary



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

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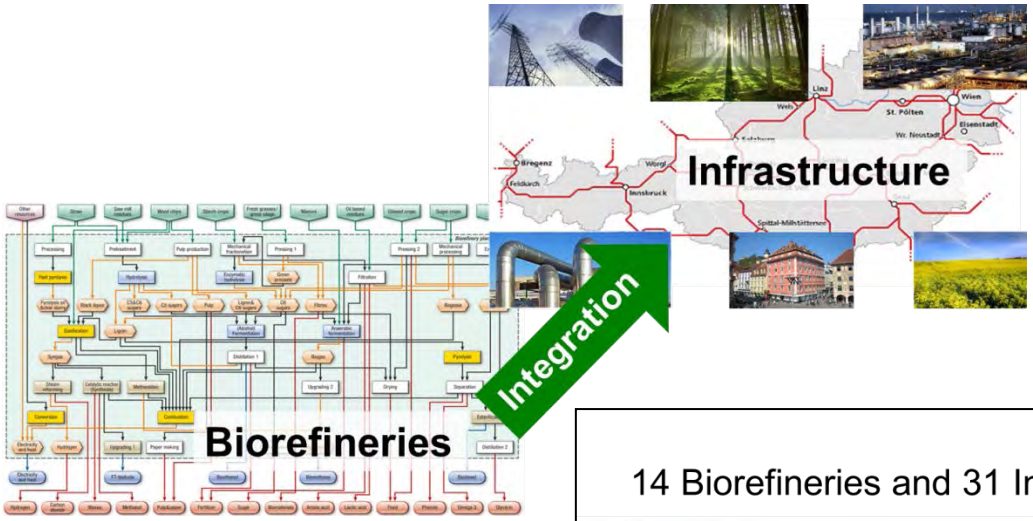
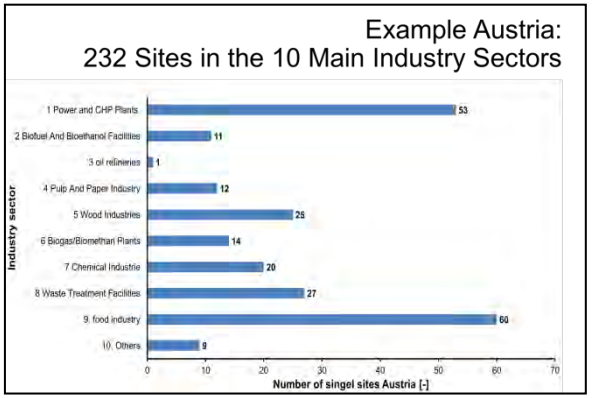
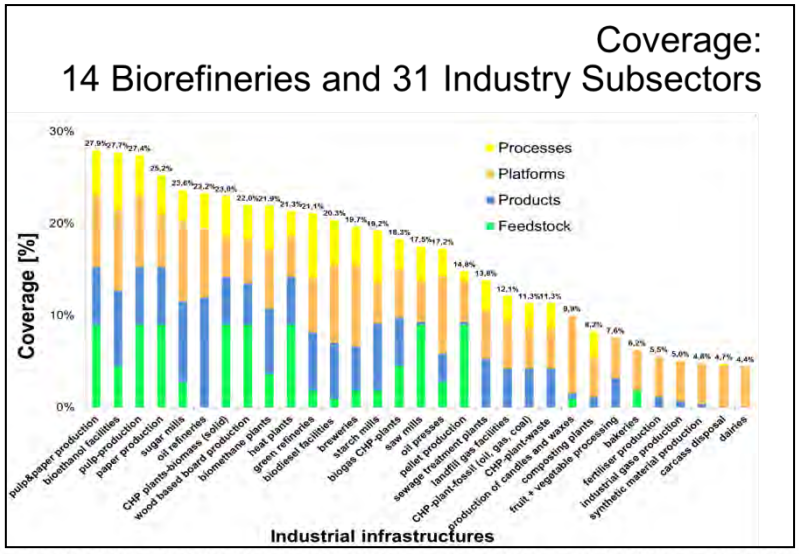
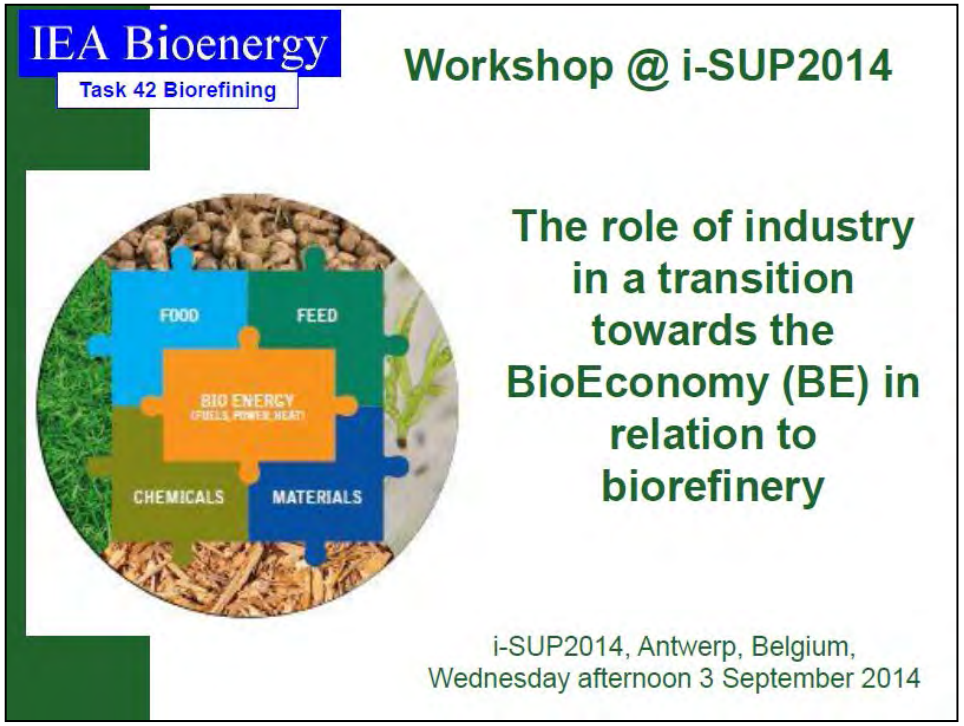
Highlight #7: Integration of Biorefineries into Existing Industrial Infrastrcuture







