

IBC
LEIPZIG

INTERNATIONAL
BIOMASS
CONFERENCE



PROGRAMME

Biomass in the future electricity system

Demand-driven electricity supply from
biomass – focus: combined heat and
power production

24 & 25/4/2012

Zeitgeschichtliches Forum Leipzig



For more Information see:

www.ibc-leipzig.de



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Aim of the Conference

The share of electricity produced from renewable energy is continuing to increase, both nationally and internationally. The transition to an electricity system based on renewable sources is characterised by an increasing need to provide flexible, demand-driven energy in order to compensate power supply from fluctuating sources, like solar or wind. Bioenergy has the potential to supply peak demands and to provide ancillary services in a flexible, resource- and cost-efficient way. Therefore, the aim of the conference is to highlight and discuss the frameworks, conditions, alternatives and consequences of a demand-driven bioenergy supply in an energy system in transition. In addition to the national and international frameworks, the main focus of the conference is on technological, economic, environmental, social and local issues.

INFORMATION

Conference Venue

Zeitgeschichtliches Forum Leipzig

Grimmaische Straße 6

D-04109 Leipzig

www.hdg.de/leipzig/



Stiftung Haus der Geschichte
der Bundesrepublik Deutschland
Zeitgeschichtliches Forum Leipzig

Directions



Registration

Click on „Registration“ on the IBC website (www.ibc-leipzig.de) and follow the instructions to register for the event.



Conference Fee *

Regular: 410 € (Reception at Zoo Leipzig not included)

Students **/Authorities: 310 €

Reception, Zoo Leipzig: 40 € (The fee includes food, refreshments and the visit of the Gondwanaland)

- * The conference fee is tax-free pursuant to §4, Section 22a of the UStG (Value Added Tax Law).
- ** To qualify for the reduced fee, a copy of a valid student ID card must be presented.

Hotels

Hotel rooms of various equipment and price segments have been reserved under the keyword „IBC“. We recommend you to book early, as the reservation can be guaranteed only temporary.

Park Hotel

Richard-Wagner-Straße 7

D-04109 Leipzig

Tel.: +49-341-98 52 0

www.parkhotelleipzig.de

Motel One Leipzig

Nikolaistraße 23

04109 Leipzig

Tel.: +49 (0)341-337437-0

www.motel-one.com

PROGRAMME

24 APRIL 2012



Opening/SECTION 1: The role of bio-energy in the future electricity market

Location: Hall, 3rd Floor, moderation: Frank Scholwin, Deutsches BiomasseForschungsZentrum (DBFZ)

10:30 Opening & welcome address

Frank Scholwin, Deutsches BiomasseForschungs-Zentrum (DBFZ)

Uwe Leprich, Institut für ZukunftsEnergieSysteme (IZES)

10:40 Welcome address

Berthold Goeke, Bundesministerium für

Umwelt, Naturschutz und Reaktorsicherheit (BMU)

11:00 Welcome address

Uwe Albrecht, Stadt Leipzig

11:10 Expectations for biomass in the future electricity supply worldwide

Arthur Wellinger, Technical Coordinator of IEA Bioenergy

11:30 Expectations for biomass in the future electricity supply in Europe

Gustav Melin, Swedish Bioenergy Association (SVEBIO)

11:50 Challenges of system transformation of the electricity supply in Germany

Uwe Leprich, Institut für ZukunftsEnergieSysteme (IZES)

12:10 The role of flexible bioenergy provision in different energy scenarios

Daniela Thrän, Deutsches BiomasseForschungs-Zentrum (DBFZ)

12:30

Lunch break



**SECTION 2: General framework,
support schemes, environment,
economics and market issues
Experiences and expectations from
Germany**

*Location: Hall, 3rd Floor, moderation: Michael Nelles,
Universität Rostock*

**13:30 Effects of the German Renewable Energy Act
(EEG)**

*Joachim Nick-Leptin, Bundesministerium für Umwelt,
Naturschutz und Reaktorsicherheit (BMU)*

