



# A Global Grid to Reduce CO<sub>2</sub> Emissions – potential and challenges

**A seminar arranged by The Royal Swedish Academy of Engineering Sciences and The Sweden-Japan Foundation in cooperation with The Royal Swedish Academy of Sciences and The Swedish Agency for Growth Policy Analysis**

Professor *Jun-Ichi Nishizawa*, one of Japan's most respected scientists and inventors, presents his vision of a future sustainable electricity grid. He proposes an extremely low-loss Direct Current (DC) transmission network system, which would play a key role in a future global electricity distribution system. He argues that a system based on existing modern technology with less transmission losses would make it possible to utilize abundant water and solar power in very remote areas, even from the North pole to the South pole.

Recently several companies, among them ABB, founded DESERTEC – a project with the aim to transfer thermal solarpower from the Sahara to Northern Europe. Dr. *Thiemo Gropp* will tell us more about this project.

High Voltage DC transmission technology is an area in which Sweden has a great deal of knowledge and expertise. In this seminar experts take the opportunity to discuss potentials and obstacles with this technology. The deployment of this technology will also be discussed from the point of view of international relations.

The seminar is a part of the study Energy Crossroads and the Sweden-Japan Energy lectures.

## Registration and more information

- Date: Monday November 16, 13.00–15.00  
Venue: IVA's Conference Center, Grev Turegatan 16, Stockholm  
Registration: Register at [www.iva.se/sem-20091116](http://www.iva.se/sem-20091116) no later than November 9 2009.  
The seminar is free of charge.  
More information: Contact *Ann-Margret Back*, e-mail [annmargret.back@iva.se](mailto:annmargret.back@iva.se), tel +46-8-791 29 62.



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# Programme

Welcome Address

Prof *Björn O. Nilsson*, President of the Royal Swedish Academy of Engineering Sciences

Sweden-Japan Energy Lectures

Mr. *Edvard Fleetwood*, Secretary General, Sweden-Japan Foundation

“How to Reduce CO<sub>2</sub> Emission with Global High Voltage Direct Current Transmission Technology”

Prof *Jun-Ichi Nishizawa*, Senior Advisor to Sophia University, former President of Council of Academies for Engineering and Technological Sciences

“Implications of this Technology for Europe and Sweden”

*Gunnar Asplund*, honorary doctorate at KTH, GBA Consulting

“Integration of Renewables – the role of interconnectors”

*Lars Jacobsson*, Head of strategic planning and development, Vattenfall Nordic

“DESERTEC – An executable program for energy, water and climate security with clean power from deserts”

Dr. *Thiemo Gropp*, Desertec Foundation

Panel discussion:

Mr. *Per Bolund*, Member of Parliament (mp, Green Party)

Mr. *Sture Larsson*, Technical director, Svenska Kraftnät

Dr. *Tomas Ries*, Director, Swedish Institute of International Affairs

Moderator: *Bo Normark*, President, Power Circle



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