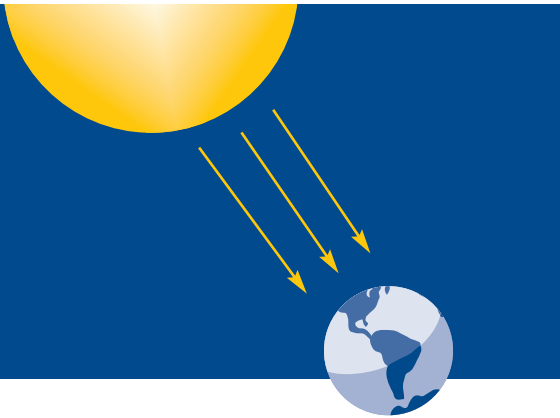


Science Forum ■



Research, Development and Education – The Basis for Wide-spread Employment of Renewable Energies

Wissenschaftszentrum Bonn
1st June 2004

Under the patronage of the
Federal Minister of Education and Research
Edelgard Bulmahn

The Science Forum is organized by the
Solar Energy Research Association (FVS)
in the context of the renewables 2004 conference

Last update: 25 May 2004

Science Forum in the context of the renewables 2004 conference

- **Date**
1st June 2004
- **Location**
Wissenschaftszentrum Bonn
Ahrstr. 45
53175 Bonn
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- **For most recent update please see
www.fv-sonnenenergie.de**

■ Invitation

Ladies and Gentlemen,

environmental problems do not stop at national borders, environmental solutions demand a global perspective. Science and education on renewable energies, therefore, need to consider the specific conditions in developing countries.

One of the main obstacles for the application of renewable energy technologies is the lack of knowledge about how they work, about their potentials and how to use them. Research on applications of renewable energies and training of local experts play thus a pivotal role in global solutions to environmental problems.

The science forum will demonstrate the significance of science, research, education, and training for the global dissemination and application of renewable energy technologies, and for the goal of sustainable development. To this end, the science forum shall connect both human and institutional capacities in a global perspective, name requirements to research and training programs, and discuss what actions need to be taken.

Market launch and research and development of renewable energies must be coordinated. The technological solutions to energy problems are available today. We now need the political will and action to implement them, as Klaus Toepfer, Executive Director of UNEP, said. Research and education policies must bridge the existing knowledge gaps.



Jürgen Schmid · FVS/ISET

Responsible for the program of the science forum

Programme

1st June 2004

■ Opening session

Chair: Jürgen Schmid · FVS (Ger)

- 10.15
- Welcome address, Jürgen Schmid · FVS/ISET (Ger)
 - The significance of research and education for renewable energies, W.-M. Catenhusen · BMBF (Ger)
 - Innovation and the Significance of Human Resources
N.N. · EU-Comission
 - Perspective from the South on the significance of research
Laya Sawadogo · Minister for Research (Burkina Faso)
 - Science and education as key to development, Walter Erdelen · UNESCO

■ Research, Development and Education

Chair: Jürgen Schmid · FVS (Ger)

- 11.15
- Global Research and Development on Renewables – Needs, Contexts and Structures, Joachim Luther · GRA/FVS/Fraunhofer ISE (Ger)
- 11.45
- UNESCO Global Renewable Energy Education and Training (GREET) Programme, Osman Benchikh · UNESCO

■ Renewable Energy Research in a Global Perspektive

Chair: John Christensen , GNESD (DK)

- 12.15
- Research and development needs on renewable energies in industrial countries, Sigurd Wagner · University of Princeton (USA)
- 12.35
- Research and development needs on renewable energies in developing countries, Mongameli Mehlwana · CSIR (South Africa)
- 12.55
- The challenge of renewable energies integration in energy distribution systems, Romeo Pacudan · UNEP Risoe Centre (DK)

Lunch Break 13.15 –14.15

Pressekonferenz

■ Renewable Energy Education Networks

Chair: N.N. · N.N.

