

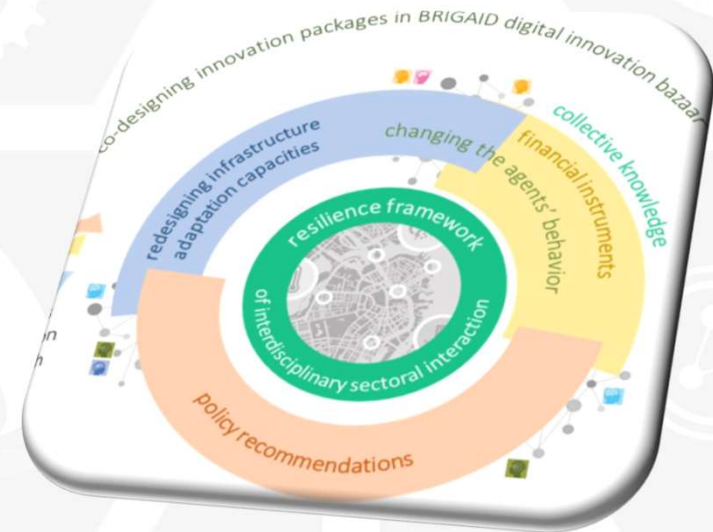


This project has received funding from the European Union's Horizon H2020 innovation action programme under grant agreement 101036683.

ARSINOE- EU-Funded research project – HORIZON 2020 – Facts and Figures

Building a low-carbon, climate resilient future: Research and innovation in support of the European Green Deal

- Large EU-funded **H2020** research project (Innovation action) (2021-2025)
- Budget: **15M** Euros.
- Duration: **4 years** (2021-2025)
- **41** Partners from **14** Countries.
- Coordination: **University of Thessaly**, Greece (Prof. Chrysi Laspidou)
- Title: Climate resilient-regions through **systemic solutions** and **innovations**
- Main theme: A holistic approach for **resilience** to climate change for European regions
- **9** Case Studies, involving **12** Countries



Case Studies: Overview

9 Case Studies across Europe

Involving 12 Countries

3 transboundary Cases (in red)

