



Solar Oases: Transformation of Deserts into Gardens

Food, water and electricity out of the desert – that is the vision of the International Research Centre for Renewable Energy e.V.(IFEED), in Sievershausen. This should be possible through an intelligent utilization of renewable energies and they are quickly spreading this message world wide. Industrial companies, organisations and governments put their trust meanwhile in the planning and implementation of big technical projects costing up to 400 billion Euro such as the massive desert electricity project Desertec-Initiative and the planned two-gigawatt-solar agency near Ordos in China. However, focus on these projects lies only with the energy production, while IFEED in Sievershausen goes a definite step further. In their plans, they use the heat process which occurs in such solar projects to make inhospitable regions liveable. The catchword is “Solar Oases”.

Sievershausen, 19th of December 2009.

Great technical solar plants are planned with one primary factor - the Sun. The Desertec-Initiative, for example, plans to furnish Europe with electricity out of the Sahara. Studies show that the equator, near the desert regions, receives in a couple of hours so much energy from the sun, that the energy demand of the entire world could be covered for a year. The IFEED team under Prof. Dr Nasir El Bassam supports renewable energy and the new developments in this area. The organisation does not restrict their views alone however, on energy production.

In three research studies under the overall control of the Centre of German Aviation and Spaceflight (DLR), Prof. El Bassam and his team examined the basic principles for the cultivation of the desert. In the large-scale production of solar energy in solar thermal power plants, also named Concentrated Solar Power or CSP, large quantities of heat are produced. The process heat will be used in large-scale neighbouring sea water desalination plants in preparing drinking water. This drinking water is for IFEED the key for the implementation of solar oases - creation of new habitats in the desert. The drinking water produced in the connection with the solar thermal plants and sea water desalination will be used for irrigation. Sustainable agriculture will develop and be possible in these oases. The team of IFEED has researched around 450.000 well known plant species, such as agriculture and forage crops, which can be cultivated in such desert oases. Also animal husbandry could be possible.

A positive side effect: The micro climate will improve and the temperatures could sink to around 8 degrees. In addition, the plants, buildings and structures would help substantially in diminishing the dust load in the desert oases.

The solar thermal energy production offers therefore chances for both sides: Electricity out of renewable energies for the industrialized countries in the moderate climate zones and growth of valuable habitats in the sun rich, arid countries on whose territory the solar energy is produced.

The International Research Centre for Renewable Energy e.V. promotes the use of renewable energies and the implementation of new developments in this field. Its goals are the development and planning of sustainable, integrated solutions for any global location. At the same time long-term solutions are considered for energy, drinking water and food.

The International Research Centre for Renewable Energy e.V. was founded in 1999 in Dedelsdorf, Gifhorn county. The main office is located in Sievershausen, near Hannover, where seminars, conferences and trade exhibitions are offered.

Contact information:

IFEED e.V.
Professor Dr Nasir El Bassam
Kirchweg 4A
31275 Lehrte-Sievershausen
Germany

Telephone: +49 (0)5302-1303
Fax: +49 (0)5102-1303
E-mail: info@ifeed.org
Internet: www.ifeed.org
International Secretary: m.schlichting@ifeed.org