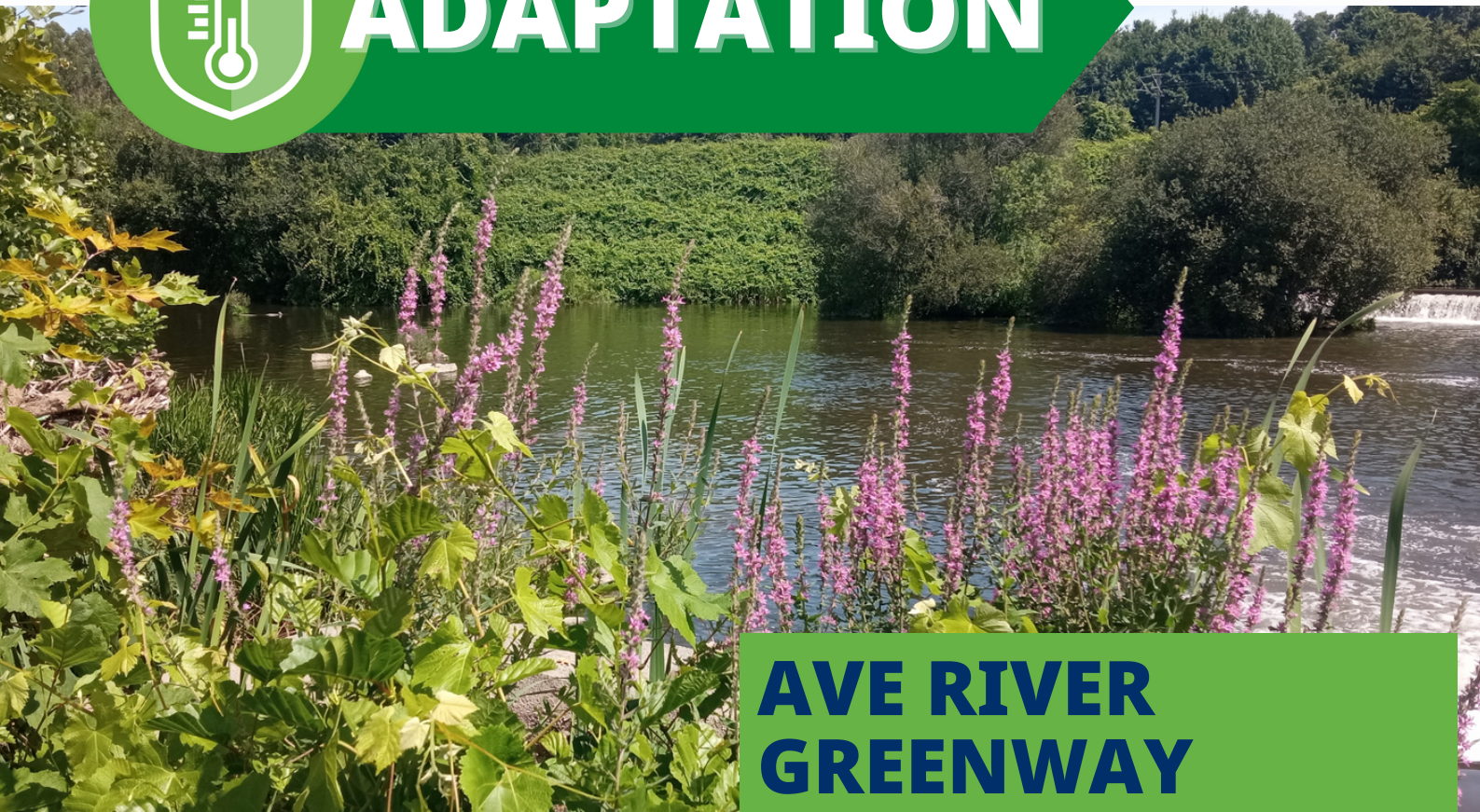




# ADAPTATION



## AVE RIVER GREENWAY NATURE-BASED REHABILITATION

### SANTO TIRSO, PORTUGAL

The project aims to qualify the Rio Ave's valley's ecosystem services to promote resilience during severe rainfall and consequent flooding. To achieve this goal, the city is implementing a general clean-up of the river's banks both to control invasive species, as well as to reduce erosion through the planting of native plant species. Additionally, Santo Tirso is connecting natural urban green parks that are located along the riverbanks with a walking/cycling path as a means of promoting environmental awareness (including school engagement in reforestation) and increasing general leisure use.



### HAZARDS ADDRESSED

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



### SOLUTIONS

- Nature-based solutions (invasive species control, plantation of native species)
- Natural path developed to reduce flooding risks
- Environmental awareness programme
- Resilient Urban Green Spaces



### FUNDING

- Local government's own funds
- There is an expectation of external financing through EU granting schemes

### STATUS OF MEASURE





## DIRECT BENEFITS

The nature-based solutions have a direct impact on increased drainage into the river and a reduction of flood damages during severe precipitation events as the areas are designed for this water retention purpose. Natural designs also reduce maintenance and watering costs. Moreover, the nature-based solutions also support enhanced site biodiversity.



### CO-BENEFITS

- The cycling/walking path encourages a healthier lifestyle close to naturalised landscapes, a new option for those wishing to commute without using their car. This will contribute to GHG emission reductions, as well as improvement of ambient air quality.



### STAKEHOLDERS ENGAGED

- The different stakeholders from the city - e.g., organisation dedicated to education, schools etc



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

While there have been some project implementation activities carried out, namely some riverbank cleaning/restoration and the inauguration of the Urban Green “Verdeal Park”, there is still the need to further plan and secure funding for full project realisation. This includes fully restoring and naturalising the entire riverbank, including further extending the cycling/walking path for daily use by local population, and for tourists. There is also the potential for project scale-up by working with upstream and downstream Ave River neighbouring municipalities to extend the riverbank restoration work and pathway. The project, and the qualification of 18km of the river’s margins, is expected to be concluded by December 2023.