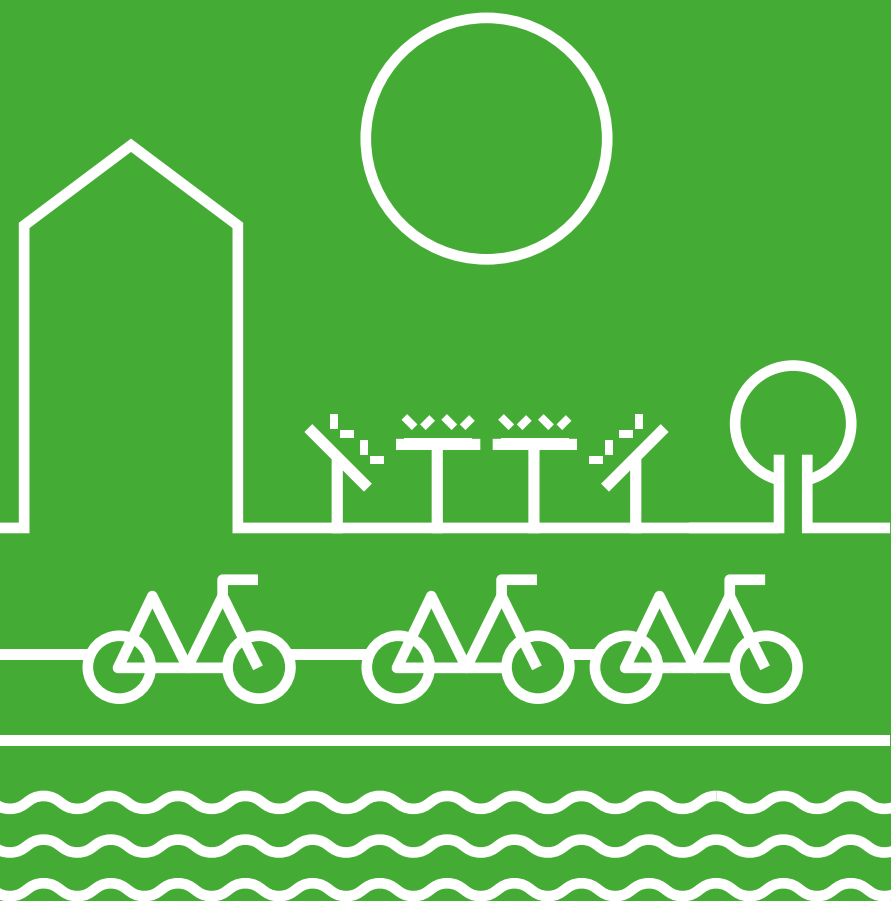




Actions for local adaptation  
to climate change



**What are cities doing  
to fight Climate Change?**

# Life Adaptate Observatory

The project has developed an on-line monitoring tool consisting of an observatory from which to follow the progress of all the pilot actions and the Sustainable Energy and Climate Action Plans of the municipalities participating in the LIFE Adaptate project.



## Guidelines for the preparation of Sustainable Energy and Climate Action Plans (SECAP).

This guide provides municipal technicians and managers with a methodology based on the qualitative analysis of their city to assess its situation when facing climate change. In this way, the diagnostic phase is significantly simplified as it does not require quantitative information which is not usually available to municipalities.

The guide is a useful tool for municipalities facing for the first time the design of a city adapted to climate change so that they can be able to plan their actions in a way that is coherent with the local situation and integrated with the actions of mitigation and the fight against energy poverty.



## Guidelines to including climate change mitigation and adaptation in local policies

The ultimate goal of the guide is to contribute to climate change mitigation and adaptation at the local level by including effective measures in the planning and management activities of municipalities.

Specifically, it establishes local standards that encourage the reduction of greenhouse gas emissions in any new plan and project for works or activities, as well as including the effects of climate change and the adaptation measures necessary to address it.



