



Improving climate resilience of critical assets

Duration: 39 months (January 2023 - March 2026)

Budget: 2,294,146.00 €

Coordinated by:



This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No. 101093806. This publication reflects only the authors' views and the European Union is not liable for any use that may be made of the information contained therein.

What is ICARIA about?

The ICARIA project promotes the use of a comprehensive asset-level modelling framework to achieve a better understanding of climate-related impacts produced by complex, compound and cascading disasters. The risk assessment methodologies have been tested on three pilot regions across Europe that face severe climate challenges.

Case studies

Barcelona Metropolitan Area
(Spain)



The Barcelona Metropolitan Area has focused on methodologies to tackle flooding.

Salzburg Region
(Austria)



The Salzburg pilot region has tested methodologies to manage extreme winds.

South Aegean Archipelago
(Greece)



The South Aegean Islands has tried methodologies to address forest fires.

ICARIA's key outcomes

Datasets



They are related to various fields: historical meteorological data, climate projections, and historic economic losses associated with past extreme weather events.

Adaptation Measures Portfolio



A list of measures that can be implemented to improve the climate resilience of critical assets against a wide range of climate hazards.

Maps



A representation of the geographical distribution of either hazard, vulnerability or risk against specific climate hazards.

Holistic Resilience Assessment Tools



These tools focus on the climate resilience of critical assets and services, which can be used for a wide range of territorial scopes for single or compound events.

Decision Support System (DSS)



It allows its users to compare several adaptation scenarios to improve climate planning on critical infrastructures.

Impact and Multi-risk Assessment



Models that enable an impact assessment considering a wide range of climate hazards and risk receptors of compound weather events.