



INTERNATIONAL

INVITED SESSION SUMMARY

Title of Session: Zero Energy Buildings and Communities and the role of Smart Grids

Name, Title and Affiliation of Chair:

Denia Kolokotsa, Associate Professor, Technical University of Crete

Details of Session (including aim and scope):

The concept of Smart and Zero Energy Buildings has attracted the interest of the scientific community, policy organisations and the industry worldwide. Special attention is paid to bridge integrated design and energy efficiency in new and renovated buildings via strategic energy and environmental objectives, policy initiatives, regulatory reforms and financial incentives.

On the other hand, the requests of the future communities are very demanding. They should be places of advanced social progress and environmental regeneration, as well as places of attraction and engines of economic growth based on a holistic integrated approach in which all aspects of sustainability are taken into account.

The main objective of this session is to provide recent insights and developments the current state of the art in the potential of buildings and communities to be integrated in smart grids as well as to discuss the still-open research issues in this field. The challenges for the building sector are discussed and future research prospects are analysed. Topics such as demand response, predictive algorithms, software platforms, etc. are discussed.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

The target audience of the session consists of several researchers from Greece, Europe and all around the world seeking to investigate energy efficiency in building through passive strategies and microclimate mitigation techniques.

Website URL of Call for Papers (if any):

Email & Contact Details:

dkolokotsa@enveng.tuc.gr