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CEESA

International Conference on Energy, Environment and Health - Optimisation of Future Energy Systems

**Three days conference from
May 31 to June 2, 2010
at Carlsberg Academy,
Copenhagen, Denmark.
Conference information, see
www.ceeh.dk/conference**

The objective of the conference is to enhance the collaboration between scientists from different research fields with the mission to establish a common framework for interdisciplinary based systems to support optimal planning of future energy production and consumption where both direct and indirect costs related to human health, the natural environment and climate change are considered.

To ensure the needed interdisciplinary approach the conference invites researchers from the scientific communities within atmospheric physics and chemistry, air pollution modelling, environmental sciences, energy systems, human health and environmental economy. Submission of abstracts is invited within the following sessions:

Session 1: Energy System Modelling

Modelling of energy systems, including conventional and renewable energy sources. Modelling of energy demand side, e.g. electricity, heating and transport. Integration of e.g. wind energy, biomass and hydrogen in energy systems. Integration of demand side in energy system models - saving, efficiency improvement and flexible demand. Energy system optimisation models.

Session 2: Environmental and Health Impacts

Describe the link between air pollution and environmental and health impacts. Quantification of the impacts from different pollutants on respiratory and cardiovascular diseases as well as on terrestrial and marine eco-systems. To investigate the effect of the chemical composition on toxicological impact and the link to epidemiology. Quantification of the health impacts of pollutants on a macro-scale level based on statistical methods. Dose-response functions as well as critical loads and levels.

Session 3: Economic valuation

Economic valuation of health and environmental externalities. Cost of impacts from air pollution on human health and the natural environment, including e.g. valuation of statistical lives (VSL) and value of life-years (VOLY), Unit values applied for assessment of the damage costs of air pollution, valuation of morbidity and mortality effects, cost of climate change (what is the cost of one kg CO₂).

Session 4: Integrated modelling and Optimization

Integrated modelling of energy systems, air pollution, environmental and health impacts, economic valuation and climate change. Description of - and typical results from - integrated modelling frameworks that include one or more of the above mentioned components. E.g. integration of energy systems and air pollution modelling, integration of air pollution, health impacts and cost, or climate changes and energy optimisation modelling systems, etc.

Session 5: Future scenarios for energy production and consumption

Future scenarios for energy production and consumption with respect to costs related to the natural environment and human health. Optimisation of future energy systems including direct as well as indirect costs. Recommended scenarios as basis for optimal planning of future energy systems and solutions based on the interdisciplinary approach.

Practical information and dead lines:

For information of registration for the conference, see www.ceeh.dk/conference. This web site also contains detailed descriptions of the conference venue, accommodations, transport, etc, and will be updated continuously. The deadlines are:

- Abstract submission: April 1, 2010
- Early bird registration: April 1, 2010
- Registration dead line: May 1, 2010
- Extended abstract submission: May 15, 2010

Organising Committee: Lise Frohn¹, Allan Gross¹, Kenneth Karlsson², Jørgen Brandt¹, Eigil Kaas³.

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