



# Re-ACT Schools

## Transformation of Schoolyards to Combat Climate Change Effects and Promote Healthy and Active Environments

The escalating effects of climate change pose significant threats to cities; in particular, heavy rainfall, flooding, rising extreme temperatures, and urban heat island effects significantly impact the urban environment, life quality, and health in the Mediterranean. The Re-Act Schools project addresses these challenges by focusing on climate change adaptation and risk prevention in school outdoor spaces. Schoolyards, especially in cities where public green living areas are limited, are valuable assets that offer unique opportunities to test and promote Nature-based and innovative technological solutions for climate change mitigation and adaptation capable to reduce the climate hazard.

To achieve this goal, the project brings together a diverse and complementary partnership that comprises 2 research institutions, 5 public bodies, and a territorial development agency from 6 Mediterranean countries (Italy, Spain, France, Croatia, Bulgaria, and Cyprus), that will work together to transform 6 schoolyards through Pilot Actions into green, climate-resilient and innovative spaces that promote healthy and active lifestyles among students and the wider community, according to the goals of the New European Bauhaus and Green Deal Program.

The testing activity will be accompanied by a capacity-building phase finalised to define an innovative design methodology to mitigate heat stress, manage water resources efficiently, enhance biodiversity, and offer climate shelters to the citizens in the Mediterranean urban context based on the use of ENVI-met microclimatic simulations and Digital Urban Climate Twin models to test advanced methods for analysing, designing, and monitoring climate-resilient schoolyards.

The knowledge developed during the project will be collected in an innovative Action Plan and a multimedia tool to support the Public Administration of the Med Area in managing the regenerative transformation of schoolyards and public spaces.



**Overall objective:** Re-Act Schools aims to redevelop climate-resilient, multifunctional, and health-promoting schoolyards by utilising NbSs and novel design practices. The expected impact includes mitigation of the urban heat island effect, biodiversity enhancement, life quality improvement, and awareness among students and citizens. An innovative climate audit strategy, design guidelines and action plans will be produced for public authorities and stakeholders to reduce the risk hazard across the Med region.



### Partners:

- **University of Florence** (Italy)
- Province of Lucca (Italy)
- Var County Council (France)
- Municipality of Matarò (Spain)
- The City of Split (Croatia)
- The Cyprus Institute (Cyprus)
- School Board of Nicosia (Cyprus)
- Varna Economic Development Agency (Bulgaria)



### Territories:

Urban



### Test Project