

**Call for Papers**  
**for the Conference Special Stream on**  
**Decentralized Energy Systems**

within the

**11th Annual International Sustainable Development Research Conference**  
June 6-8, 2005 in Helsinki at Finlandia Hall, Finland

Conference Website: [www.erpenvironment.org](http://www.erpenvironment.org)

Session Convenor: Ingela Tietze-Stöckinger

Decentralized energy supplies can significantly contribute to increase the overall efficiency of existing power supply systems and thus to reduce CO<sub>2</sub> emissions and costs. Taking into consideration the limited transportability of heat and steam, decentralized supply structures open new application fields for innovative cogeneration options such as micro CHP and fuel cells. In the field of electricity supply, the proximity of energy supply and consumption decreases transport and distribution losses. The ownership of conversion units by the final users (industry, households) may furthermore favourably influence consumption behaviours (total demand, load curve).

For the conference stream on “DECENTRALIZED ENERGY SYSTEMS”, we are looking for papers addressing the following topics:

1. Regional energy network
  - a) technical/economic feasibility
  - b) economic, ecological and social benefits
  - c) barriers and drivers for the implementation
  - d) inter-company co-operation
  - e) case studies
  
2. Integration of decentralized energy generation into existing national energy systems
  - a) modelling of generation and/or grid systems
  - b) economic, ecological, and social impacts
  - c) virtual power plants
  - d) fluctuating energy sources (wind, photovoltaic)

The conference stream seeks to bring together an international and interdisciplinary audience to share experiences, to validate and generalize research results and to initiate new research work.

The conference stream will be chaired by Ingela Tietze-Stöckinger, working group

“Energy Systems Analysis and Environment”, Institute for Industrial Production (IIP), University of Karlsruhe (TH), Germany.

Initial abstracts of approximately 200 words should be emailed to I. Tietze-Stöckinger ([ingela.tietze-stoeckinger@wiwi.uni-karlsruhe.de](mailto:ingela.tietze-stoeckinger@wiwi.uni-karlsruhe.de)) and to J. Korhonen ([jouni.korhonen@uta.fi](mailto:jouni.korhonen@uta.fi)) by February 11, 2005.