- 14.15
- Integrating renewable energies into society
Jan Hamrin · Center for Resource Solutions (USA)
- 14.35
- Access to modern Energy
Ogunlade Davidson · GNESD (South Africa)
- 14.55
- EUREC'S MSc in Renewable Energies, Didier Mayer · CENERG (F)
- 15.15
- The International Institute for Renewable Energies (IIRE), Wattanapong Rakwichian · SERT (Thailand)

Break 15.35 – 15.55

■ Renewable Energy Education Networks

Chair: Walter Erdelen · UNESCO

- 15.55
- UNESCO – GREET Programme in an African view, Lamine Kadi · University of Mostaganem (Algeria)
- 16.10
- UNESCO – GREET Programme in an southamerican view, Alfredo Curbelo · Innovation and Energy (Cuba)
- 16.25
- UNESCO – GREET Programme in a European view, Spyros Kyritsis · AUA (GR)
- 16.40
- Internet-Based Renewable Energy Education and Training Network, Jürgen Schmid · FVS/ISET (Ger)

■ Panel Discussion

17.00 –18.00

- **Requirements to future research, education, and training programmes**
- **Regional, international, global – degree of information exchange, cooperation, and networks of education and research**
- **Participants:**
Herrmann Schunck · BMBF (Ger)
Dieter Holm · GRA (South Africa)
Didier Mayer · EUREC-Agency (F)
John Christensen · GNESD (DK)
Osman Benchikh · UNESCO
Hans-Josef Fell · EUROSOLAR (Ger)
- **Moderator:** Martha Lux-Steiner · FVS/HMI (Ger)



Side Events

1st June 2004

■ **Renewable Energy and Sustainable Development: Role of Research and Academic Institutions**

Stanford A.J. Mwakasonda, ERC

11.00 – 13.00 h, Room S 12

- ERC and its core programs, Stanford A.J. Mwakasonda
- Policies and Measures for Energy Efficiency and Renewable Energy in South Africa, Richard Worthington
- Rural SEED and SHS Concession Project for Rural Electrification, Nthabiseng Mohlakoana
- City of Cape Town and the Energy Strategy, Osman Asmal

■ **Germany goes Renewable – A scientific view on visions, strategies and main steps for a central European country**

Joachim Nitsch, DLR

11.00 – 12.00 h, Room S 1 and S 2

Study group of German Aerospace Center (DLR), Wuppertal-Institute for Climate, Environment, Energy (WI), Institute for Energy and Environment (IFEU), Centre for Solar and Hydrogen Research (ZSW) in connection with Federal Ministry for the Environment (BMU)

■ **Scenarios towards an energy system based fully on renewable sources the Examples Japan and Germany**

Harry Lehmann

12.00 – 13.00 h, Room S 1 and S 2

Institute for Sustainable Solutions and Innovations

■ **Transitioning to a Renewable Energy Future**

Rian van Staden

13.00 – 15.00 h, Room S 12

The International Solar Energy Society (ISES)

■ **Promotion of renewable energies for heating and cooling – Innovative instruments in industrialised countries and initiatives in the EU**

Bernd Hirschl

15.00 – 17.00 h, Room S 12

Institute for Ecological Economy Research (IÖW)

German Renewable Energy Federation (BEE)

European Renewable Energy Federation (EREF)

- Introductory input, Hirschl, Lackmann, Fouquet, Hoffmann
- National examples from Sweden, Austria, Spain, Germany; and focus on Geothermal Energy, Danielsson, Egger, Piria, Pilgaard, Sanner, Fell
- Panel & open discussion
- EU policy, Kellner, Rothe
- Discussion/ Declaration

■ **Capacity Building in Developing Countries – From the Classroom to the Village**