1. Athens Metropolitan Area

2. Mediterranean ports

3. Main River (Germany)

4. Prespa/Ohrid Lakes

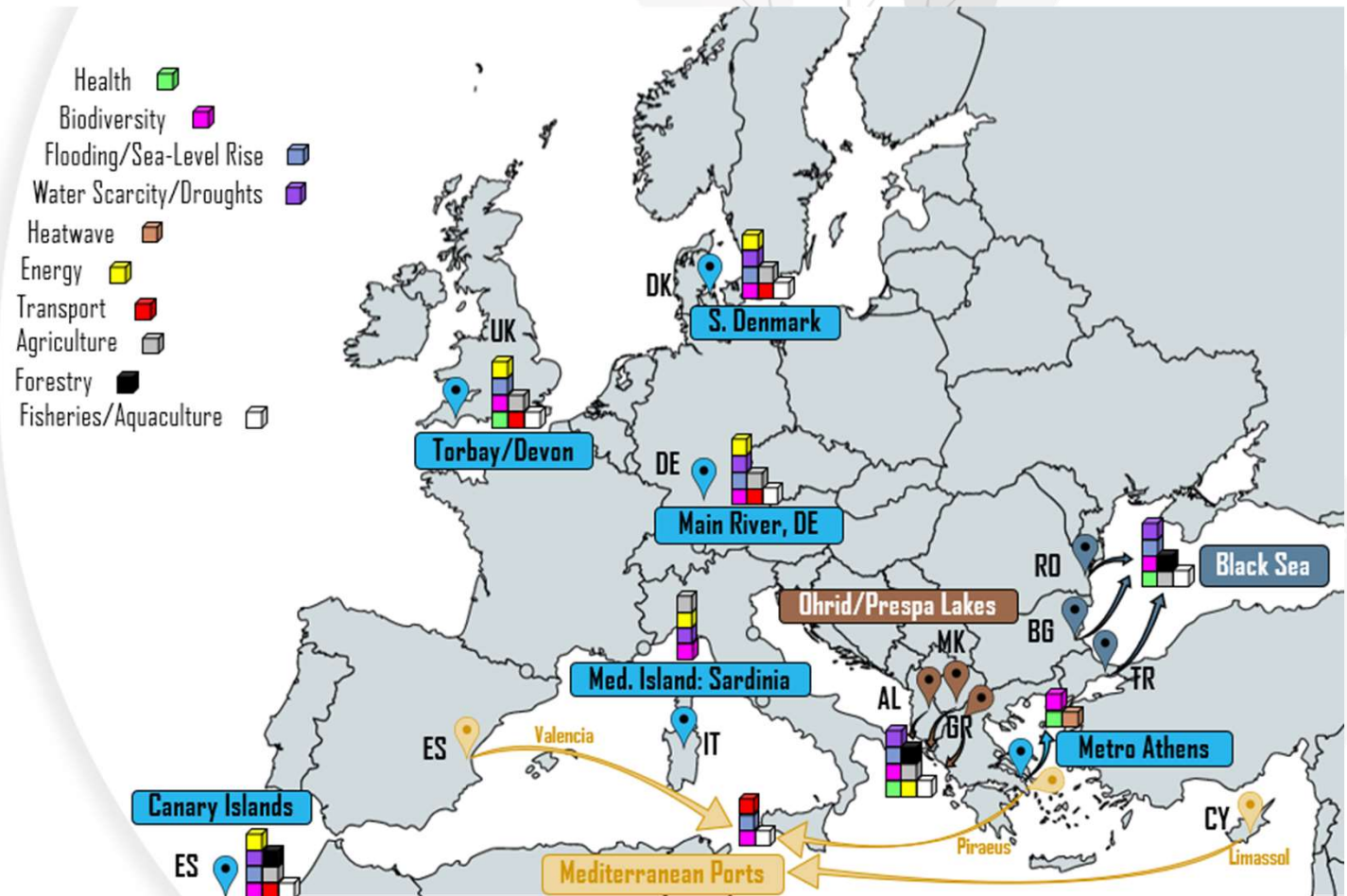
5. Canary Islands

6. Black Sea (west coast)

7. Southern Denmark

8. Torbay/Devon (UK)

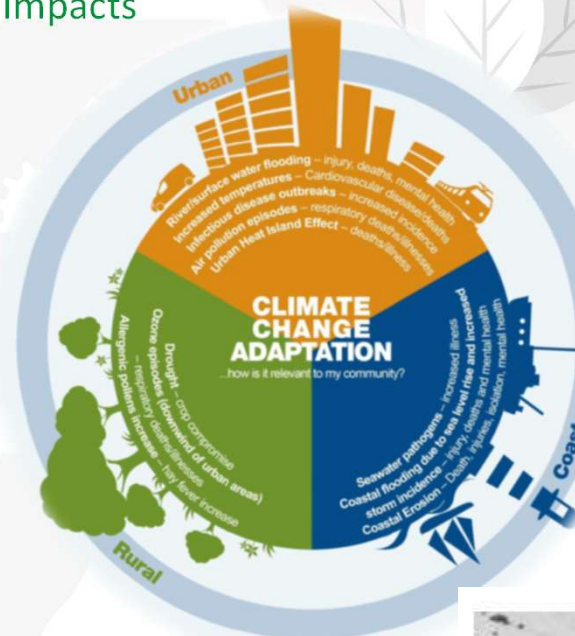
9. Sardinia



Adaptation to Climate Change

Enhancing the Resilience to Climate Change Hazards and their Impacts

- **Climate Change Hazards:** Extreme events and long-term phenomena (e.g., water scarcity, food security)
- With global Impacts (for humans and ecosystems).
- **Resilience** enhanced by **Adaptation to Climate Change**
- **Complex** and **Interconnected** to other global challenges
- Refers to **all approaches** taken to adjust, prepare for, and accommodate new conditions that are created by changing climates
- Involves, **technical, cultural, societal and financial solutions.**
- Implemented through **adaptation strategies**
- For **natural resources** (species, habitats, forest plantations, watersheds, etc.) and **human societies**
- Towards **accommodating** to the new conditions



After the flood: rebuild or relocate? 15.11.2021

In short...



Not just technical! social, Financial, Political...

The project aims to leverage innovation for climate adaptation across a series of key systems (from biodiversity to flooding and sea level rise and from droughts and water scarcity to heatwaves and deforestation), and build an ecosystem for solutions to climate change adaptation.

