

Event:  
Date:  
Place:

**ENERGY in BUILDINGS 2016**  
Saturday November 12, 2016  
Athens, Hellas



#	<b>Alexandros Karapetsis</b> Civil Engineer, MSc	
Title:	CEO, Co-Founder at Tritoxo Project Management, Athens, Greece	
Presentation title:	<b>Indoor Environmental Quality and its Impacts on Health – Case Study: School Buildings</b>	
<p>The paper focuses on the Indoor Environmental Quality (IEQ) of school buildings and its impact on the health and well-being of the building's occupants. Determining the levels of IEQ is a rather complex and partly subjective process, which involves setting and measuring a number of environmental parameters, as well as evaluating the related perceptions of all stakeholders. The effects of IEQ on human health are significant, ranging from minor distractions and performance decrease, to major diseases and health deterioration. Unfortunately, these issues are not well-known, especially in school buildings in Greece. However, in order to have a clear and documented idea of IEQ, it is necessary to implement scientific methodologies, based on measurements and questionnaires.</p> <p>To determine and test the theoretical background of this paper, a selected and well-defined methodology for determining the IEQ has been applied to three school complexes within the Filothei – Psychiko Municipality in the greater area of Athens. The evaluation process consists of two parts: measurement of IEQ parameters in the classrooms and having the students, their parents and their teachers, complete questionnaires regarding their perception of IEQ in the school environment, based on the EN 15251:2008 Standard. The results reveal a number of problems concerning Indoor Air Quality, Glare and Thermal Comfort, especially during the warmer months. A comparison of the results of each methodology is also made, leading to conclusions on methodological issues.</p> <p>Conclusions are also drawn on the insufficiency of the existing regulatory framework and scientific research on IEQ, both of which need to be developed and enriched. Furthermore, it is suggested that immediate action should be taken in order to improve the indoor environment of buildings, by training and educating their users and redesigning and reforming their management.</p>		

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CV:

Alexandros Karapetsis was born in 1977 in Athens, Greece. He holds a Bachelor's degree in Civil Engineering (City University, London), a Master's degree in Construction Management (University of Reading) and a Master's degree in Environmental Urban Planning and Building Design (Hellenic Open University).

He started his professional career working on major infrastructure projects for OSE (Greek Railways) and Egnatia Highway. Later, he set up his first company and switched to urban and rural building projects, providing consulting, design and contracting services. After 2008, he has extended his business activities to the areas of renewable energy and the environment. In 2012, he co-founded Tritoxo Project Management, a company providing energy, environmental and engineering services for the built environment, focusing on critical issues such as Sustainability and Climate Change.

A restless and ever creative personality, independently or through his companies, Alexandros has been active in numerous fields, even beyond engineering. He has worked as a consultant for European initiatives on e-business and e-commerce, taken part in research programmes on the unique regional heritage of Epirus (Northwestern Greece) and even produced a short award - winning documentary on the development of mountainous regions.