

QUICK LOOK

Constructing a safer Europe

Providing knowledge to save lives from earthquakes that threaten homes and public buildings across the EU.

Building our economy

A holistic approach that saves time and money by combining seismic retrofit and energy efficiency improvements.

Designing for our environment

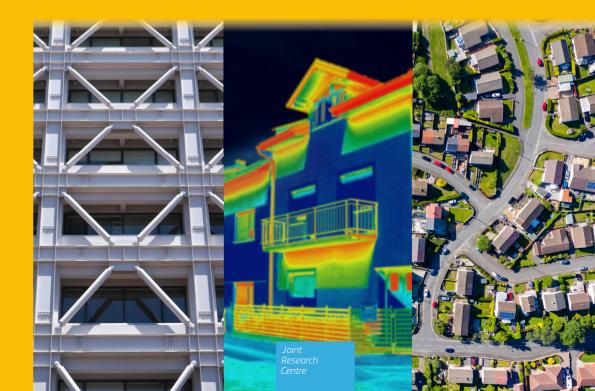
Decreasing CO₂ emissions through structural and energy improvements that avoid the need to demolish and rebuild atrisk homes

Preserving the charm and history of the EU

Ageing buildings hold an important part of a region's history and cultural identity. Therefore, each retrofit and upgrade preserve an irreplaceable element of the EU.

EUROPEAN PILOT PROJECT

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







EU Science Hub

in EU Science, Research and Innovation

OVERVIEW

This Pilot Project will put forward a **holistic approach** to improve simultaneously the seismic safety and energy efficiency of the European building stock. Earthquakes threaten a large percentage of homes and public buildings across the EU. At the same time, inefficient energy consumption of outdated buildings is a major source of greenhouse gas emissions. Our sustainable approach will combine renovation efforts that reduce building vulnerability to **protect lives** and will update the energy efficiency of ageing structures to significantly **reduce CO₂ emissions** and **tackle energy poverty**.

We tailor our analysis to building typologies, climatic and seismic exposure in each Member State identifying suitable intervention scenarios and measures that incentivise funding and investments in risk-proofed infrastructure. Our findings will help achieve longstanding policy goals and provide industry with innovative methods to **modernise EU buildings**. What's more, our success will help preserve our rich architectural identity.

The Pilot Project directly supports several European Commission priorities including the **Green Deal**'s call for renovating in an energy and resource efficient way. It provides the technical background in support of the **Renovation Wave** initiative and an **EU Action Plan** to modernise the European building stock.

Participate in our efforts through upcoming workshops on scientific output and policy achievements. Join our community of policy makers, industry players, experts, associations and organisations as together we design a **safer**, **resilient** and more **sustainable** EU!





action 1

Overview and classification of technologies for **seismic strengthening** and **energy upgrading** of existing buildings



Analysis of technologies for **combined upgrading** of existing buildings



Methodologies for assessing the combined effect of upgrading



Regional impact assessment and proposals in support of an **Action Plan**



Stakeholders' engagement to ensure the sustainable implementation of the Pilot Project

