A multisectorial approach, a key advantage of RESCCUE

Cities, being complexes of interdependent systems, cannot be understood by sectorial and disciplinary approaches alone. In this sense, RESCCUE goes beyond conventional urban resilience approaches delivering a forward looking, multi-scale, multisectorial and multi-hazard methodology.

RESCCUE: water sector-focused project

RESCCUE will analyze different urban systems, taking as starting point the water sector. This sector has been highlighted due to the importance of water-related risks in the correct functioning of a city.

www.resccue.eu

Coordinator: Aquatec - SUEZ Advanced Solutions
Duration: 48 month May 2016 – April 2020
Budget: 8.023.342,50 €

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RESCCUE

RESILIENT CITIES FACING CLIMATE CHANGE

www.resccue.eu

RESCCUE in the world of cities

Our cities are constantly facing different impacts of climate change such as floods, heat waves and droughts, among others, which not only cause significant economic and human losses but also pose challenges to urban living. In this context, Europe's first large-scale innovation and urban resilience project RESCCUE (RESilience to cope with Climate Change in Urban arEas – a multisectorial approach focusing on water) was born to improve urban resilience.

Today, 54% of the world's population lives in cities, a proportion that is expected to increase to 66% by 2050.

Urban resilience: the capability of cities to anticipate, prepare, respond and recover from significant multi-hazard threats with minimum damage.

The RESCCUE challenge

The main goal of the RESCCUE project is to help urban areas around the world to become more resilient to climate change.

Specific goals:

1

To deliver a framework enabling city resilience assessment, planning and management.

2

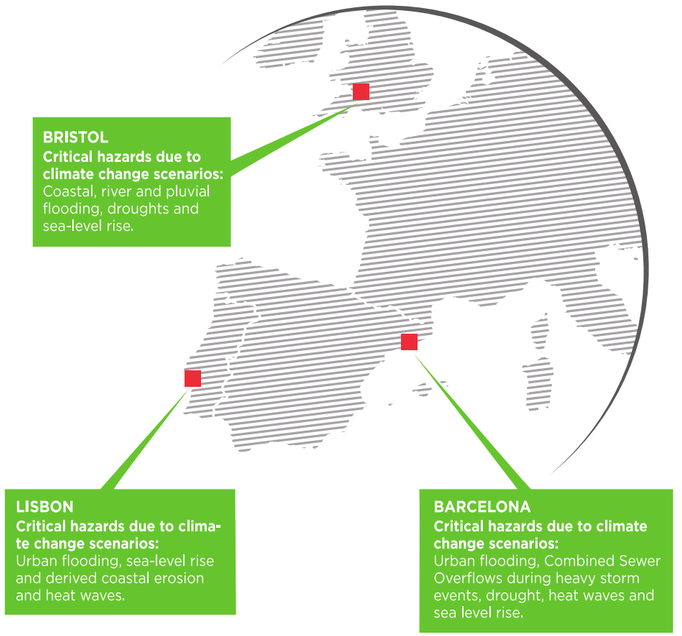
To develop an adapatation strategies portfolio, including nature-based solutions, and test it in the 3 research sites: Barcelona, Lisbon and Bristol.

3

Elaborate a Resilience Action Plan (RAP) for each of the research sites, considering the inputs of all local partners and stakeholders and using all the outputs of RESCCUE.

3 cities, 3 different challenges

RESCCUE is built around three research sites: Barcelona, Lisbon and Bristol that represent different challenges in terms of urban resilience building:



Final product: RESCCUE methodologies and tools

RESCCUE will contribute in building more resilient cities by providing innovative methodologies and tools to improve the ability of cities to withstand and recover quickly from multiple shocks and stresses and maintain continuity of services. All the methodologies and tools developed during the project will stand out for their capability to be deployed to different types of cities, with different climate change pressures.

Benefits of the RESCCUE methodologies and tools:

Environmental and social: citizens' protection and security by enabling a better coordination of the city emergency teams.

Economic: cost savings due to the integral management of city services.

End-users of the RESCCUE methodologies and tools:

City managers will use RESCCUE methodologies and tools to increase transversal knowledge of the city.

Utility managers will improve operations and planning of the networks by using a multi-sectorial RESCCUE approach.

Citizens will benefit from reduced impacts and process optimization once RESCCUE methodology is applied in their city.

RESCCUE timeline: Ready, steady, go!

Phase I: Ready (1 to 18 months)

- Generation of climate simulations for the pilot cases
- Identification of models of the urban services
- Definition of the frameworks of impact assessment and resilience strategies
- Resilience Assessment with Hazur tool in the three cities

Phase II: Steady (19 to 36 months)

- Generation of extreme weather events
- Assessment of the impacts of climate change on urban services on urban services
- Integration of new functionalities in Hazur tool
- Development of methodologies for resilience strategies

Phase III: Go! (37 to 48 months)

- Assessment of impacts considering cascading-effects
- Resilience Management with Hazur in the three cities
- Definition of a Resilience Action Plan for each research site