



INTEGRATED ENVIRONMENTAL MANAGEMENT OF SMALL GREEN SPOTS IN FUNCTIONAL URBAN AREAS FOLLOWING THE IDEA OF ACUPUNCTURE

### **NEWSLETTER 03.2022**

Environmental Acupuncture

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#### **PROJECT OBJECTIVE**

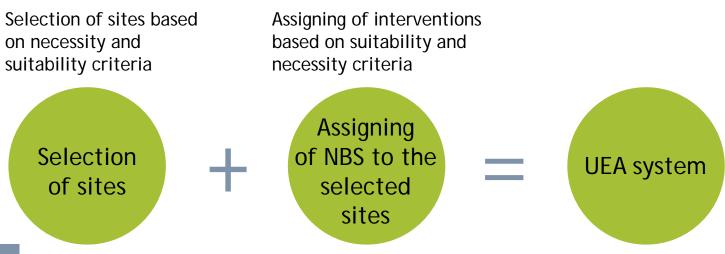
Enhancement of creation of green and blue infrastructure with planting native vegetation in cities lacking large spaces for this function

#### **PROJECT CONCEPT**

Small green interventions in an urban area.

Interventions = nature based solutions (NBS) with application of native species

#### **CREATION OF UEA SYSTEM**





## PILOT CASES

Impulse Region, DE

Chorzòw, PL

Liptovský Mikuláš, SK

Alessandria, IT

# Chorzów - PL

#### Bankowa Street

The relation between the biologically active surface (grass) and the concrete surface adopted in the concept should be changed. There must be more grass which fills the gaps between concrete slabs in grassy pavement presented in the conception. For this purpose, we suggest to thicken the grassy between the plates. It would also be reasonable to include an absorbent basin. Absorbent basin is depressions for rainwater retention overgrown with vegetation including grasses. Absorbent basin slows down the water flow, enables infiltration into groundwater and acts as a rainwater pollution filter. Absorbent basin works perfectly along roads, squares and parking.

The basin collects rainwater mainly from roads and pavements. Water can be supplied through the street inlet system or directly from the sidewalks. Usually it has a width of 1.5-5.0 m. It is also lowered by 0.3-0.5 m compared to the terrain.

#### Moniuszki Street

All elements necessary for the full implementation of the investment should be taken into account.

In this case it is necessary to separate the roadside from the street by building curbs or parking stops, which will protect the plants from damage.

After



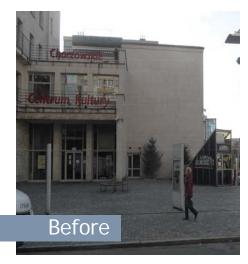




#### Chorzów Cultural Center

Due to the need to ensure the right solution of the green wall as acceptance of the solution with the Contractor's warranty. Adaptation of a vertical garden hydroponic system doesn't mean that this is a solution based only on hydroponics.

The wall should use native species. In the design, it must be permanent fived to the building wall. For cost reasons, we suggest reducing the green wall by a 0.5 m module on each side.





#### Armii Krajowej Street

As in the case of the other three concepts, it is necessary to adapt the type of materials to financial resources intended for the investment.

Therefore, we propose to limit the number of elements of small architecture presented in the concept to the necessary minimum. Leave one pot for growing herbs and wooden seats. Do not use flower pots with pergolas. Instead, plant hedge shrubs in the ground in line, at a suitable distance from the retaining wall.

The design should also include concrete pavement surfaces with grass joints and a playground for games proposed in the concept. The installation of a lawn should also be considered.



# 2 Impulse Region

#### Apolda

The investment area in Apolda is a ground-based green wall. In addition, the goal is to install benches. With the reconstruction and renovation of the investment area, the intergenerational living should be promoted.

The public procurement started in July 2021. The tender was closed in December 2021. The installation of trellises and the planting of climbing plants was completed in March 2022. The primary goal is to enhance the neighbourhood by providing more and higher quality green and open spaces. The focus of urban development and open space design in the core of the city is to be placed more on the revitalization of the historical gardens and the associated open space design by planting native species.



#### Jena

The investment area in Jena was transformed into a pocket park in school location as a small area around and between buildings vegetated by trees and bushes. This concerns both a better planting and a clear improvement of the equipment elements, especially with benches and playing equipment. The start of the project "pocket park" was in October 2021. The reconstruction and revitalisation of the area will be finished in March 2022. The planting of new woody plants and the creation of flowering meadows and perennial areas will create attractive recreational spaces as well as biodiverse and micro climatically enhanced natural spaces.

Before





## - DE Erfurt

In Erfurt was the plan to build a municipal garden (community garden). In the garden the people can grow fruit to the own utilization and to the training. In addition, the goal was to plant some trees and install benches. The partner of Erfurt wanted to expand the possibilities of use (recreation etc.) in order to increase the quality of stay. Public procurement started in September 2021 and finished in October. Directly after this time the construction works started. Work on the area was completed in December 2021. The now usable green spaces are available to the urban population for recreation from the summer heat in the built-up city or as a social meeting place. At the same time, biodiverse natural spaces are created as retreats for flora and fauna, which in turn can be easily observed while resting.



