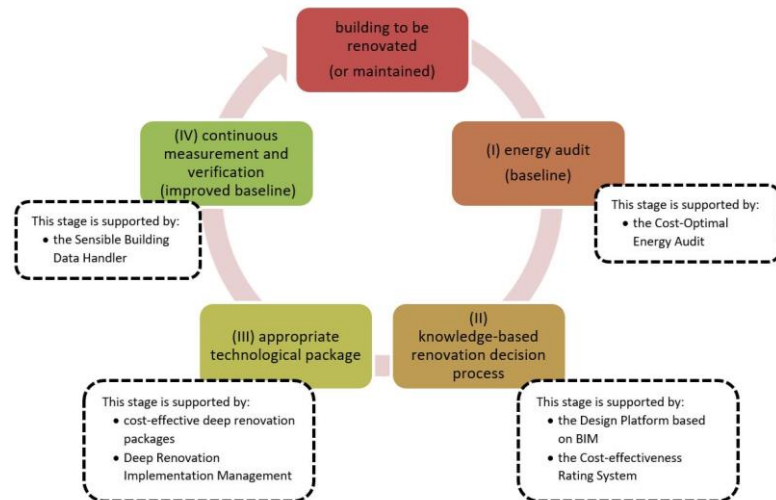


PROJECT OBJECTIVES

The project 4RinEU aims at providing new tools and strategies to encourage large scale renovation of existing buildings, fostering the use of renewable energies, and providing reliable business models to support their applications.

PROJECT SOLUTIONS AND KEY RESULTS

The project 4RinEU supports deep renovation of residential buildings through (a) a knowledge-based decision process for increasing building users' well-being; (b) optimising investment considering energy, environment costs in the life cycle, renovation time; and (c) reducing impact on building users, moving activities from construction to production site.



IMPLEMENTATION (I): DEMO CASES



Demo Norway



Demo Netherlands



Demo Spain

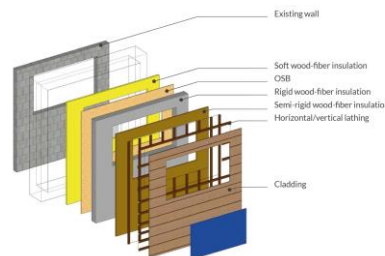


IMPLEMENTATION (II): EARLY ADOPTERS

The project involved Early adopters in Poland, Ireland and Latvia. This collaboration with the Early Adopter Teams is structured in three different workshops, aimed at transferring the knowledge about 4RinEU to enable the replication in those specific contexts.

DEEP RENOVATION PACKAGES

The 4RinEU packages include key innovative solutions and standard products whose integration has been optimised to ensure reliable and robust results. 4RinEU technology packages include a prefab timber building façade, a hydronic module that can be monitored to optimise the demand for heating and cooling, a smart ceiling fan, a tool for optimal harvesting of renewable sources to cover demand profile. Packages are modular/industrialized solutions to reduce construction works impact.



DEEP RENOVATION PERFORMANCE

Measured via a calibrated pre-renovation building model vs. post-renovation measurements considering (a) measured consumption of pre-renovation building; (b) simulated consumption using calibrated model of pre-renovation building and (c) measured consumption of post-renovation building.



For more info, please visit www.4rineu.eu

