## **ENERGY in BUILDINGS 2016**

Date: Saturday November 12, 2016
Place: Athens, Hellas





## # Haris Doukas Dr Mechanical Engineer Assistant Professor, Management & Decision Support Systems Laboratory, School of Electrical and Computer Engineering, National Technical University of Athens Presentation title: Building Energy Management Systems using an Innovative "Smart City Platform"

The aim of this paper is to present the development of a Building Energy Management System (BEMS) based on an innovative "Smart City Platform", using Smart Decision Support Systems (DSS). The proposed platform sits on the top of existing energy management systems, integrating five data sources from various domains (weather, building monitoring, occupants' feedback, energy prices and energy production), in order to propose short-term action plans for building / energy managers to optimise energy use and thereby reducing energy costs and carbon emissions.

## CV:

Event:

Dr. Haris Doukas is an Assistant Professor in the School of Electrical & Computer Engineering, National Technical University of Athens (NTUA). Dr. Doukas has a degree on Mechanical Engineering (Aristotle University of Thessaloniki – AUTH, 2003), and a PhD on the decision support systems for the sustainable energy sector's operation (NTUA, 2009). He is teaching energy management, energy and environmental policy, operational research, multiple criteria decision support systems, engineering economics and techno-economics of energy at graduate and post graduate level at NTUA. Dr. Doukas has a working experience of 14 years in the scientific areas of decision support systems for energy and climate policy and planning as well as energy management. He has held the position of project manager/ energy expert in the fields of energy and environmental policy and modelling, development & administration of decision support systems in national and EU funded projects (FP6, FP7, H2020, Synergy, Intelligent Energy Europe, etc). Recently, Dr Doukas coordinated the European FP7 OPTIMUS project, within which a package of web-based consulting tools for energy managers and energy consultancies was developed, in order to make cities more energy efficient and sustainable. Dr. Doukas has also working experience in international cooperation initiatives for the promotion of clean energy and is currently the research collaboration specialist of the <u>EU-GCC Clean Energy Network</u>, which aims to catalyze partnerships between clean energy stakeholders, both in the Gulf Cooperation Council (GCC) countries and the EU. Dr. Doukas has more than 80 scientific publications in international journals and more than 100 announcements in international conferences, chapters in books etc. For his work, Dr. Doukas has received awards by the State Scholarship Foundation (IKY), the NTUA, the AUTH the Technical Chamber of Greece (TCG) and the Hellenic Operational Research Society (HELORS).