RESCCUE

RESILIENCE TO COPE WITH CLIMATE CHANGE IN URBAN AREAS.

RESCCUE - RESilience to cope with Climate Change in Urban arEas

a multisectorial approach focusing on water

General brief presenation

This Project has received funding from European Comission by means of Horizon 2020, The EU Framework Programme for Research and Innovation, under Grant Agreement no. 700174

RESCCUE IN BRIEF

Budget: 8 M€

Requested EU contribution: 6,9 M€

Number of partners: 18

Main structure: 8 WP

Coordinator: Pere Malgrat (Aquatec – Suez Water Advanced Solutions)

Main objective: *To help cities around the world to become **more resilient** to physical, but also social and economic challenges by generating **models** and **tools** to bring this objective to practice and make them applicable to different types of cities, with different climate change pressures. RESCCUE will also assist cities preparing their **resilience plans**.*

3 research sites: Barcelona, Bristol, Lisbon

Starting date: 01/05/2016

Benefits of the RESCCUE methodologies and tools:

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

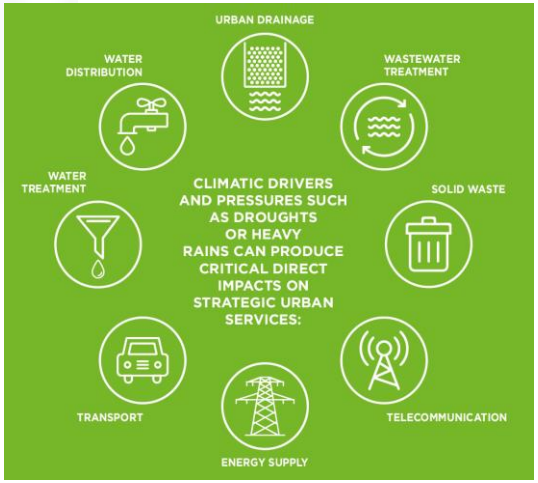
Economic: cost savings due to the integral management of city services.

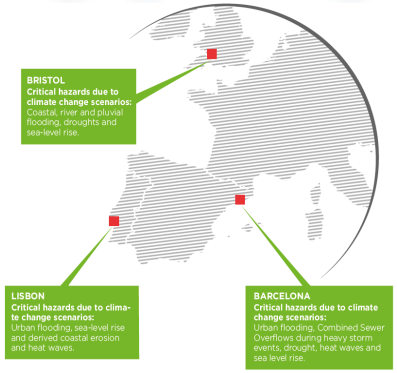
End-users of the RESCCUE methodologies and tools:

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.



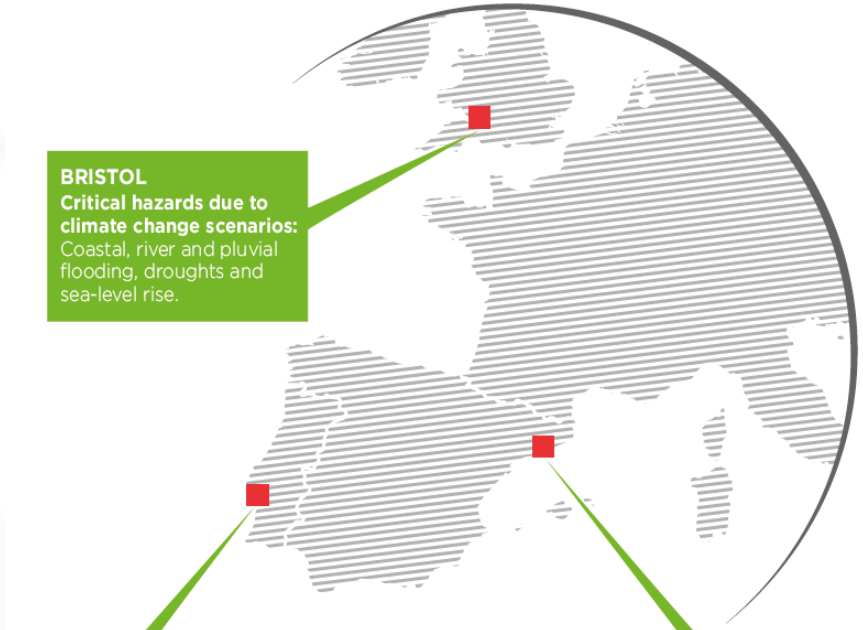


RESCCUE CONSORTIUM

- ✓ RESCCUE Coordinator: Mr. Pere Malgrat (Aquatec-SUEZ)
- ✓ Key role of CETaqua in the scientific, administrative and financial issues
- ✓ Project management team (WP leaders): a consolidated team with successful collaborations (LNEC, University of Exeter, FIC and Opticits)

The RESCCUE research sites

- ✓ **Members of 100 Resilient cities network (program pioneered by Rockefeller Foundation)**
- ✓ **Strong commitment with resilience and climate change**
- ✓ **CRO (City Resilience Officer) with a clear role in the city strategies to improve urban resilience**
- ✓ **Different climate variables and affected services considered in the RESCCUE project**
- ✓ **Urban water cycle in the core**
- ✓ **Flooding and urban drainage are the links among the three cities**
- ✓ **Need to develop RAPs**





RESCCUE APPROACH

WP 1

Generation of **CLIMATE CHANGE SCENARIOS** in the three RESCCUE cities, considering different weather variables (temperature, rainfall, sea rise, etc.)

THROUGH STATISTICAL DOWNSCALING OF GCMS RESULTS BY FIC-METHOD

WP 2

Development of detailed **SECTORIAL MODELS** to describe the behaviour of strategic urban services during extreme events (heavy storms heat wave, etc.) and assess hazard levels for current and future scenarios

THROUGH ADVANCED TOOLS AND INTEGRATED MODELS WITH HIGH TRL

WP 3

RISK ASSESSMENT of the climate change impacts on the urban services crossing local vulnerability at the three research sites and hazards inputs provided by sectorial models.

THROUGH RISK MAPS CROSSING VULNERABILITY AND HAZARD INPUTS

WP 4

Implementation of the RESCCUE roadmap in the three research sites, achieving **RESILIENCE ACTION PLANS** according to the commitment of 100 Resilient Cities program

ELABORATION OF A MANUAL ABOUT RESILIENCE BEST PRACTICES FOR IMPLEMENTATION IN OTHER CITIES

WP 5

Definition of **ADAPTATION STRATEGIES** (including NBS, structural and non-structural measures) to face with climate change reducing risk impacts and increasing resilience

THROUGH A MEASURES DATABASE AND THE IMPLEMENTATION OF MCA FOR PRIORITIZING

WP 6

Analysis of the **INTERDEPENDENCIES** among critical urban services and infrastructures and possible **CASCADE EFFECTS** during crisis episodes using a holistic approach

THROUGH A SPECIFIC SOFTWARE FOR URBAN RESILIENCE ANALYSIS: THE HAZUR TOOL

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