


Event:
Date:
Place:

ENERGY in BUILDINGS 2017
Saturday October 21, 2017
Athens, Hellas



#	Zacharias Hadjigeorgiou Mech Engr, MASHRAE,	
Title:	Owner, Managing Director, Technical Manager of HeatFlow Group of Companies, Nicosia, Cyprus	
email:	zacharias@heatflow.com.cy	•
Presentation title:	Nearly Zero Energy Buildings. Presentation of a Case study & Design 'Soft' Elements of a HVAC Project can be Critical to Reach a Nearly Zero Energy Building	
<p>Through the analysis of real cases and simulations, one expects to obtain energy efficiency benefits, when a philosophy of sustainability is applied utilizing the technological innovation, plant selection and design, and the latest tools in the management and maintenance of the air conditioning units. International agreements tend to struggle with global warming policies to reduce fuel consumption and greenhouse gas emissions: in this scenario, the manufacturer of air conditioning units provides a contribution through an open approach to the selection of suitable products and the plant regulation, with the aim of providing the best technology related to the required application focusing on its proper management to get the best results from the economic, environmental, and quality points of view. The Designers' responsibility is to stay informed of the technological innovations and improvements and to specify the most appropriate for the specific project technology and plant configuration even if it is outside the standard practice. In this regard, the presentation of a real case considers energy comparisons between different technologies, different combinations of air conditioning products, and different operating systems. The real case study results clearly supports the simulations performed. This proves the importance of the simulation to be able to make projects that at the end will perform nearly to the predictions. The project considered is a new building in the Mediterranean area. The numbers generated from the analysis highlight the advantages of the technologies and the plant regulation chosen, supporting the environmental impact reduction process that is generated by air conditioning. Through this analysis, the approach presented binds together the various steps that lead to the choice of the ideal product for a specific type of application, through the comparison of the parameters that generates the overall assessment. This method allows the manufacturers & designers to identify the system which will better contribute in reducing the energy required to ensure the load demands of the building, while contributing in the strongest possible way to achieve the definition of NZEB.</p> <p>Moreover, in the future to be able to make all buildings nearly zero energy, the 'soft' aspects of the design have a very important role. Elements such as tools, experience, systems, sustainability, unconventional ideas, process & synergy are related to how the design team – the human factor is able to turn the restrictions set by the legislators into opportunities. The designers of different trades have to closely collaborate from the architectural conception and</p>		

Event:
Date:
Place:

ENERGY in BUILDINGS 2017

Saturday October 21, 2017

Athens, Hellas



they should be able to pass their enthusiasm and confidence of the final results to be succeeded to the Owner to the investors that are going to finance the project.

CV:

Zacharias Hadjigeorgiou was born in 1962 at Strongylos - Famagusta. As a result of the Turkish Invasion, today, he resides in Strovolos, Cyprus.

He studied Mechanical Engineering at Higher Technical Institute of Cyprus and at Pennsylvania State University in the USA where he earned a BSc degree 1983. In 2008, he earned a Post graduate Diploma in Project Management from Henley College of UK.

We worked for a contracting firm for a few years as project engineer in mechanical contracting projects. Since 1989, he maintains in partnership his own companies; namely HeatFlow Group (www.heatflow.com.cy), with all firms active in the field of HVAC mechanical engineering contracting, trading of HVAC machinery and the supply of support & maintenance of HVAC systems and equipment. He is licensed Engineer, member of the Scientific Technical Chamber of Cyprus. Apart from being member of the board and managing director, he is responsible for Technical matter and for innovative projects/undertakings as group's Technical Manager.

He is demonstrating particular interest in the energy saving technologies and he has attained numerous relevant conferences, presentations and seminars in Cyprus and abroad. He is leader in introducing into the Cyprus market the solar cooling applications, the thermal storage with PCMs, the vertical geothermal installations and the use of well and sea water in building highly energy efficient HVAC plants.

He has been a founding and executive member of the Round table-8 Social Club and he has been past Chairman of the Mechanical Contractors Association of Cyprus for a number of consecutive terms. Today, he is the Secretary to the council of the Mechanical & Electrical Contractors Association of Cyprus. Also, he is a member of the Advisory Board of the Center for European and International Affairs of the University of Nicosia and since 2014 serves the center from the position of the Secretary to the Chairman.

He is an ASHRAE member and he has been a founding member and the President elect of the Cyprus ASHRAE section and since 2017 after the advancement of the section into a chapter in , he is the president of ASHRAE Cyprus Chapter.