



## REZBUILD project: an innovative refurbishment ecosystem for Near Zero Energy Building in Europe

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your business resilient

REZBUILD project (Refurbishment decision making platform through advanced technologies for near Zero Energy Building Renovation) is a new European initiative funded by the Horizon2020 Programme of the European Commission that grows with the main aim of defining an innovative and collaborative refurbishment ecosystem for transforming RE assets into Near Zero Energy Building (NZEB).

The construction market has entered a phase of recovery after the global financial crisis and it is time to face new challenges: encouraging a high-technologized sector, which turns Energy Efficiency into a sustainable business. This is one of the strategies that the European Union follows to improve their energy efficiency, boosting their competitiveness and facing social challenges.

The construction sector is the highest energy consumer (about 40 %) and main contributor to GHG emissions (about 36 %) in Europe. At this stage, tackling refurbishment of existing residential buildings (historic buildings included) is a top priority and decarbonisation is the main goal aligned with the European energy and climate change policies.

In this context a number of challenges have been set for NZEB renovation taking into account all stakeholders involved through five pillars: technical, economical, social, environmental and legal. Nowadays, NZEB renovation methodologies are required as one of the key enablers supported by Horizon 2020 Framework Programme in order to promote business research and innovation through energy-efficient buildings.

REZBUILD will address these challenges by opening the construction sector with the integration of innovation technologies to pave the way towards an annual renovation rate of 2.5% instead of current rates lower than 1%. In order to achieve these goals REZBUILD will base its refurbishment ecosystem with the integration of cost-effective technologies, business models and life cycle interaction to diverse residential renovation typologies and interconnecting both, building renovation stages and stakeholders.

This innovation will establish a multi-collaborative framework within a refurbishment methodology managed by an Agile Project Management tool based on cloud service, capable to interconnect in real-time the key steps of a tailored retrofitting plan among all stakeholders

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant contract n° 768623 involved within the building renovation value chain.

Moreover, decision making tools will be performed in order to validate the best optimized cost-effective refurbishment technology package in 3 different European scenarios (Spain, Norway and Italy), each one with a different representative climate and tipology of building.

This all-in-one decision making platform will communicate all stakeholders involved in the housing renovation process from designers, refurbishment to private consumer and public / private owners. Key stakeholders groups and local communities will be involved in the project through social innovation actions.

REZBUILD consortium brings together 13 partners from 5 different countries. The consortium is formed by the equilibrated collaboration of international level entities represented by big industries, SMEs, consultancy firms, RTD centres, public bodies, users associations and academic institutions: Officinae Verdi Group (Italy), Vias y Construcciones (Spain), CARTIF (Spain), ESTIA (France), Comunidad de Madrid (Spain), Saint-Gobain Placo Iberica (Spain), ONYX

Solar (Spain), SINTEF (Norway), OBOS (Norway), University of Nottingham (United Kingdom), Exploded View (Spain), Rimond (Italy), and ZABALA Innovation Consulting (Spain).

This project is awarded by the European Commission with a Horizon2020 programme grant of 6,996,128.25 € and a total budget of 9,038,208.75 €. REZBUILD's kick off meeting took place recently in Rome and the project will run for 4 years.

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