



EUROPEAN PILOT PROJECT

INTEGRATED TECHNIQUES FOR THE SEISMIC STRENGTHENING AND ENERGY EFFICIENCY OF EXISTING BUILDINGS

Analysis of technologies for combined upgrading of existing buildings

ACTION 2



Review of **technology options** for combined seismic and energy upgrading



Analysis of **novel technologies** for combined seismic and energy upgrading

PILOT PROJECT ACTIONS

1. Overview and classification of technologies for seismic strengthening and energy upgrading of existing buildings
2. **Analysis of technologies for combined upgrading of existing buildings**
3. Methodologies for assessing the combined effect of upgrading
4. Regional impact assessment and proposals in support of an Action Plan
5. Stakeholders' engagement

THE BEST TECH TO INVEST AND PROTECT

Identifying efficient schemes for combined renovation demands a comprehensive examination of technological options. Action 2 reviews technology options for combined seismic and energy upgrading of buildings to gather insights to better estimate their performance in terms of seismic safety and energy efficiency improvement, cost and life cycle impact. It builds upon Action 1 to conduct an examination and comparison of the combination of conventional technologies as well as the emergence of novel ones. Action 2 will help identifying novel and combined renovation technologies that save lives, protect the environment and secure commercial assets.

The data collected will produce a comprehensive and scientifically rigorous understanding of the possibilities offered by the identified combined renovation technologies. Insights from Action 2 will help choose the best combined renovation techniques for specialised renovation projects. This informed selection process will support efforts of the European Green Deal's Renovation Wave initiative and help preserve cultural heritage sites, within the Framework for Action on Cultural Heritage. In doing so, it will contribute to the overarching goals of sustainability of the EU building stock by promoting technologies that combine energy and resource efficiency along with resilience to earthquakes.