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 Biorefineries in a BioEconomy – Activities of IEA Bioenergy Task 42 "Biorefining",** 4th Central European Biomass Conference Graz/Austria, January 15 – 18, 2014
- **Internationale Entwicklungen am Beispiel der IEA Bioenergy Task 42 "Biorefining"**, VDI-Expertenforum, "Bioraffinerien – Klassifikation und Nachhaltigkeitsbewertung", 20. Mai 2014, Düsseldorf
- **Facts, Figures and Integration of Biorefineries in a Future BioEconomy – Findings in IEA Bioenergy Task 42 "Biorefining"**, 22th European Biomass Conference , Hamburg, Germany, June 23 – 27, 2013
- **Facts&Figures of Biorefineries Integrated in the Pulp&Paper Industry – Case Studies in IEA Bioenergy Task 42 "Biorefining"**, FUTURE.FORUM PAPER – The Austrian Paper Conference, June 4 – 5, 2014, Graz, Austria
- **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

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Highlight #10: IEA Bioenergy and BioEconomy

Australia	Info available	Country specific descriptive information
1	Scope of strategies *	√	Description of scope considered
	Bioeconomy (BE)	√	South Australia
	Biobased economy (BBE)	√	Biorefineries
	Biobased industries (BBI)	√	Pulp + Paper
	Bioenergy (BEN)	√	Biomass feedstocks and supply
2	National strategies **	√	Description of documents
a	Document name		Opportunities for Primary Industries in the Bioenergy Sector / National Research, Development and Extension Strategy
	Scope		BEN
	Published by		Governmental Rural Industries Research and Development Corporation
	Year		2014
	Priorities		Primary Industries: Sustainability, biomass feedstocks, supply logistics, policy analysis, capacity building
	Language		English
	Other documents ***	√	
b	Document name		Pulp and Paper Industry Strategy Group - Final Report
	Scope		BBI
	Published by		Pulp and Paper Industry Strategy Group
	Year		2010
	Priorities		Innovation (i.a. potential of bioenergy/biofuel production integrated in P&P processes, support of establishing a Biorefinery Research Institute), investment (i.a. expansion of timber plantations), sustainability (i.a. sustainable biomass growth) and productivity
	Language		English
c	Document name		Australian Government response to the "Pulp and Paper Industry Strategy Group Report"
	Scope		BBI
	Published by		Australian Government - Minister for Industry and Innovation
	Year		2012
	Priorities		Establishment of Manufacturing Industry Council, measures taken to support P&P industry strategy (i.a. incentives for private sector investment in new biomass plantations), no statement concerning the establishment of a Biorefinery Research Institute
	Language		English
d	Document name		Biorefinery Scoping Study: Tropical Biomass
	Scope		BBE
	Published by		Corelli Consulting BIOSCIENCE (commissioned by Governmental Department of Innovation, Industry, Science and Research)
	Year		2010
	Priorities		Advice to government for development of Biobased Economy Strategy, focusing on the use of sugarcane
	Language		English
e	Document name		Scoping Biorefineries: Temperate Biomass Value Chains
	Scope		BBE
	Published by		Parrett & Associates (commissioned by Governmental Department of Innovation, Industry, Science and Research)
	Year		2010
	Priorities		Advice to government for development of Biobased Economy Strategy, focusing on the use of temperate biomass
	Language		English
f	Document name		Biotechnology and Australian Agriculture
	Scope		BBE
	Published by		ACIL Tasman (commissioned by Governmental Department of Agriculture, Fisheries and Forestry)
