



URBAN GreenUP is a project that aims to develop a new concept, "Renaturing Urban Plans (RUPs)", which include actions focused on mitigating the effects and risks of climate change and improving the air quality and water management of cities.

The urban renaturing methodology developed by URBAN GreenUP is demonstrated in three front-runner cities, Liverpool (The UK), Izmir (Turkey) and Valladolid (Spain). Based on their experience, five follower cities, Mantova (Italy), Ludwigsburg (Germany), Medellin (Colombia), Chengdu (China) and Binh Dinh-Quy Nhon (Vietnam), will set up their own Renaturing Urban Plans to replicate the URBAN GreenUP strategy and act as ambassadors for a broader group of cities with a high replication potential.

### THE MAIN OBJECTIVES OF URBAN GREENUP ARE:

- » develop and demonstrate a fully replicable renaturing methodology to support the development of Renaturing Urban Plans aimed at climate change mitigation and efficient water management;
- » involve citizens, local authorities and stakeholders in the co-design of their city renaturing plans;
- » identify innovative business plans to replicate the model in other cities all around the world;
- » foster the creation of a global NBS market and support EU international cooperation.



# Creating more liveable cities using nature

Nature-based solutions are interventions inspired by nature and are designed to deal with societal and environmental problems. The idea behind these solutions is to exploit the properties of plants, soils and other natural elements in an innovative and integrated way to re-shape urban areas and to increase their sustainability and resilience to climate change, air and water pollution, floods and rising temperature.

### RENATURING URBANIZATION



Arboreal interventions and resting areas in the form of cooling shades and trees provide a chiller atmosphere for citizens to enjoy when summer comes reducing heat waves effects. In addition, green routes in the form of bike lanes can support a greener environment, a more sustainable urban mobility and a healthier lifestyle for people to indulge in.

### SINGULAR GREEN INFRASTRUCTURES



Urban farming, pollinators and smart soils provide a more accessible agricultural lifestyle for citizens. Coupling them with pollutant filters, horizontal and vertical green infrastructures, they all reduce the chances of air pollution that occur mostly in urbanized areas.

### **WATER INTERVENTIONS**



Green pavements, specific actions for avoiding periodic floods and sustainable drainage systems reduce the chances of flooding when sudden outpour occurs. Moreover, natural water treatment is done to manage waste water.

### NON-TECHNICAL INTERVENTIONS



Co-design and co-creation of urban areas and districts, citizen engagement and educational activities to boost citizens' and communities' awareness and acceptance of the Nature-Based Solutions introduced to their cities.

# **Front Runner** Cities

**Jumpstarting** a greener future using nature-based solutions



### VALLADOLID (SPAIN)

### **Capital of the Autonomous Region** of Castilla v León

Climate: Continental Mediterranean

Population: 300 000

Heat island effect and flooding caused by the Esgueva River are two among the many challenges faced by Valladolid, which can be resolved using nature-based solutions to be implemented in the city.



### One of the leading global trade centers at the end of the 19th century

**Climate**: Temperate maritime

Population: 500 000

Suffering a heavy blow on population reduction and economic decline in the mid-1990s, Liverpool has a number of poor open spaces and degraded urban environments that can be reduced using nature-based solutions.



### Thousands of years' old city by the **Mediterranean Sea**

Climate: Mediterranean **Population**: 4 000 000

With Izmir's growing population and fast urban development, challenges such as air pollution, heat island effect, flooding, heavy traffic and loss of natural areas will be mitigated using nature-based solutions.

## **Follower** Cities

Replicating renaturing urban plans at a global scale

### MEDELLIN (COLOMBIA)

Dynamic commercial center during the 19th century Population: 2 500 000

### LUDWIGSBURG (GERMANY)

A town north of Stuttgart known for its baroque palaces Population: 93 000

### **MAN'TOVA** (ITALY)

A city known for its artistic and cultural heritage Population: 50 000

### CHENGDU (CHINA)

Capital of Sichuan Province

Population: 16 000 000

### **QUY NHON** (VIETNAM)

Coastal city located in the Binh Dinh Province

Population: 660 000





















































