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 towards 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

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

Contact

Comitato Termotecnico Italiano Energia e Ambiente
Italy

Contact point

Name: Giovanni Riva
E-mail: riva@cti2000.it

Budget

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/

Tags:
building
nearly zero-energy buildings (NZEB)
Related projects

- **[EPLABEL]** A programme to deliver energy certificates for display in public buildings...
- **[SQUARE]** A System for Quality Assurance when Retrofitting existing buildings to...
- **[AVASH]** Advanced Ventilation Approaches for Social Housing
- **[ENPER EXIST]** Applying the EPBD to improve the ENergy PErformance Requirements to...
- **[ASIEPI]** Assessment and improvement of the EPBD Impact (for new buildings and...
- **[BESTFADE]** Best Practice for Double Skin Facades
- **[BUILDING ADVENT]** Building Advanced Ventilation Technological examples to demonstrate...
- **[CEPH]** Certified European Passive House Designer
- **[CHECK IT OUT]** Check and improve the energy performance of schools and disseminate best...
- **[DATAMINE]** Collecting data from energy certification to monitor performance...
- **[COMMONCENSE]** Comfort monitoring for CEN Standard EN15251 linked to EPBD
- **[CYBER DISPLAY]** Communicate Your Buildings Energy Rating
- **[CA EPBD II]** Concerted Action supporting transposition and implementation of Directive...
- **[CONSTRUCTION21]** CONSTRUCTION21- A EUROPEAN GREEN BUILDING EXCHANGE
- **[CERTus]** Cost Efficient Options and Financing Mechanisms for nearly Zero Energy...
- **[AFTER]** Cost Optimum and Standard Solutions for Maintenance and Management of the...
- **[ROSH]** Development and marketing of integrated concepts for energy efficient and...
- **[EEBD]** Development of an interactive vocational Web training tool for the take---...
- **[VENT DISCOURSE]** Development of Distance Learning Vocational Training Material for the...
- **[EDUCA RUE]** Energy Efficiency Paths in Educational Buildings
- **[COOLREGION]** Energy efficient Cooling in regions of North and Central Europe
- **[ECOLISH]** Energy Exploitation and Performance Contracting for Low Income and Social...
- **[EI-EDUCATION]** Energy Intelligent Education for Retrofitting of Social Houses
- **[EPI-CREM]** Energy Performance Integration in Corporate Public Real Estate Management
- **[EPI-SOHO]** Energy Performance Integration in Social Housing, a strategic approach for...
- **[ENSLIC BUILDING]** Energy Saving through promotion of Life Cycle analysis in Building
- **[INTELLIGENT METERING]** Energy Savings from Intelligent Metering and Behavioural Change
- **[ESAM]** Energy Strategic Asset Management in Social Housing Operators in Europe
- **[E-TOOL]** Energy-toolset for improving the energy performance of existing buildings
- **[EDUCATE]** Environmental Design in University Curricula and Architectural Training in...
- **[EPEE]** European fuel Poverty and Energy Efficiency
- **[EULEB]** European High Quality and Low Energy Architecture
- **[ENFORCE]** European Network for the Energy Performance Certification of Buildings
- **[E-SEAP]** European Sustainable Energy Award for Prisons
- **[AUDITAC]** Field benchmarking and Market development for Audit methods in Air...
- **[GREENBUILDING]** GREENBUILDING
- **[HARMONAC]** Harmonizing air-conditioning inspection and audit procedures in the...
- **[IMPLEMENT]** IMPLEMENT - The EPBD in Action
- **[IMPACT]** IMProving energy Performance Assessments and Certification schemes by Tests
- **[ISSEES]** Improving the Social Dialogue for Energy Efficient Social Housing
- **[ILETE]** Initiative for Low Energy Training in Europe
- **[INOFIN]** Innovative Financing of Social Housing Refurbishment in Enlarged Europe
- **[CENSE]** Leading the CEN standards on energy performance of buildings to practice....
- **[GREENBUILDINGPLUS]** Leveraging the GreenBuilding Programme (GBP) to promote energy-
efficiency...

- **[LCC-DATA]** Life-Cycle-Cost in the Planning Process. Constructing Energy Efficient...
- **[ENERGY TROPHY+]** Magnify success: Extension of the European Energy Trophy competition to 18...
- **[PASSIVE-ON]** Marketable Passive Homes for Winter and Summer Comfort
- **[IDES-EDU]** Master and Post Graduate education and training in multidisciplinary teams...
- **[NIRSEPES]** New Integrated Renovation Strategy to improve Energy PErformance of Social...
- **[NZB2021]** NZB2021 ‘Doors Open Days’ – sharing experiences from low energy buildings...
- **[SOUTHZEB]** nZEB training in the Southern EU countries – Maintaining building...
- **[FACTOR 4]** Programme of actions Factor 4 in existing social housing in Europe
- **[COOL ROOFS]** Promotion of cool roofs in the EU
- **[PEP]** Promotion of European Passive Houses
- **[NEZER]** Promotion of smart and integrated NZEB renovation measures in the European...
- **[NORTHPASS]** Promotion of the Passive House Concept to the North European Building...
- **[RE-CO]** Re-Commissioning – Raising Energy Performance in Existing Non-Residential...
- **[REQUEST2ACTION]** Removing barriers to low carbon retrofit by improving access to data and...
- **[RESHAPE]** Retrofitting Social Housing and Active Preparation for EPBD
- **[SAVE@WORK4HOMES]** SAVE@Work4Homes - Supporting European Housing Tenants in Optimising...
- **[STABLE]** Securing The Take-off of Building Energy Certification: Improving Market...
- **[KEEPCOOL]** Service Buildings Keep Cool: Promotion of "sustainable cooling"...
- **[SMART-E BUILDINGS]** Smart-e buildings - yes we canEnable the building sector to contribute to...
- **[SHARE]** Social Housing Action to Reduce Energy Consumption
- **[STEP-2-SPORT]** STEP-by-STEP renovation towards nearly zero energy SPORT buildings
- **[SAVE AGE]** Strengthening Energy Efficiency Awareness Among Residential Homes for...
- **[SENTRO]** Sustainable Energy systems in New buildings- market inTROduction of...
- **[SURE-FIT]** Sustainable Roof Extension Retrofit for High-Rise Social Housing in Europe
- **[TACKOBST]** Tackling Obstacles in Social Housing
- **[TOTAL CONCEPT]** The Total Concept method for major reduction of energy use in non-...
- **[THERMCO]** Thermal comfort in buildings with low-energy cooling
- **[F-RETROFIT-KIT]** Tool-Kit for "Passive House Retrofit"
- **[BUILDING EQ]** Tools and methods for linking EPDB and continuous commissioning
- **[TOWARDS CLASS A]** Towards Class A - Municipal Buildings as Shining Examples
- **[TRAINREBUILD]** Training for Rebuilding Europe (TRAINREBUILD)
- **[TREES]** Training for Renovated Energy Efficient Social housing
- **[REE_TROFIT]** Training on Renewable Energy solutions and energy Efficiency in...
- **[KEEP COOL II]** Transforming the market from "cooling" to "sustainable...
- **[TABULA]** Typology Approach for Building Stock Energy Assessment
- **[USE EFFICIENCY]** Universities and Students for Energy Efficiency

**Source URL:** https://ec.europa.eu/energy/intelligent/projects/en/projects/republiczeb

**Links**