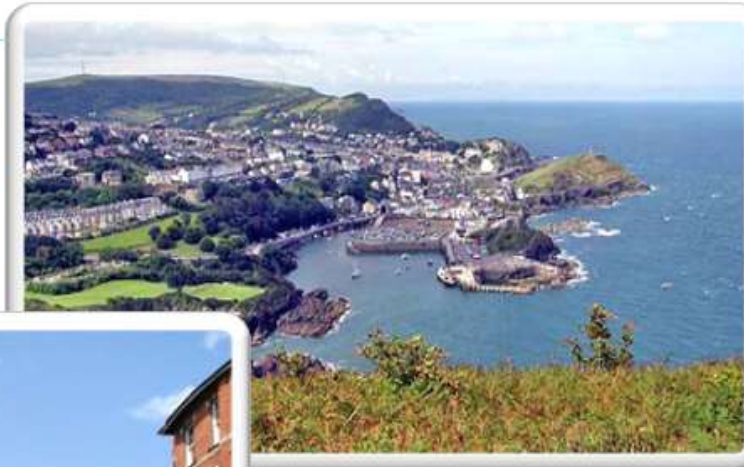
Water - **Energy** - **Food**
Ecosystems - **Pollution**

Case Study#8: Torbay/Devon UK



WATER

Assessing by looking at the effects of flooding on the water infrastructure (drinking and wastewater)



ENVIRONMENT-BIODIVERSITY

Assessing by investigating the effects of flooding on the local environment

HEALTH

Identifying residential properties at risk and assessing the effects of flooding on health



INFRASTRUCTURE

Infrastructure including clean energy and transport will be assessed within the case study by assessing the effects of flooding on critical infrastructure including roads, railways, electric gas, water, telecommunications.



Torbay living lab

- Participatory research tool often used in planning, product design and innovation which brings together a collective of key stakeholders to explore a focal issue
- 10 stakeholders
- X3 workshops
 - 1st before Sep 2022
 - 2nd Jan – March 2023
 - 3rd summer 2023
- Led by Sarah Ward (Westcountry Rivers Trust) & Kate Baker (University of Exeter)



Workshop 1: Mapping local issues + creating objectives

(before Sep 2022)

What are the main issues associated with x?

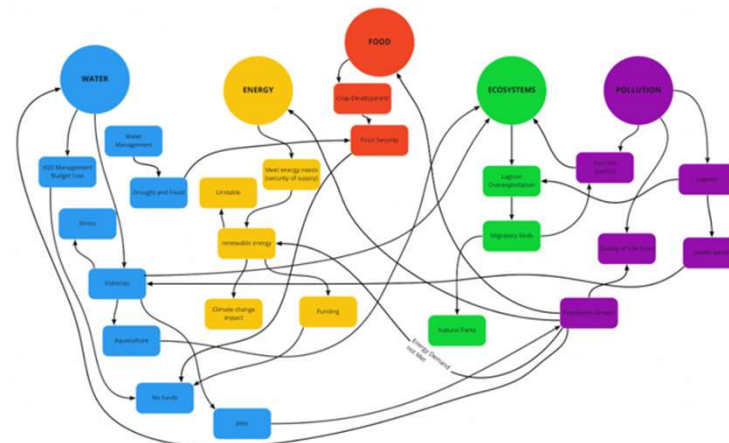
Why?

Who is responsible?

What is the impact?

What are the financial implications?

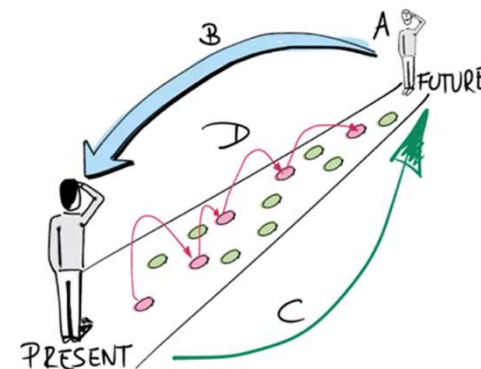
Water – Energy – Food
Ecosystems – Pollution



Workshop 2: Future Visions

(Jan – March 2023)

- Validate mental map
- Reach consensus on the LL problem
- Develop Future Visions



Workshop 3: Backcasting & Innovations

(summer 2023)

- Identify key milestones
- Identify **innovations** that will support the identified actions
- Develop outline innovation pathways – there will be funds!



Who to involve in the living lab?

- Torbay Council Strategic Planning
- TDA/Torbay Regeneration
- Torbay Council Highway Authority - SWISSCO
- Torbay and South Devon NHS Foundation Trust
- South Devon College
- Torbay Community Development Trust
- South West Water
- Western Power
- Environment Agency Plymouth Arts College
- Network Rail Torbay Climate Partnership





THANK YOU



 info@arsinoe-project.eu

 www.arsinoe-project.eu

 [#ARSINOE](https://twitter.com/ARSINOE)



This project has received funding from the European Union's Horizon H2020 innovation action programme under grant agreement 101036683.