The future of energy systems in buildings

Prof. Umberto Desideri
Full professor of Thermal Machines,
Head of the Dept of Energy, Systems, Territory & Construction Engineering
University of Pisa

Summary
The energy consumed by final users in their homes is becoming the largest share of primary energy consumption in developed countries. This is causing a big change in the supply and demand of energy in most areas of the world.
New directives about energy efficiency in buildings are changing the way energy is consumed and converted for electric uses and heating and cooling. Buildings are increasingly being transformed into energy production sites with very low internal consumption. New systems are being installed and they may have a significant effect on the national grids, where the penetration of renewables is larger and larger.
It is therefore necessary to improve the way energy in buildings is produced and used by promoting the consciousness of energy consumption among dwellers and introducing new building automation technologies to help the consumers to optimize their energy efficiency.
This talk will try to stimulate a multidisciplinary approach to energy efficiency in buildings, removing barriers between different approaches and methodologies and trying to bridge different competences to achieve the final goal of increasing the share of renewable energy in energy production.

About the speaker
Prof. Umberto Desideri is Full professor of Thermal Machines and Head of the Department of Energy, Systems, Territory and Construction Engineering at the University of Pisa, Italy. He is member of the Editorial Board of several scientific journals and author/co-author of more than 200 scientific publications. His research topics include renewable energy systems, innovative and high efficiency fossil fired power generation systems, hydrogen and fuel cells, carbon capture and storage, energy saving in buildings and industry, tri-generation and polygeneration, as well as life cycle assessment.

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Jean-Louis Scartezzini, Full Professor
Head of Solar Energy and Building Physics Laboratory (LESO-PB)
Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland
Website: http://leso.epfl.ch

*Presentations are followed by drinks & snacks, to give the opportunity to guests and speaker to further discuss the topic.

Organized by Dr Nahid Mohajeri, & Barbara Smith