## Lorca.

### *Installation of awnings in Lorca city centre.*



The installation of awnings in several commercial and busy pedestrian areas in the historic centre of Lorca aims to alleviate the effects of heat waves and urban heat islands, two phenomena that are increasingly frequent and intense in the municipality. This action has managed to reduce the ambient temperature in the most emblematic streets in the heart of the city, making it more pleasant for pedestrians and helping to promote local commerce.

The awnings are installed in May and removed in September, thus relieving the heat during the toughest summer months. The awnings cover from Calle Corredera to Calle Alburquerque and Almirante Aguilar, without covering part of Pío XXII and Alporchones so that the awnings do not obstruct the views of the Castillo de Lorca.



## Águilas.

### *Creation of a wooded area with drip irrigation using treated water.*



Águilas seeks to fight extreme heat, high solar radiation and desertification by providing natural shade through the creation of a 30,000m<sup>2</sup> native forest area, irrigated with treated water from the urban waste water treatment process and increasing the humidity level of the soil.

The action begins at the water treatment plant located in Las Máscaras Street ("El Labradorcico" industrial estate), where a pipe leads the water to a pump powered by solar energy. This pump raises the treated water to two 35 m<sup>3</sup> tanks, where it is stored and falls by gravity to irrigate the new wooded area created as part of this project, which is 1.3 km from the treatment plant.



## Cartagena.

### *Conditioning and connection of green areas.*



Cartagena seeks to connect green areas by means of a pedestrian walkway and tree-lined pergolas to offer residents a friendly environment in which to walk and live together. Thus, the increase in green areas adapted to pedestrian use can contribute to minimising climate-related risks in citizens' daily lives by reducing the temperature in the affected areas in one or two degrees.

Through this pilot project, the municipality intends to initiate a change in the concept of design of parks and public squares, by eliminating hard pavements and introducing trees, vegetation, pergolas and porches with green roofs, upholstered pavements and increasing the number of trees that allow water to infiltrate during rainy periods.



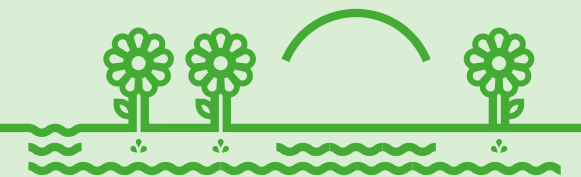
## Alfândega da Fé.

### *Creation of a natural lake, shaded areas with integration of renewable energies and project for the creation of a multipurpose forest*



Alfândega da Fé has developed three pilot actions in the municipality:

- 1. The creation of a natural lake of 3,000 m<sup>2</sup> in order to respond to the great vulnerability of the municipality to drought phenomena and the consequent risk of fire.**
- 2. Creation of shaded areas with the integration of renewable energies with a total surface area of approximately 120.00 m<sup>2</sup>.**
- 3. Projects to promote the creation of a multipurpose forest based on native species and to promote the natural regeneration of these species.**





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## Smiltene.

### *Lake Vidusezers cleaning and recovery.*



Smiltene's pilot action consisted in cleaning and dredging of the artificial lake Vidusezers, which was in an extreme situation of environmental degradation. In addition, the municipality is on constant alert because of the increasingly frequent heavy rainfall and the resulting increased risk of flooding.

This action improves the capacity to accumulate water in the lake and to regulate the flow of rainwater through the gates, which have been restored to avoid the risk of flooding and its own eutrophication. It also improves the quality of the water and promotes the lake's recreational use. Thus, an improvement in the microclimate and environmental quality of the neighbourhood is achieved.



## Mértola:

### *Shaded areas with integration of renewable energies, multipurpose forest projects and sustainable tourism plan*



Mértola seeks to combat the risk of drought and high temperatures in summer by developing three pilot actions:

1. Covered recreational area with the intention of ensuring the existence of shaded areas that provide a solution to the high temperatures.
2. Development of a sustainable tourism plan.
3. Projects to promote the creation of a multipurpose forest based on native species and to promote the natural regeneration of these species.





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