

Welcome to the first newsletter of the international project on the *Refurbishment of the Public Building Stock Towards Near Zero Energy Buildings – RePublic_ZEB*.
Visit the project website at www.republiczeb.org

What is RePublic_ZEB?

RePublic_ZEB is a European Commission funded project that brings together partners from the South-Eastern European countries to develop and promote Near Zero Energy Building (nZEB) tools. The aim of this two-and-a-half year project is to provide the means of reducing energy consumption in public buildings to near zero, in accordance with Article 9 of the EU's Energy Performance of Building Directive.

Why undertake this work?

Buildings account for approximately 40% of energy consumption and 36% of all greenhouse gas emissions in the European Union. To tackle these issues the EU has introduced demanding targets for reducing carbon emissions and making buildings near self-sufficient in energy. Achieving the EU's near-zero energy targets for 2019 and 2021 requires major additional investment in both private and public sector buildings.

So far efforts to implement nZEB across Europe have been limited. RePublic_ZEB will offer substantial support to initiate step changes in the participating countries, which share a similar climate and so have comparable energy demands and renewable energy potential.

How is nZEB achieved?

The high energy performance required for a near zero energy building requires a combination of very low or near zero energy demand with renewable energy that is produced on-site or nearby.

To deliver buildings that can be operated with near zero net primary energy consumption, we need to radically transform the way we design, build, maintain and operate them. RePublic_ZEB aims to develop and promote nZEB in public sector construction by working with the building industry, as well as building operators and end users, to deliver tangible reductions in energy consumption and carbon emissions.

How will this happen?

The RePublic_ZEB project will conduct research on the current public sector building stock and on demonstration projects to learn lessons that can be applied across the whole building sector.

Key elements of the project include:

Stakeholder involvement – engaging with public building sector stakeholders and authorities in participating countries.

Benchmarks – measuring, analysing and benchmarking the current public building stock in each country.

Sample refurbishments – testing the benchmarks against sample refurbishment projects.

Tools – offering stakeholders the practical, user-friendly tools that will help them to select the most cost effective mix of measures needed to maximise carbon savings and minimise energy consumption.

Who's involved?

The project consortium consists of twelve partners, eleven of which are from target countries with one from the UK. The UK partner is responsible for providing professional consultancy and support for developing and promoting best practice. The consortium includes the following organizations:

- **Educational and academic research institutions:** Budapest University of Technology (Hungary) and Politecnico di Torino (Italy).
- **Research and energy policy institutions:** BS RC (Bulgaria), CRES (Greece), EIHP (Croatia), IREC (Spain), URBAN-INCERC (Romania), LNEG (Portugal), ZRMK (Slovenia).
- **Energy policy developers:** CTI Energy and Environment (Italy), which is the Project Coordinator and MACEF (the former YR of Macedonia).
- **Research and policy institute based in Northern Europe:** BRE (UK).

More information?

Further issues of the RePublic_ZEB newsletter will be issued at regular intervals to provide updates on the project's progress.

More information is also available by contacting us at republiczeb@bre.co.uk or visiting our website at www.republiczeb.org.