**13:50 Possibilities of direct marketing of bio-
electricity in the context of the Renewable
Energy Act (EEG) in Germany**

*Martin Maslaton, MASLATON Rechtsanwalts-
gesellschaft*

**14:10 Flexible premium as an efficient system of
incentives for demand-oriented production
of electricity with Biogas and Biomethan**

*Uwe Holzhammer, Fraunhofer-Institut für Wind-
energie und Energiesystemtechnik*

**14:30 Power trading and renewables at the
European Energy Exchange**

Miriam Mann, European Energy Exchange AG

14:50 Energy trade of Biogas plants in practice

Hendrik Sämisch, Next Kraftwerke

15:10

**Coffee break and poster session:
Biomass in the future electricity system**

Location: Seminar room, 4th Floor



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15:45 Challenges of energy storage in a changed energy system

*Klaus-Peter Röttgen/Alexander Vogel,
E.ON Innovation Center Energy Storage*

16:05 Environmental impacts of a demand-driven bioenergy generation – result determining factors

*Marek Gawor, Stefan Majer, Deutsches Biomasse
ForschungsZentrum (DBFZ)*

16:25 Expansion of renewable energies in the regional context

*Klaus Brunsmeier, BUND für Umwelt und Naturschutz
Deutschland*



PANEL DISCUSSION

*Location: Hall, 3rd Floor, moderation: Daniela Thrän,
Deutsches BiomasseForschungsZentrum (DBFZ)*

17:00 100% Renewable – How can this goal be achieved efficiently and sustainably?

*Joachim Nick-Leptin (BMU), Hendrik Sämisch (Next
Kraftwerke), Winfried Damm (Stadtwerke Leipzig),
Klaus Brunsmeier (BUND), Franz Bruckner (Energie
Eibenstock)*

18:00 Guided tour through the exhibition of the Zeitgeschichtliches Forum (optional)

**19:00 Reception, Zoo Leipzig
Welcome address – Demand-supply of electricity from renewable energies**

Harry Lehmann, Umweltbundesamt



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SECTION 3: Supply Concepts for Flexible Bioenergy Provision

Location: Hall, 3rd Floor, moderation: David Serrano, IMDEA Energy Institute

- 8:30 **Technical demands and promising developments of biomass conversion technologies**
David Serrano, IMDEA Energy Institute

9:00 – 10:00

Technology snap shots: concepts for solid Biomass conversion plants

- 9:00 **Wood-Sourcing and heat delivery to industry under EEG-scheme – practical experiences**
Winfried Damm, Stadtwerke Leipzig
- 9:15 **Status quo. CHP for electrical power < 1 MW Flexible power generation from biomass power plants**
Jan Grundmann, Vattenfall Europe
- 9:30 **Options for integrating the agnion Heatpipe-Reformer in a virtual plant**
Matthias Hofer, TU München/agnion Technologies
- 9:45 **Model based control of fluidised bed processes for biomass conversion**
Franka Kretschmer, Otto-v.-Guericke Universität Magdeburg

10:00

Coffee break and poster session: Biomass in the future electricity system

Location: Seminar room, 4th Floor



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11:00 – 12:00

Technology snap shots: concepts for biogas plants

Location: Hall, 3rd Floor

- 11:00 **Technical modifications and current legal framework for a controllable electricity production via biogas plants in Germany**
Georg Häring, Hochschule Ingolstadt
- 11:15 **Demand-driven electricity production from biogas plants – a decentralised energy concept**
Rainer Bolduan, European Institute for Energy Research
- 11:30 **Flexible biogas production: Biological possibilities and economic considerations**
Marcus Trommler/Fabian Jacobi, Deutsches BiomasseForschungsZentrum (DBFZ)
- 11:45 **Biogas on demand: Technology and economy**
Joachim Krassowski, Fraunhofer-Institut für Umwelt-, Sicherheits- und Energietechnik

12:00

Lunch break



SECTION 4: Decentralised energy management and supply systems for flexible power production

Location: Hall, 3rd Floor, moderation: Daniela Thrän, Deutsches BiomasseForschungsZentrum (DBFZ)

