

The framework conditions for the electrical power supply have changed fundamentally. Legislators liberalised the energy market, fostered renewable energy sources and announced a battle against rising emissions. Distributed power generation is one of the possible answers to these changes and at the same time raises new questions. New technological and organisational standards emerge related to the complexity of the electrical power supply system. Fundamental questions concerning the electricity system itself like grid management, capacity planning, stability, protection strategies as well as the power quality and at the same time optimisation of energy supply and demand come to the fore. The borders between producers and consumers become more and more indistinct. New business models have to be developed.

The RTD programme "Energy Systems of Tomorrow" of the Federal Ministry of Transport, Innovation and Technology has got one of its main focuses dedicated to the research topics distributed generation and smart grids. The 1st International Symposium "Distributed Generation and Smart Grids" addresses experts from different fields like electricity production, grids and environment. Prominent representatives from politics, industry and the research community are invited to discuss possible solutions concerning distributed generation and grids. Taking the background of international developments into account, the research topics in question shall be further developed and concretised.

The event is based on findings from the "Energy Systems of Tomorrow" programme and presents a contribution to the "Energie 2050" strategy process of the BMVIT. (For further information see also www.ENERGIESYSTEMEderZukunft.at, www.e2050.at)

Information and registration

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Symposium fees
 EUR 480.00 before 25th Sept. 2006
 EUR 600.00 after 25th Sept. 2006
 EUR 39.00 for students

Symposium languages:
 German and English with simultaneous interpretation

Co-operation partners
Verband der Elektrizitätsunternehmen Österreichs
Österreichischer Verband für Elektrotechnik



Location

TECHbase Vienna
 Giefinggasse 2 / Siemensstraße 103
 A-1210 Vienna
 AUSTRIA

Date

18th and 19th October 2006



ENERGIE 2050- An Initiative by the BMVIT

Organiser: Division of Energy and Environmental Technologies
 Head of Division: DI Michael Paula
 A-1010 Vienna, Renngasse 5

www.NachhaltigWirtschaften.at



1st International Symposium on Distributed Generation and Smart Grids

18th and 19th October 2006
 TECHbase Vienna



Symposium programme



Wednesday, 18th October 2006

8:15 am Registration

Chair: Hubert Fechner, arsenal research

9:00 am Opening

Anton Plimon, Managing Director of arsenal research
Eduard Mainoni, State Secretary for Technology, Federal Ministry of Transport, Innovation and Technology
Heinz Kaupa, Verband der Elektrizitätsunternehmen Österreichs (VEÖ) (Austrian Association of Electricity Companies)

9:45 am Decentralised generation in an international context

ENARD and other activities of the International Energy Agency (IEA)
Samantha Ölz, International Energy Agency

EU technology platform "Smart Grids"
Gerald Vones, Federal Ministry of Economics and Labour

Challenges and advantages arising from decentralised generation
Goran Strbac, Imperial College London, DTI Centre for Distributed Generation and Sustainable Electrical Energy

Relevant aspects for Europe from a US-American viewpoint
Chris Marnay, Berkeley Laboratories, CA

11:40 am Break

12:00 am Decentralised generation in Austria

Framework conditions for research and development in Austria
Michael Paula, Federal Ministry of Transport, Innovation and Technology, Division of Energy and Environmental Technologies

Standardisation and regulation of DG in Europe and Austria
Roland Bründlinger, arsenal research

Opportunities and challenges of distributed generation for Austria
Hubert Fechner, arsenal research

1:15 pm Lunch break

2:45 pm Decentralised generation as seen by plant operators

Interview Session
Chair: Klaus Fischer, Bohmann-Verlag publishers

Stefan Hantsch, IG Windkraft Österreich (Austrian Wind Energy Association)
Gerhard Fallent, Photovoltaic Austria Federal Association
Bernhard Pelinka, European Small Hydropower Association
Franz Kirchmeyr, ARGE Kompost & Biogas Österreich (Austria's Compost & Biogas Working Group)
Günther Herdin, GE Jenbacher AG

3:40 pm Break

Chair: Andreas Lugmaier, arsenal research

4:00 pm Decentralised generation as seen by grid operators

Experiences of Austrian grid operators with DG
Andreas Abart, Energie AG Oberösterreich
Christian Kitz, Vorarlberger Kraftwerke AG
Rudolf Pointner, Salzburg AG

Energy management in the low-voltage grid: conclusions for distribution grid operators gained from the "Am Steinweg" ecological estate
Britta Buchholz, MVV Energie AG

Experiences of Stadtwerke Karlsruhe
Norbert Lewald, Stadtwerke Karlsruhe

POMS – the load management system
Christof Wittwer, Fraunhofer Institut Solare Energiesysteme

Cell controller pilot project (CCPP) and aspects of decentralised energy supply in Denmark
Carsten Strunge, Energinet DK

6:00 pm Champagne reception

7:00 pm Special guest lecture

Jürgen Schmid, Head of ISET (Institut für Solare Energieversorgungstechnik) in Kassel, Germany

Introductory statements: Gerd Schauer, Verbund

followed by **evening buffet**

Thursday, 19th October 2006

Chair: Michael Hübner,
Federal Ministry of Transport, Innovation and Technology

9:00 am Austrian research highlights from the "Energy Systems of Tomorrow" programme line

EE+PQ, Helfried Brunner, arsenal research
DG DemoNetz, Andreas Lugmaier, arsenal research
IRON, Friederich Kupzog, Vienna University of Technology, Institute of Computer Technology
Autonomous regenerative energy systems, Günther Brauner, Vienna University of Technology, Institute of Power Systems and Energy Economics
Micro turbine, Helmut Nedomlel, Wels Strom GmbH

10:40 am Break

11:00 am Development framework for decentralised generation in Austria

Regulatory aspects of decentralised generation
Tahir Kapetanovic, Energie Control GmbH

What we wish for decentralised generation
Hans Auer, Vienna University of Technology, Energy Economics Group

12:00 am Lunch break

1:30 pm Innovation impulses for the Austrian economy

Christoph Panhuber, Fronius International GmbH
Sergej Kalaschnikow, VA TECH ELIN EBG Elektronik GmbH & Co
Heinrich Wilk, Energie AG Oberösterreich
Johann Hell, Nеща Danilovic, VA TECH Hydro GmbH & Co

3:00 pm Round table – visions for the future of decentralised generation

Norbert Lewald, Stadtwerke Karlsruhe
Hans Auer, Vienna University of Technology, Energy Economics Group
Walter Tenschert, Energie AG Oberösterreich
Werner Friesenecker, Vorarlberger Kraftwerke AG
Tahir Kapetanovic, Energie Control GmbH
Karl Derler, Eurelectric

Chair and summary:
Hubert Fechner, arsenal research

4:30 pm End of symposium