


Event:
Date:
Place:

ENERGY in BUILDINGS 2018
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#	<p>Theocharis Tsoutsos Chemical Engineer, PhD</p>	
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Presentation title:	<p>Standardization for Supporting Decision Making in Tertiary Sector Buildings Energy Efficiency Renovations</p>	
<p>The tertiary sector has an important share in the EU's final energy consumption; in 2015 this reached to almost 14% with a rising trend observed in the years 2000 to 2015. Therefore the sector has a significant role to play in the EU's efforts to decarbonise the national building stocks by 2050, according to the stipulations of the recent revision of the Energy Performance of Buildings Directive (2018/844/EU). It becomes clear that substantial investments in energy efficiency technologies and renewable energy systems will be required, however the tertiary sector businesses prefer to invest in their core business activity and usually do not have the capacity to deal with such issues, especially SMEs.</p> <p>The Trust EPC South Horizon 2020 initiative run in the period 2015-2018, aimed to scale up energy efficiency investments in the tertiary sector of southern European countries, with particular focus on EPC projects, by means of developing an investment standardization and benchmarking framework and organising targeted capacity building activities. The project was carried out in 6 countries (Croatia, France, Greece, Italy, Portugal and Spain). The initiative supported 46 lighthouse pilot cases from the tertiary sector, to evaluate the potential of EPC in their facilities, by applying a specific tool investment standardization and benchmarking framework, developed in the frame of Trust EPC South, based on a methodology of an international certification company.</p> <p>It is examined a 3-buildings complex, 4,000 m² surface, which operates as entertainment and leisure centre in Crete. It's operation is daily, all year round, while the only source of energy used is electricity, which raises their annual energy costs to a whopping 155,000 €/year. Through 47 standardized measures, it was proposed to substitute the low efficiency chiller with inverter chiller, install air curtains, solar films in windows and install a photovoltaic plant.</p>		
CV:		
<p>Professor, School of Environmental Engineering, Technical University of Crete (2015-), Director Graduate Programme "Environmental Engineering" (2014-2017); Head, Renewable and Sustainable Energy Lab (2005-)</p> <p>Head, Development Dept (Centre for Renewable Energy Sources & Energy Saving - CRES -, 1992- 2005);</p> <p>Author of 300+ scientific publications in international journals, conference proceedings; he has coordinated 40+ projects on RES and energy efficiency; participated in 100+ totally.</p>		