Science Forum of the renewables2004

International Conference for Renewable Energies

Networked Knowledge for Renewable Energies

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

Science Forum 2004

Organized by the Solar Energy Research Association
ForschungsVerbund Sonnenenergie (FVS)
On 1st June in Bonn

This publication has been supported by the BMBF

Inhalt

Science Forum 2004

FVS ForschungsVerbund Sonnenenergie

Solar Energy Research Association

Editorial: A Knowledgeable Strategy for the Dissemination of Renewable Energies

Energy was one of five foci of the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002. While the access to modern energy is crucial for poverty reduction in particular and development in general, the way of producing and providing that energy is as crucial for environmental and social sustainability. Hence, the renewables2004 – the International Conference for Renewable Energies was the logical consequence and next step on the way forward. It was held from 1st June to 4th June 2004 in Bonn, Germany, and turned out to be a forum for stakeholders from all sectors: Governments as well as parliamentarians, the private sector, NGOs, International Organisations, and International Financial Institutions. On 1st June this multisectoral approach to the dissemination of renewables was completed by the Science Forum – Education, Research, and Training: Basis for Wide-spread Deployment of Renewable Energies. This one-day side-event brought together scientists and practitioners from allover the world, discussing the future requirements of research and development as well as needs and potentials of education and training for renewables in developing and industrialized countries.

Knowledge will be beyond doubt the source of power and wealth in the coming global knowledge-based society and, hence, is a leverage for all capacity building in sustainable development. The generation and distribution of knowledge, however, will not work the ways usual commodities do. Its value can hardly be priced, nevertheless it has value for actors in developmental processes. Knowledge can be characterized as public or at least semi-public good. Neither markets nor politics alone will be sufficient to provide the knowledge resources needed for the successful creation of markets for renewable energies.

Multisectoral partnerships of autonomous actors, who cooperate flexibly and provide each other with abilities, information, and complementary resources when needed, offer a new and increasingly prominent informally structured model for international cooperation for sustainable development. Knowledge networks combine efficiency of competition with effectiveness of cooperation. Those networks avoid situations of international stalemate and offer optimal conditions for the cooperative dissemination of renewable energies. One of the major, but not uncontroversial outcomes of the WSSD were the so called Type II partnerships, in all of which knowledge is an important resource to be traded.

Those organisational forms demand a strategy of management of knowledge in particular and of knowledge networks in general. That strategy has to complement self-organizing processes of markets with the mechanisms of political governance. It needs to connect decision-making to action and allow renewable energies through political interventions to compete on level playing fields.

The Science Forum achieved to gather the scientific community and contributed to the excange and elaboration of strategic knowledge, though a consistent strategy to manage networks and their knowledge resources for the dissemination of renewables is (still) missing.

The Science Forum would not have been possible without the generous sponsorship and support of the German Federal Ministry for Education and Research (BMBF). We are also deeply grateful to the Thematic Advisor of the Conference Renewables 2004, Dieter Uh, of the German Energy Agency (DENA), and Martin Schöpe of the Federal Ministry for the Environ-

Jürgen Schmid
Solar Energy Research Association (FVS/ISET)
jschmid@iset.uni-kassel.de

Sebastian Wienges
Solar Energy Research Association (FVS)
wienges@gmx.de

Gerd Stadermann
Solar Energy Research Association (FVS)
fvs@hmi.de

ment (BMU) for the thorough discussions and useful advice on the organisation. Special thanks deserve Hans-Josef Fell, MoP, who as parliamentary expert for research policy of Alliance 90/The Greens propelled the decision for the realisation of the Science Forum.
This volume presents the papers of the speakers at the Science Forum, complementing each other to make knowledgeable the strategic significance of knowledge, respectively research and education for sustainable development and the switch to a renewable energy system. It cannot give a recipe how to manage that switch, that puzzle is still to be resolved, even if the organisers of the Science Forum hope to have made another step on "the way forward on renewable energy".

Particularly one outcome (see annex) of the Science Forum proves this hope to be realistic. During the panel discussion the proposal of an open international university for renewable energies was taken up and launched:
On 2nd June, EUROSOLAR and the Solar Energy Research Association (FVS) initiated a foundation process of the Open University for Renewable Energies (OPURE), which was acknowledged as significant commitment and included in the Internatioanl Action Plan of the conference. For the time being the university will be internet-based. A respective platform will be developed by the member institutes of the FVS. OPURE is supposed to serve the exchange of information and impart knowledge on renewable energies, connect existig initiatives and multiply the impact. The UNESCO, continuing the GREET Programme, and the BMBF welcomed the proposal and plan to finance that initiative.

OPURE opens a new opportunity to disseminate R&D results, information, and knowledge, and to make them accessible on a global scale. For environmental problems and knowledge have one thing in common: they do not stop at national borders. The renewable energy technologies are already forthcoming in the industrialised countries, but they cannot resolve the global environmental problems and mitigate climate change without the developing countries.