- 12:45 **Decentralised energy management – Experiences from the first virtual power plants**
Patrick Hochloff, Fraunhofer-Institut für Windenergie und Energiesystemtechnik



13:05 **Decentralised energy structures –
“Bioenergy Regions” in Germany and an
outlook on European projects**
*Daniela Rätz, Fachagentur Nachwachsende Rohstoffe
(FNR)*

13:25 **Legal performances for the acceleration of
bio-electricity – a review of North-West
European concepts**
*Katja Weiler, Institut für ZukunftsEnergieSysteme
(IZES)*

13:45 **Summary**
*Frank Scholwin, Deutsches BiomasseForschungs-
Zentrum (DBFZ)*
*Uwe Leprich, Institut für ZukunftsEnergieSysteme
(IZES)*

14:15 **End of sections**

14:15
**EXCURSION: Visit to the biomass heating
power plant in Piesteritz/Wittenberg**

15:00
WORKSHOPS

- 1. Systems analysis of bioenergy – models and scenarios**
- 2. Technical possibilities for increasing power plant flexibility**
- 3. Market development and German Renewable Energy Source Act**

(For more information please refer to page 13 & 14)

PROGRAMME DETAILS

24 APRIL 2012

19:00 Reception at Gondwanaland

Zoo Leipzig, Pfaffendorfer Straße 29, 04105 Leipzig

Programme

- 19:00 **Welcome**
Frank Scholwin, DBFZ
- 19:10 **Greeting Words – Demand-supply of electricity from renewable energies**
Harry Lehmann, Umweltbundesamt
- 19:30 **Get together**
- 20:30 **Individual tour through the tropical hall**
- 23:00 **End of the event**



Source: Zoo Leipzig

Primitive times come alive in Gondwanaland, when Asia, Africa and South America were one continent and dinosaurs wandered over the landmass. Exciting tracks lead you through the rainforest in a huge tropical hall where animals from these three continents will cross your path. Birds will fly through the air and monkeys climb in the trees. With multimedia techniques evolution is shown in an exciting and interactive way like a colourful history book.¹

¹ Source: Zoo Leipzig





25 APRIL 2012

15:00 Parallel workshops

1. Systems analysis of bioenergy – models and scenarios

Location: Zeitgeschichtliches Forum, hall, 3rd Floor

Aim of the workshop is to introduce existing models and scenarios of current and future energy systems and the analysis and assessment of the necessity, requirements, possibilities and solutions for flexible power supply within the tools.

The seminar takes place in cooperation with

Deutsches BiomasseForschungsZentrum, Institut für Zukunfts-EnergieSysteme, Universität Leipzig & Helmholtz-Zentrum für Umweltforschung

2. Technical possibilities for increasing power plant flexibility

Location: Zeitgeschichtliches Forum, seminar room 1, 4th Floor

Within the workshop, technological issues of flexible power production will be discussed. This includes possibilities and problems of dynamic modeling and simulation as well as the development of process control technology for plants and integrated systems. Furthermore, practical questions on the balancing of voltage and frequency fluctuations within the power grid will be addressed.

3. Market development and German Renewable Energy Source Act (EEG)

Location: Zeitgeschichtliches Forum, seminar room 2, 4th Floor

The focus of this workshop will be to describe the status quo market framework conditions of bioenergy production for the background of the new incentives for bioenergy production within the German Renewable Energy Source Act (EEG) since 2012. Future market developments are based on a fluctuant and periodical increasing price development of biogas substrates and solid biofuels. Thus the target of this workshop will be to present and discuss possible impacts of feedstock availability and market prices in corresponds to the economic feasibility of bioenergy production in EEG plants.



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Excursion

14:15 – 18:00

Excursion: Visit to the biomass heating power plant in Piesteritz/Wittenberg

Programme

14:15 **Departure from Zeitgeschichtliches Forum**

15:30 **Arrival at the biomass heating power plant in Piesteritz/Wittenberg, guided tour**

16:45 **Departure to Leipzig**

18:00 **Arrival at Zeitgeschichtliches Forum**



Contact

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