

Improving Energy Performance of University Buildings The USE Efficiency Project.

Since the adoption of the European Energy Performance Directive (EPBD-2002) by the EU, a large number of projects were funded, aiming to reinforce and support the implementation of this directive. Many projects were funded under the Intelligent Energy Europe I and II programmes, which had a wide diversity of actions. Several of these projects included training activities on energy matters while others focused on improving energy efficiency in buildings and on the implementation of Renewable Energy Sources.

'Universities and Students for Energy Efficiency - USE Eff' (2009), is a project involving 13 partners from 10 EU countries. It intends to create a common stream for energy efficiency in University buildings. While focusing on training of University students, it aims to improve in long term the energy efficiency and performance of University buildings. Both Universities and students could act as "shining examples" for energy efficiency solutions and behaviour. Engineering students will learn about energy efficiency through specialized training programmes developed by the partners. These programmes were based on actual case studies of University buildings that the students spend much of their time in them. Students performed energy audits on selected University buildings, aided by professors and technical experts. At the end they were invited to present their contributions in energy efficiency improvement and the two best projects (ten students) were selected for a summer school where they met and interacted with students from other countries.

Scope of the lecture is to present the scientific context and the results of the European project USE Efficiency

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Theofilos A. Papadopoulos was born in Thessaloniki, Greece in 1980. He received the Diploma Eng. and PhD degrees in electrical and computer engineering from the Department of Electrical and Computer Engineering in the Aristotle University of Thessaloniki, Greece, in 2003 and 2008, respectively. Since 2009, he is a post doctorate fellow in the same department and in 2011 was elected Lecturer in the Power Systems Laboratory of the Electrical and Computer Engineering Department of the Democritus University of Thrace. His special interests are within the areas of power systems modeling, computation of electromagnetic transients, powerline communications, energy efficiency and Smart Grids. Dr. Papadopoulos has received the Basil Papadias Award for the best student paper, presented at the IEEE PowerTech 07 Conference in Lausanne, Switzerland.