	Year		2008
	Priorities		Advice to government for development of a Strategy for agricultural biotechnology: optimising the contribution of the next generations of biotechnologies to Australian agriculture and downstream markets as part of an emerging bioeconomy
	Language		English
g	Document name		Building a bioeconomy in South Australia 2011-2015
	Scope		BE
	Published by		Government of South Australia
	Year		2011
	Priorities		Strategy to foster the bioscience industry in South Australia, focusing on medical devices, environmental solutions, water management and cleantech
	Language		English
	Websources	√	
	Title		The bioeconomy
	Source		CSIRO
	Link		http://www.csiro.au/Organisation-Structure/Divisions/Ecosystem-Sciences/The-Bioeconomy.aspx
	Title		Bioeconomy and Industrial Biotechnology
	Source		Australian Government, Department of Industry
	Link		http://www.industry.gov.au/industry/biotechnology/IndustrialBiotechnology/Pages/BioeconomyandIndustrialBiotechnology.aspx
	Title		BioSA
	Source		South Australian Government
	Link		http://www.bioinnovationsa.com.au/
3	Vision ****	-	
4	Targets ****	-	
5	Adressed economic sectors	√	References to documents listed above
	Forestry	√	a, b, c, d, e
	Agriculture	√	a, b, c, d, e, f
	Food and food processing	-	
	Pulp+Paper	√	b, c
	Woodworking industry	-	
	Chemical industry	√	d, e, f
	Materials manufacturing	√	d, e, f
	Bioenergy	√	a, b, c, d, e, f
*	Definitions of Scope		
	Bioeconomy (BE)		Food and feed industries (agriculture, forestry, horticulture, fisheries and aquaculture, plant and animal breeding, the nutrition and beverage industry) + Biobased Economy
	Biobased economy (BBE)		Non-food industries: Biochemical, biomaterial, biomedicine, pulp+paper and wood industries + Bioenergy (including biorefineries)
	Biobased industries (BBI)		Individual sectors of Non-food industries: Biochemical, biomaterial, biomedicine, pulp+paper and wood industries
	Bioenergy (BEN)		Electricity, heat, transportation biofuels, gaseous and solid energy carriers
**	National strategies		Governmental Strategies
***	Other documents		Strategies and reports by industry, research and consulting, governmental responses to such strategies
****	Vision, Targets		Only if there is a national BE/BBE strategy

- **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)

IEA Bioenergy
Task 42 Biorefining

IEA Bioenergy aims to facilitate the commercialisation and market deployment of environmentally sound, socially acceptable, and cost competitive bioenergy systems and technologies

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Activities

- Knowledge dissemination
- Market deployment
- Stakeholder positioning
- Sustainable biomass valorisation
- Policy advice
- Training

News

New map of US biorefineries available
March 28, 2014

Project results presented at conference
February 17, 2014

Tomorro… Eu…

…eeting in Graz …ble online
…ember 6, 2013

Biofuel-driven Biorefineries Report 2013
February 1, 2013

Poster IEA Bioenergy Task42

Calendar

April 8, 2014
7th I… …d,

… - Conference
…014: A Conference for a …ow Carbon Future - Edmonton, Canada

May 12, 2014 - Conference
9th Biopolymer Symposium- Philadelphia, USA

More calendar

Recent publications

Green Building Blocks for

Austrian Team Leader

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…level playing field for sustainable biomass use

- Multi-sectoral stakeholder involvment in the development and implementation of sustainable value chains
- Technology development and biorefinery scale-up using best