



# ADAPTATION



## TREE PLANTING, VÁRZEA PARK, POP- UP CLIMATE SHELTER

### SETÚBAL, PORTUGAL

#### Three main activities were developed:

- **Tree planting in Várzea Park with an environmental awareness programme to promote climate adaptation in local schools. In total: 5 sessions in 3 public schools; 1300 trees planted (500 more to go); 160 students and more than 1000 volunteers participated.**
- **The redesign of a 19-hectare urban green park with climate resilient features for flash flooding, heat waves, water savings, and promotion of biodiversity, to name a few.**
- **Pop-up island/shelter in the city centre to create awareness for heat waves and the potential of Nature-based Solutions (NBS) to reduce the urban heat island effect.**



### HAZARDS ADDRESSED

- Extreme heat, droughts, and water scarcity
- Heavy precipitation and flooding
- Wildfires



### SOLUTIONS

- Planting trees and bushes
- Permeable paving
- Retention basin
- Shading above public surfaces in the central city area
- Design planning for future implementation
- Awareness raising and inclusion of students and citizens into planting activities



### FUNDING

- Local government's own funds

### STATUS OF MEASURE





## DIRECT BENEFITS

- Flood protection – Varzea flood basin was successfully tested during the heavy precipitation period in December 2022.
- Awareness raising – strong campaign, inclusion of a large number of citizens and students into implementation; social networks.
- Learning about NBS in practice – local urban planners and landscape architects were challenged to prepare a new master plan with NBS in focus.



### CO-BENEFITS

- Quality of built environment
- Quality of life for residential neighbourhoods along Varzea Park Biodiversity
- Creation of future semi-natural habitat.



### STAKEHOLDERS ENGAGED

- Various departments of the Municipal Administration - direct engagement; public schools - cooperation in educational activities (5 sessions) and inclusion of students in tree planting; volunteers (citizens) - tree planting; Chamber of Commerce - proposing the solutions for shading of city streets.



## NEXT STEPS TO PROGRESS AND/OR UPSCALE THE MEASURE:

In order to scale up the measure, it will be necessary to recognise and present the project at the national and the EU level, as well as identify new sources of financing other than the Municipal budget.