



May 2008

Call for Papers

Second Trans-Atlantic INFRADAY Conference on Applied Infrastructure Modeling and Policy Analysis

Sustainability Infrastructure: Modeling and Policy Issues in a Low-Carbon World

Friday, 14 November 2008, Washington, DC

Organized by

University of Maryland, College Park, Maryland 20742 USA
Resources for the Future, Washington, DC 20036 USA
Dresden University of Technology, Dresden, Germany
DIW Berlin (German Institute for Economic Research), Berlin, Germany

Subject

Increasing focus on environmental and sustainability issues is a key driver in many of today's infrastructure policy decisions. Models are needed to clearly identify the tradeoffs between competing technologies, investment decisions, issues of reliability and resilience, and the like. The formulation, analysis, and algorithm development for these models needs to be multi-disciplinary activity including participation from engineering, economics, mathematics/operations research being some of the key disciplines involved.

The objective of the Trans-Atlantic INFRADAY conference is to identify similarities and differences between various networked industries: energy, transportation, telecommunication, and water as well as draw comparisons between North American and European experiences in research in this area with particular emphasis on the engineering-economic connection, as well as the policy implications.

Papers may be theoretical or applied, and may address the following issues:

I. Cross-sectional topics

- **Infrastructure requirements in a low-carbon world:** electricity, gas, CO₂, carbon storage, hydrogen, transportation, water, etc.
- **Modeling of critical infrastructure networks:** e.g. linear and non-linear optimization, equilibrium modeling (MPEC, EPEC, etc.), stochasticity, reliability, etc.
- **"Optimal" infrastructure investment and pricing:** e.g. congestion pricing, price differentiation, peak-load pricing measuring efficiency, different regulation regimes, etc.
- **Institutional and policy aspects of regulating sustainability infrastructures:** regulation, restructuring and investment incentives,
- **Correcting market failures:** internalization of external costs, R&D and innovation policies, subsidies, etc.

II. Sectoral analyses and case studies

- **Energy (electricity, natural gas, renewable energies, oil, coal)**
- **Transportation (roads, railways, air transport, shipping)**
- **Telecommunications & Internet**
- **Water (supply and waste water)**

Paper Proposals

Please send either a full paper or an extended abstract (one page, about 300 words) by 15 September 2008 as a pdf or MS word file to: transatlantic_infraday@ee2.biz. Information on acceptance will be given by 30 September 2008; the full version of the paper and a presentation are due by 31 October 2008. Papers will not be published but posted on the conference website; presentations will be included in the conference hand-out.

Venue & Registration

The conference will take place on Friday, 14 November 2008, at Resources for the Future, 1616 P Street NW, Washington, DC 20036 USA. Please register by sending your name and affiliation to: transatlantic_infraday@ee2.biz. (Please also indicate attendance of dinner Friday night.) Participation fee is US\$100 payable by credit card either before the conference (preferred) or the day of the conference. (Fee for dinner only: US\$75.) For papers, payment details, cancellation policy, directions, etc. please refer to the conference webpage: tai.ee2.biz.

Contact

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For inquiries concerning payment of participation fee: Lisa Mihalik, Resources for the Future, mihalik@rff.org, +1-202-328-5177.

Organizing Institutions

University of Maryland (UMD) the Department of Civil & Environmental Engineering (www.civil.umd.edu) as well as the Center for Integrative Environmental Research specialize in modeling and policy analysis for network industries in energy, transportation, water, and telecommunications.

Resources for the Future (RFF), an economic think tank specializing in environmental and policy analysis (www.rff.org).

The Chair of Energy Economics and Public Sector Management (EE²) at Dresden University of Technology is specializing in regulation and organizational issues in the energy sector, and Public Sector Management (www.ee2.biz).

DIW Berlin, the German Institute for Economic Research, is one of the leading economic research institutes in Germany carrying out fundamental research and policy advice, with a focus on transport, energy, and telecommunication economics (www.diw.de).

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