Refurbishment of the Public building stock towards nZEB

The main objectives of the RePublic_ZEB project are: to support the South-Eastern European countries in capacity building and rising EE (Energy Efficiency) awareness of the nearly Zero-Energy Buildings (nZEB) policy; to identify the criteria and definition of nearly Zero-Energy Buildings; to ensure the way to refurbish the existing public building stock toward nearly Zero-Energy Buildings. Although the Energy Performance of Buildings Directive Recast focuses on new buildings, refurbishment of existing buildings towards nearly Zero-Energy Buildings merits investigation because of the huge potential for energy savings. The project focuses on the Mediterranean and the South-East European countries, as there are common conditions in terms of climate, energy performance (both cooling and heating are important) and available renewables potential. The project will bring together a wide range of professionals to develop strategies for the refurbishment of the public building stock towards nearly Zero-Energy Buildings. One output of this process will be a common, feasible and sustainable national definition of nearly Zero-Energy Buildings for public buildings. The aim is to have a significant impact on the local energy policies and on the building industries and market. The target groups cover Energy Service Companies (ESCOs), Energy agencies, National/local authorities (building owners), producers, distributors, installers, stakeholders (including government).

Results

The main proposal outputs are that of defining the cost optimal and low-risk technological "packages of measures" for the refurbishment of the public buildings towards nearly Zero-Energy Buildings, in which smart and high performing solutions, including both the building envelope and technical systems as well as technologies for Renewable Energy Sources (RES) use are considered. These will provide guidelines:

- for national or regional authorities, energy agencies and Energy Performance Certificate (EPC) providers in order to address local energy policies, to support the development of financial mechanisms and to spread the use of Energy Performance Certification as a driver for on-going renovation.
- addressed to industries, housing organisations and owners of large building stocks to overcome the market’s lack of practical experience and improve familiarity with new and smart building technologies, thereby increasing the demand in the market for step-by-step renovations, improving consumer confidence and understanding of nearly Zero-Energy Buildings, bringing the market together with industry to provide one-stop shop solutions and promote large-scale agreements and commitments.
Partners and coordinator

| **Comitato Termotecnico Italiano Energia e Ambiente** | Italy |
| **Centre for Renewable Energy Sources** | Greece |
| **URBAN-INCERC National Institute for Research & Development in Construction** | Romania |
| **Building Research Establishment Ltd** | United Kingdom |
| **ENERGY INSTITUTE HRVOJE POZAR** | Croatia |
| **Budapest University of Technology and Economics** | Hungary |
| **Building and Civil Engineering Institute ZRMK** | Slovenia |
| **Labaratorio Nacional de Energia e Geologia** | Portugal |
| **Politecnico di Torino** | Italy |
| **Black Sea Energy Research Centre** | Bulgaria |
| **CATALONIA INSTITUTE FOR ENERGY RESEARCH** | Spain |
| **Macedonian Centre for Energy Efficiency** | Macedonia |
| **Comitato Termotecnico Italiano Energia e Ambiente** | Italy |

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Overall budget: 1.638.795,00 € (EU contribution: 75,00 %)

In brief

Sector: Buildings

Duration: 01/03/2014 to 31/08/2016

Contract number: IEE-13-886

Website: http://www.republiczeb.org/

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• [ZEBRA2020 [63]] Nearly Zero-Energy Building Strategy 2020
• [NIRSEPES [64]] New Integrated Renovation Strategy to improve Energy PErformance of Social...
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• [STEP-2-SPORT [80]] STEP-by-STEP renovation towards nearly zero energy SPORT buildings
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• [TACKOBST [84]] Tackling Obstacles in Social Housing
• [TOTAL CONCEPT [85]] The Total Concept method for major reduction of energy use in non-...
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• [E-RETROFIT-KIT [87]] Tool-Kit for "Passive House Retrofit"
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• [TOWARDS CLASS A [89]] Towards Class A - Municipal Buildings as Shining Examples
• **[TRAINREBUILD]** [90] Training for Rebuilding Europe (TRAINREBUILD)
• **[TREES]** [91] Training for Renovated Energy Efficient Social housing
• **[REE TROFIT]** [92] Training on Renewable Energy solutions and energy Efficiency in...
• **[KEEP COOL II]** [93] Transforming the market from "cooling" to "sustainable...  
• **[TABULA]** [94] Typology Approach for Building Stock Energy Assessment
• **[USE EFFICIENCY]** [95] Universities and Students for Energy Efficiency


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[34] https://ec.europa.eu/energy/intelligent/projects/en/projects/ecolish