Michael Harms

15.00 – 17.00 h, Room S 1 and S 2

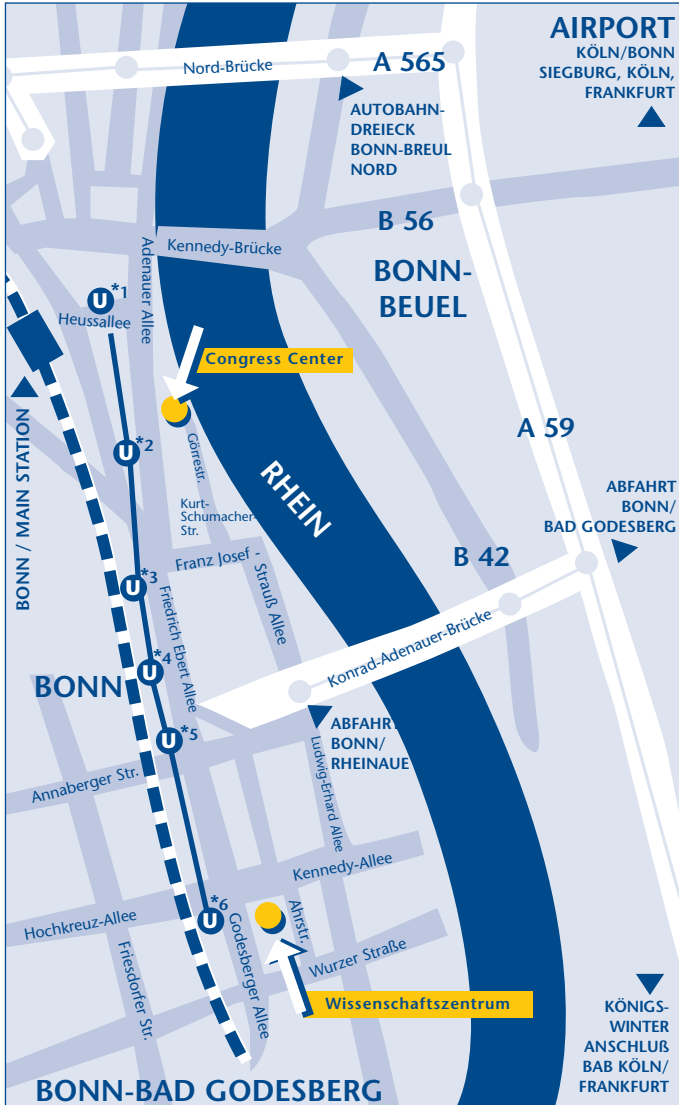
Consortium of DAAD, University of Flensburg, University of Bonn (ZEF), University of Göttingen, and University of Oldenburg

Panel-Participants:

Uwe Rehling, Director of SESAM,

University of Flensburg, (Ger);

Henning Karcher, RR UNDP, (Nepal)



Underground Stations:

- | | | | |
|-----|-------------------|-----|-----------------------------|
| U*1 | Museum Koenig | U*4 | Deutsche Telekom |
| U*2 | Heussallee | U*5 | Max-Löbner-Str./Friesendorf |
| U*3 | Ollenhauerstrasse | U*6 | Hochkreuz/Deutsches Museum |

Site Plan

- **Science Forum**
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 53175 Bonn
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 Fax: +49 (0) 228/302-270
 www.wzbonn.de
 Underground Station: Hochkreuz

- **renewables 2004**
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 (Plenary Chamber and Waterworks)
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 53113 Bonn
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 Underground Station: Heussallee

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Sonnenenergie

Solar Energy Research Association

Member institutes



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Science Forum in the context of the renewables 2004 conference

1st June 2004

Wissenschaftszentrum Bonn
Ahrstr. 45
53175 Bonn
Germany

■ Registration

There are no fees for registration or participation.
Please register as participant of Side Events as well.

title, name, first name

organisation

street

city

country

phone

e-mail (in order to confirm your registration)

**In case of requests
concerning your registration
please contact:**

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