





# Call for Papers 6<sup>th</sup> Annual Trans-Atlantic INFRADAY Conference on Applied Infrastructure Modeling and Policy Analysis

# - Infrastructure Resilience -

# Friday, 9 November 2012, Washington, DC

Organized by University of Maryland, College Park, Maryland 20742 USA Resources for the Future, Washington, DC 20036 USA

DIW Berlin (German Institute for Economic Research), Berlin, Germany Berlin University of Technology, Berlin, Germany

## Subject

Addressing issues of long-term sustainable infrastructure networks clearly requires an engineering-economic-institutional approach. The long life of network infrastructures requires specific approaches to long-term planning, financing, construction, and maintenance. Models are needed to clearly identify the tradeoffs between competing technologies, environmental impacts, investment decisions, issues of reliability and resilience, and the like. But companies and policymakers also need advice on the appropriate institutional and regulatory decisions to make large-scale, long-term investments and the efficient operation of sustainability infrastructure happen ("governance structures").

The objective of this sixth Trans-Atlantic INFRADAY conference is to identify similarities and differences between various networked industries such as energy, transportation, and water, and to 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 in order to guarantee sustainability of infrastructure systems. This year's theme is "Infrastructure Resilience" in the face of man-made or natural events.

#### Confirmed Keynote presentations will be given by:

- Elise Miller-Hooks (University of Maryland, College Park, USA)
  - Bjørn Bakken (SINTEF, Trondheim, Norway)
- George S. Hawkins (District of Columbia Water and Sewer Authority, USA)

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

#### I. Cross-sectional topics

- Infrastructure requirements in a low-carbon world: electricity, gas, CO<sub>2</sub>, hydrogen, transportation, water, super-grids, smart-grids, 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 etc.
- Institutional and policy aspects of regulating sustainability infrastructures: planning, corporate governance structures, ownership issues, regulation, restructuring, etc.
- II. Sectoral analyses and case studies
  - Energy (electricity, natural gas, renewable energies, oil, coal, CCS)
  - Transportation (roads, railways, air transport, shipping)
  - Water (transmission and distribution, supply and wastewater)

#### **Paper Proposals**

Please send either a full paper or an extended abstract (one page, about 300 words) by <u>14 September 2012</u> as a pdf or MS word file to: <u>transatlantic infraday@umd.edu</u>. Information on acceptance will be given by approximately 24 September 2012; the full version of the paper and a presentation are due by <u>22 October 2012</u>. Papers will not be published but posted on the conference website. The same applies to the conference presentations.

## Venue & Registration

The conference will take place on Friday, 9 November 2012, at Resources for the Future, 1616 P Street NW, Washington, DC 20036 USA (<u>www.rff.org</u>). Participation fee is as follows: Conference only, \$100, Conference + dinner at the Tabard INN (\$150), dinner only (\$100) payable by credit card. Registration details will be available via the conference registration and payment website, <u>http://www.regonline.com/TA12012</u> (active approximately 15 June 2012).

#### Contact

General inquiries: Chalida U-tapao: transatlantic infraday@umd.edu, www.mepp.umd.edu/TAI2012

For inquiries concerning payment of participation fee: Chalida U-tapao: transatlantic infraday@umd.edu, questions about Resources for the Future, Christine Tolentino, Resources for the Future, tolentino@rff.org.

## **Organizing Institutions**

- University of Maryland (**UMD**): the Master of Engineering and Public Policy Program (<u>www.mepp.umd.edu</u>) and the Civil Systems Program , (<u>www.civilsystems.umd.edu</u>) in the Department of Civil & Environmental Engineering (<u>www.civil.umd.edu</u>).
- Resources for the Future (RFF), an economic think tank specializing in environmental and policy analysis (www.rff.org).
- The Workgroup for Infrastructure Policies (**WIP**) at Berlin University of Technology focuses on planning, financing, provisioning, and regulation of network industries (<u>www.wip.tu-berlin.de</u>).
- **DIW Berlin**, the German Institute for Economic Research, 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 (<u>www.diw.de</u>).



