

International Conference on Sustainability in Energy and Buildings

Invited Sessions

Title of Session: Sustainable Energy Systems and Building Services

Name of Chair:

Chair: Professor Ivo Martinac, Professor and Chair of Division of Building Service and Energy Systems, School of Architecture and the Built Environment at Royal Institute of Technology, Sweden, and a Visiting Professor at Sustainable Building and Environmental Research Institute, Northwestern Polytechnical University, Xi'an, PR China. He specializes in sustainable building systems, energy utilization in the built environment, renewable energy systems, energy efficiency and conservation in buildings, and sustainable resource management.

Co-chair: Aumnad Phdungsilp, Assistant Professor of energy management at Faculty of Engineering, Dhurakij Pundit University, Bangkok, Thailand. A Visiting Researcher at Division of Building Service and Energy Systems, Royal Institute of Technology, Sweden, and a Research Associate with the Urban and Regional Carbon Management Initiative of the Global Carbon Project hosted by National Institute for Environmental Studies in Japan. His research focuses on energy systems modeling, urban energy use and carbon emissions, urban metabolism, and energy-water-carbon nexus in cities.

Description:

The goal of this special session is to better understand how to optimize the sustainability of energy systems and services for building clusters and urban districts. This session focuses on developing framework, modeling techniques, and computational optimization of district scale resource flows and energy services. The session aims to present methodologies that will be uniquely capable of simulating energy systems and building services, supporting users to identify ways of optimizing resource flows, maximizing the use of local and renewable energy resources and minimizing overall environmental emissions, and generating new ideas for low-carbon energy systems development.

We are interested in a modeling-based approach to the design of energy systems and services and to integrate the assessment of the environmental impacts of different alternatives and components. Contributions are welcomed on methodological aspects of the modeling techniques, case studies in any region of the world, and comprehensive assessment projects. Contributors are asked to assign their presentations to one of the following topics: (a) Optimization of energy systems and services for building clusters and urban districts; (b) New approaches to quantification and analysis of energy systems for urban districts; (c) Development of sustainable urban systems performance; (d) Policy aspects on energy systems and building services; and (e) Other related topics.

Website URL (if any):

Email & Contact Details:

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