

Mediterranean Green Energy Forum

26-28 March 2015



http://nkms.free.fr/MGEF/MGEF2015.htm

Special Session

Title of Session: Buildings Energy Performance in the Mediterranean Area BEPinMA2.

Chair: Prof. Brahim BENHAMOU, Cadi Ayyad University Marrakech (Morocco)

Introduction and background:

The Mediterranean Countries are undergoing rapid urbanization, which is reflected in massive demand for housing, especially in the South side. It is estimated that by 2030, a further 42 million housing will be needed. Under the combined effect of demographic pressure and economic growth, demand for energy and electricity is set to increase 1.5-fold by 2030 [Blue Plan Notes, 18 May 2011].

The building industry, which ranks first in terms of electricity consumption and second, after transportation, for fossil fuels, is a key sector, since it allows influence to be brought to bear on both demand (energy efficiency measures) and supply (integration of Renewables). Globally speaking, it is estimated that potential energy savings in the construction sector amount to some 40%, largely through economically viable measures. Accounting as it does for one third of total energy consumption in the Mediterranean countries, the building sector could provide for energy savings of up to 60%.

The building industry accounts for about 38% of final consumed energy, with the residential sector consuming between 21% and 51% of national electricity production, depending on the country.

In view of the demand for housing, public policy in the Northern Mediterranean Countries is focused on encouraging the redevelopment of existing stock, whilst vast construction programs are being rolled out in the Southern and Eastern Mediterranean Countries.

The Mediterranean climate is characterized by moderately cold winters and high solar radiation with very hot summers. Recent decades have seen a rise in the number of air-conditioning systems in Mediterranean countries. This creates considerable problems at peak load times, increasing the cost of electricity and disrupting the energy balance. Priority should be given to strategies which enhance the thermal performance of buildings during the summer period. To that end, there should be focus on measures which avoid overheating, such as shading and sufficient thermal capacity in the building construction, and further development and application of passive cooling techniques, primarily those that improve indoor climatic conditions and the micro- climate around buildings.

The first edition if this special session BEPinMA1 was organized during MGEF-13 held in Fes, Morocco on June 16-21, 2013 (http://mgef-13.sustainedenergy.org/cms/userfiles/is01.pdf). 14 papers from 8 Mediterranean countries were presented (http://mgef-13.sustainedenergy.org/MGEF13-Programme.pdf).

Theme and scope

This second edition **BEPinMA2** aims to disseminate new knowledge about Energy Performance in Mediterranean Buildings as well as Mediterranean experiences in Buildings Energy Performances.

Original papers are welcome on a range of topics related to this special session's theme, that is, but not limited to: Energy Performance Regulations, Dynamic Thermal Simulation of Buildings, Energy Performance Measurement, Passive Cooling Techniques, Nearly Zero Energy Buildings...

Paper formatting and submission procedure

Papers should be detailed academic articles in conventional format.

Please use the IEEE standard template. The guide length for papers is 6 pages.

Guidance notes for the preparation of Full Papers is available here and the template is available here (IEEE Template). For more information please refer to this link http://nkms.free.fr/MGEF/Submissions.htm

FULL papers (there is no abstract submission stage) should be submitted as PDF documents via this link: https://cmt.research.microsoft.com/MGEF2015/

After review (at least two referees) the editable source files for the paper will be requested for publication.

Important dates and deadlines:

- Deadline for submission of full papers: 8th December 2014 (if more delay is needed please email the session chair and provide 1 page abstract)
- Notification of acceptance: 31 January 2015
- Upload of final papers: 16 February 2015

Website URL the conference: http://nkms.free.fr/MGEF/MGEF2015.htm

Email & Contact Details: BrahimBenhamou@gmail.com