

International Conference on Sustainability in Energy and Buildings (SEB-13)

Fes, Morocco, 16-21 June 2013

Invited Session

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

Co-Chair: Prof. Brahim BENHAMOU, Cadi Ayyad University Marrakech (Morocco) Dr Karim LIMAM, La Rochelle University (France)

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. Consequently, recent years 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.

Theme and scope

This special session aims to:

- Disseminate new knowledge about Energy Performance in Mediterranean Buildings.
- Compare 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, Technologies for Improving Energy Efficiency in Buildings, Passive Cooling,...

Paper formatting and submission procedure

Papers should be detailed academic articles in conventional format. The guide length for papers is 10 pages. Guidance notes for the preparation of Full Papers is available http://seb.sustainedenergy.org/EGYPRO template-1.doc). For more informations please refer to this link http://seb.sustainedenergy.org/submission.php

FULL papers (*there is no abstract submission stage*) should be submitted as PDF documents through the http://mgef-13.sustainedenergy.org/prose.php; or http://seb.sustainedenergy.org/prose.php On this webpage, authors should select: 'IS01 *Buildings Energy Performance in the Mediterranean Area*' from the drop-down menu for Session Name, and should also complete all other requested informations.

The paper will be sent to at least two referees for review. After review the editable source files for the paper will be requested for publication.

Important dates and NEW deadlines (modified according to the conference new schedule):

- Submission of full papers for review: 1st March 2013
- Notification of acceptance: 1st April 2013
- Upload of final camera-ready publication files: 1st May 2013 (hard deadline will not be extended)

Note: The Australian Research Council Excellence for Research in Australia survey in 2010 (ERA2010) rated SEB as a Grade 'A' (top grade) conference. See http://www.arc.gov.au/era/era/2010/archive/era journal list.htm#2

Website URL of Call for Papers: http://seb.sustainedenergy.org/cms/user/ISdisplay.php

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