

# WATERFRONT CLIMATE

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# H2020 Programme

Linking Research and Innovation on Waterfront through Technology for Excellence of Resilience to face Climate Change

# The climate is changing, the sea level is rising...

Sea level rise, high tides, storms and floods enhance the vulnerability of urban waterfront territories.

The effect of climate change is increasing at an unprecedented rhythm which demands adaptation and transformation of vulnerable territories.

These problems affect not only the local environment and economy, but also every citizen or even tourists.



# S.O.S. for Urban Waterfronts to face Climate Change

S.O.S. – Sustainable Open Solutions for European urban waterfronts programme focuses to develop new solutions that emerge from the present necessities.

The programme builds a new multidisciplinary collaboration network involving top European research institutions in architecture, urban design, regional planning and landscape architecture for better understanding of the impacts of climate change in urban waterfronts and explore them from social, environmental, educational, technological and urban design perspectives.

The novelty of the approach is to overcome the problems that affect urban waterfronts and join efforts of specialists from different disciplines that have a recognized expertise in the subject and develop complementary research in the field of climatic change.

#### The aim of S.O.S Climate Waterfront

S.O.S Climate waterfront aims at improving sustainable research structure that enables new solutions and strategies to be found and mitigate the vulnerability of urban waterfront.

> The project benefits from special conditions not available in a single institution. Local experts, municipal representatives, stakeholders and international scholars work together, participants exchange views, gain new perspectives to enhance the adaptation.



The concept of human development is used in all research actions of S.O.S Climate Waterfront according to the United Nations Development Programme.

> The focus on people, their skills and opportunities rather than depending only on resources or profitable income is a priority in the research project. The main goal is to expand the realm of possibilities so that urban waterfronts can adapt, transform and create opportunities to be meaningful areas for the community.

S.O.S. Climate Waterfront goes beyond technical features, and reflects cultural, political, environmental and social, characteristics that influence the quality of human life in the context of climate change.



#### S.O.S. Climate Waterfront Approach

S.O.S. Climate Waterfront fills the the understanding gap in of how the different scales of landscape and urban planning, architectural design and technology water-related linked in are strategies.

The project directly reflects how these fields impact each other in the definition of preventive action plans and in the enhancement of more conscious solutions to inform the community, human welfare and socio-economic activities along those vulnerable territorial settings of the waterfront.

The dissemination of results is effective the most through the cooperation of international networks, and regional networks. To achieve steady and interdisciplinary this. а agenda research is required, including environmental issues. technologies, strategies smart urban of resilience desian in The aim S.O.S and culture. of Climate Waterfront is to exchange of transnational examples best practices and cross vision to achieve better strategies for urban environment.

**Workshops** - each semester two-week workshop is organized by the host institution and focuses on their core of investigation. Participation is open to researchers, PhD students, post-docs and cultural agents to improve and benefit the scientific excellence within the partnership.

To enhance the present debate, the scientific committee invites external consultants and professionals from partner institutions. The scientific commission selects a particular waterfront case and identifies the risks of extreme swings brought by climate change. During a period of two weeks, the group debates the threats, shares previous transformations that affected the waterfront environment and presents future potential scenarios.

**Conferences** - gather local experts, municipal representatives, partners and international scholars to share their research on urban waterfronts. This is useful to exchange mutual vi-sions and common practices, which constitute a relevant tool for future research.

The research community will promote the active participation in international science and technology related conferences by providing the framework to include host presentation of papers from external guests previously selected. The organization of the conference is oriented towards the specific public involved with the Municipality, Regional Planning, Cultural Institutions Environmental Organizations and Universities interested in each discipline.

**Dissemination and outreach activities** - S.O.S Climate waterfront research community promotes the scientific and public dissemination of the outcomes and findings including publications in relevant/indexed journals, policy briefs, studies reports, booklets and cooperation with other organizations, programs, networks, operating in the areas related to the project.

The research project launches Sustainable Open Solutions that are to be communicated to wider audiences as they deal with environment, societal and transportation to be considered for discussion.



#### **Obstacles for European Urban projects**

Municipalities, stakeholders, port authorities and local communities often disagree with projects upon their own needs. Misunderstanding or lack of awareness often compromise the functioning of sustainable solution project.

In the last years a number of projects were interrupted when they faced strong opposition coming either from public opinion, the media and/or lawsuits. Projects seem to address sensitive cultural values and consequently face years of discussion, only to be put aside, eventually. Such difficulties bring a loss of competitiveness on all sides, as well as decreasing quality of life for their citizens. S.O.S. Climate Waterfront seeks to eliminate these obstacles by cooperating with all stakeholders in pooling knowledge and developing new strategies based on climate change.

# S.O.S. Climate Waterfront Solutions Strategy and Time Frame

Data related to historic and geographic records of specific waterfronts are used to construct patterns of development, feed algorithms and integrate the support of artificial intelligence to design future possible scenarios.

Climate change solutions can only be successful in ensuring a resilient city if they also engage citizens, educating them about challenges and solutions, and fostering possible adaptation in lifestyles.

	2019	2020	2021
January			
February			
March	Lisbon Workshop		
April			
Мау		Stockholm Workshop	Gdansk Workshop
June	Conference 1 Gdansk		
July		Workshop	Lisbon Workshop
August			
September			Conference 3 Lisbon
October	Thessaloniki Workshop	Conference 2 Thessaloniki	
November			
December			

#### S.O.S Climate Waterfront Partners



Lusófona University of Humanities and Technologies (Project coordinator) Chamber of Commerce (Economics)



Gdansk University of Technology (Urban renewal) Gdansk City (Municipality)

Foundation River Cities (Dissemination)







Aristotle University of Thessaloniki (Migrations)

Metropolitan Agency (Urban Resilience)



CPONH (Environment)

**O** Turkey

TOBB University of Economics and Technology (Data – A.I.)

Sweden

Intercult (Dissemination)









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