

ZenH Balkan

Towards Zero Energy Hospitals in the Balkan Region

Newsletter
Issue 1



INSIDE THIS ISSUE

1. The Project
2. Kick of meeting
3. First Workshop
4. Upcoming Events
5. Contacts of the Partnerships

“The project aims to facilitate the implementation of the EPBD by defining the characteristics and Standards for Zero Energy Hospitals in the South Balkan region”

The Project

The ZenH Project is supported by the INTERREG Balkan-Mediterranean from December 2017 to November 2019.

The Project aims to facilitate the implementation of the EU's Energy Performance of Buildings Directive (EPBD) by defining characteristics and standards in terms of zero energy in hospitals in the southwestern Balkan region. This project will contribute to the improvement of energy efficiency in the construction sector.

Hospital buildings are considered as complex systems because they have a range of intensive energy functions (HVAC system, heating, ventilation and air-conditioning) that should work under strict conditions, high demand for hot water, massive use of food, etc.). Significant work has been done in the residential sector and at the hotel, in terms of Zero Energy specifications, but not for hospital buildings.

This project is funded by the European Union



The expected outputs

- Produce benchmarks and design guidelines for ZenH
- Improve the technical capacity of professional groups and government officials towards the ZE buildings notion
- Prepare detail analysis and test the benchmark models for upgrading 7 hospital buildings into ZEB.

Methodology

- Energy data of hospitals will be collected.
- The energy audits will be performed to obtain actual data and determine the operational characteristics of the selected hospital.
- Identification of the most prominent Energy Efficient (EE) and Renewable Energy Sources (RES) technical solutions applicable to the energy consumption profiles of hospitals.
- Benchmarking of EE & RES technologies based on hospitals energy systems (e.g. heating, cooling, lighting) will be elaborated.
- Modular prototypes that can be adopted by other hospitals but also by other building categories with similar characteristics will be developed.
- Economic assessment on specific EE & RES technologies will be prepared.
- Training material that will assist hospitals' technical staff and designers to understand the basic concept of design methodologies and applicability of EE & RES technologies will be produced.

The Partnerships

The partnership covers all 5 eligible nations with partners

- Democritus University of Thrace, Department of Environmental Engineering, Greece
- ALBAFOREST (Albania)
- Association Sofia Energy Centre (Bulgaria)
- The Cyprus Institute (Cyprus)
- CeProSARD (FYROM)

Kick of meeting

1st Project Meeting, Xanthi (Greece), 13-14 February 2018

On 13-14 February 2018, the Department of Environment Engineering of the Democritus University of Thrace (DUTH) organized the Kick-off meeting of the "ZenH Balkan - Towards Zero energy Hospitals in the Balkan Region" project, in Xanthi, Greece. The partners of the project participated in the event with the aim to present the activities of the project and discuss on its objectives, management, implementation and results.

The coordinator of the Project, Mrs. Argiro Dimoudi, Assoc. Prof. of Department of Environmental Engineering of DUTH present the Leader Partner of project, Democritus University of Thrace, and especially the Laboratory of Environmental and Energy Design of Buildings and Settlements in which is Director. The equipment and research areas of Laboratory and its contribution to several surveys about sustainability were outlined.

Then, project partners introduced their selves and made a sort presentation of the activities of the Organizations and Institutes that represent.

Following, the coordinator made an overview of the project and stress out the general commitments to JS regarding the project. This include a reference about the EPBD and its targets, the effort to define zero energy buildings, the present state of hospitals concerning its energy consumption and the aim of project to facilitate the implementation of EPBD by defining the characteristics and standards of zero energy hospitals in the South Balkan regions. Additionally, the overall aim is to improve energy efficiency of the building sector in general and the outputs can be used to other building categories.



First Workshop

Scientific Workshop on Zero Energy Buildings, at the Cyprus Institute in Nicosia

On the 9th of May 2018, the Built Environment Group of the Energy, Environment and Water Research Centre of the Cyprus Institute hosted a workshop on Zero Energy Buildings. The workshop was placed under the umbrella of the European Sustainable Energy Days event titled “Zero Energy Buildings and Smart Sustainable Cities” that took place on 9th and 10th May 2018 and facilitated:

A workshop on Zero Energy Buildings under the ‘Towards Zero Energy Hospitals in the Balkan Region (ZenH)’

A seminar on Smart, Sustainable Cities under the JPI Urban-Europe project ‘Smart bioclimatic low-carbon urban areas as innovative energy isles in the sustainable city (SUI)’

The event took place at the facilities of the Cyprus Institute at Nicosia and it was a big success. It attracted the interest of the academic and research community, of the local public authorities and governmental parties. It also drew the attention of hospital representatives, of architects, engineers, and town planners.

The forty-eight participants received useful information from presentations by invited experts and interactive stakeholders, who covered significant aspects of Zero Energy Buildings such as European Commission directives, National Policies, new Technologies and Best Practices. More specifically, the ZenH project was presented, “The Concept of Nearly Zero Energy Buildings”, “The Definition of NZEB in Cyprus and its Implementation”, “Zero Energy Buildings in the Legislation of Balkan Countries”, “The ZenH Balkan Project”, “Zero Energy Houses for Positive Energy Settlements in Europe”, “The Zero Energy Building for Smart, Sustainable Urban Isles”, “A Nearly Zero Energy Museum hosted in a listed building”, and “Energy Efficient Refurbishment Towards nearly Zero Energy Houses for Cyprus”.



Upcoming Events

June 2018: 2nd Workshop in Skopje, FYROM
 November 2018: 3rd Workshop in Sofia, Bulgaria

Contacts in the Partnering Countries

	Address
 <p>ΔΗΜΟΚΡΙΤΕΙΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΡΑΚΗΣ DEMOCRITUS UNIVERSITY OF THRACE</p>	affasdfsdf
 <p>ALBAFOREST</p>	sfdsdfsdf
 <p>SEC</p>	sfdsdfsdfs
 <p>THE CYPRUS INSTITUTE <small>RESEARCH AND INNOVATION</small></p>	dfsdfsdfsdfs
 <p>CeProSARD</p>	fdsfsdfsdfsdfs

