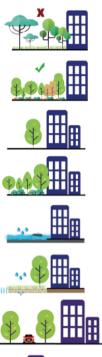
### Solutions for Climate Adaptation in Cities



### **NATURE-BASED SOLUTIONS**

The ecosystem services provided by the blue & green infrastructure system, which includes intercorrelated green areas with high ecological qualities, make cities resistant to climate change by reducing the negative impacts of climate change.

Gradual planting in green areas



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Constitution of blue and green infrastructure

Using natural meadow plants instead of grass

systems, increasing the amount of green areas and the ratio of green areas within the building area

Use of native species instead of domesticated plants

Afforestation on urban spaces such as roads, squares and parking lots

Increasing the amount of permeable surface

Afforestation on vehicle, walking and bicycle paths in a way to form green corridors

Conversion of built coasts to living coasts

### Gray & Blue & Green (hybrid) Solutions





The creation of precipitation water management facilities by integrating nature-based solutions into gray, blue and green infrastructure systems (hybrid solutions) supports mitigation and adaptation actions.

Making room for water in cities increases the climate resilience of cities.

Creation of rain gardens and swales

Conversion of green areas into areas that can function as temporary water retention and accumulation areas during rainy periods

Restoration of closed or canalized streams

Designing the flood plains around the stream as a temporary water retention area during rainy periods.



This project is co-funded by the European Union and Republic of Turkey.

## **CITIES AND** CLIMATE ADAPTATION







**WEgl@bal** 

Cities that grow unsustainably under the pressure of construction and development are the areas where the effects of climate change are felt most intensely.



Cities are both quilty and victims of climate

Cities are affected differently by climate change.

Climate change causes ecological, economic, and sociological problems in cities. The economic cost of these problems and climate disasters to cities is guite high.

The impacts of climate change and the vulnerability levels of cities differ at local/regional scales. Climate adaptation is specific to local conditions.

Cities offer a variety of opportunities for the development of climate adaptation solutions.

Climate adaptation is aimed at decreasing exposure and increasing resistance and adaptability.

Climate Change Adaptation is not an environmental issue, it is a Sustainable Development issue. It enables cities to achieve the Sustainable Development Goals.

### **Climate Adaptation Solutions in Cities**



### **GRAY SOLUTIONS**

Creation of temporary flood barriers

Covering roofs and roads with light-colored materials

Rain harvest

Use of gray water and clean energy sources

Adaptation of overflooding-affected structures to overflooding

Construction of protection barriers for critical facilities.

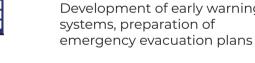
Making transportation systems climate resilient

Construction of seawalls and flood barriers on the coasts



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PLAN \*



Preparation of local climate adaptation plans, integration of adaptation into spatial plans

Making impact and vulnerability analyzes

Development of technical and institutional capacity, increasing the level of knowledge and awareness of local people



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Development of early warning



**Republic of Turkey** Ministry of Environment and Urbanization **Environment Management General Directorate** 



Tel: +90 (312) 410 10 00

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