#### Weimar

The city of Weimar had the goal to transform the urban green space to promote biodiversity in order to create an additional food supply for insects. Construction work in Weimar started in January 2021. The first step was clearing work. This affects non deserving protection plants. After that an old wall and other cement pieces were dismantled. The preparing of soil for sowing was the next and last step. The construction works was finished in August 2021. The area for the SALUTE4CE project was in the past considered as part of a planning for a kindergarten It was a wild fallow with wild growth next to the kindergarten in the middle of a residential area. With the redesign, a place with new functions were created.



# **3** Alessandria - IT

#### The Urban Orchard

The spot is a rectangular grass-grown level ground, 1600 m2 large, situated at the corner of via De Gasperi and via Galvani crossroad, in Europa's neighbourhood.

In the west side of this zone is situated the primary school "Villaggio Europa". Teachers, students and their families were actively involved in the achievement's phases, in the didactic and green-care activities.

This area has been uncultivated and badly equipped for a long time: the goal's project is the realization of the "Urban orchard" through the plantation of native fruit-trees and the sowing of a wildflower's mix useful for pollinating insects.





#### The Refuge Forest

The interested area is an irregular shaped, grass-grown irregular leveled ground, 1225 m2 large.

This area is crossed by a huge asphalt string in front of the primary school "Morando", sited in via Benedetto Croce. Also in this case the Institute was involved in the green-care (es. plantation) and in didactic activities.

The project's goal is the realization of the "Refuge forest" through the plantation of trees and berry bushes in order to help the wild avifauna. Before





#### City's Green Lung

The spot is a rectangular grass-grown area, leveled in the middle and featured by a perimetrical ditch, 2000 m2 large. On the south side the area is delimitated by a foot-way planted with trees, and on the north side by the extension of the urban cemetery of Alessandria.

The project's goal is the realization of the "City's green lung" through the plantation of native forest trees with thermo-regulation and depurative functions.

It also included tools for outdoor sports.





### Greenery in the City Center

This is a wide-spreaded area: the project provides the retraining of 300 planters in the main streets of the city centre.

The old town is characterized by a lack of greenery because of the almost total deficiency of green areas.

The goal's project is the "metamorphosis" of this area with the presence of planters containing bio-indicator plants, on which it will be done analysis in order to value air pollution.

The goal's project is the implementation of the "greenery in the city center".

Before



After

After

# **4** Lipovský Mikulá

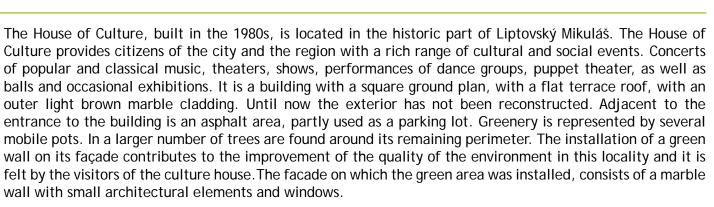
Before

After

#### Arboretum of native fruit trees

The area on which the design of "grandfather's grandmother's orchard" is solved is part of the premises of the Primary School with a kindergarten in Demänovská Street in the Palúdzka district. On three sides it is separated from the rest of the school by fencing. From the west side there is free access to it. The area, about 600 m2, was grassed without any trees and used as an open area. The school wanted to integrate the territory into its educational activities for children of kindergarten as well as pupils of the first and second level of the elementary school. Now it is a community garden with educational purposes, planting fruit-trees, vegetable beds, flowers, herb spirals, benches, etc. Removing the fence between the vegetable garden and the area in question allowed them to be interconnected and thus increase their use. As the area is in close proximity to the catering facility, schools are able to use it as well as pupils and their parents when picking up from school. The park is also available to residents of an apartment building which is part of the school grounds.









## š - SK

#### Park of the Square of Peace

Mierove Square is located in the central part of Liptovsky Mikulas, the busiest parts of the city, close to shopping centers, municipal library, hotel, bicycle path. The road running along its southern side is a link to the city's central square. Its total area is about 1859 m2 but it is divided into two parts of approx. 20 m concrete pavement. It is triangular in shape with the northern part of the department store parking lot, the eastern part of the bicycle path and the south by local road. The current park is only a part of the original park, whose areas were taken up by an asphalt parking lot and paved access areas to a department store. The surface of the square is grassed with several coniferous and deciduous trees. In its northern part there is a playground with two elements.

The revitalization of this pocket park consists in restoring the park greenery, installing new urban furniture including recessed trampolines and atomizers of water fog.



#### Podbreziny residential area

The Podbreziny site is in the eastern suburb of Liptovský Mikuláš. The area selected is abot 0,2ha and it is delimited by apartment buildings on three sides with the east side open to free space. Along this side there is a footpath for pedestrians and cyclists, and in their close proximity flows the river Smrečianka. Before SALUTE4CE intervention, it was a grassy area with several coniferous trees planted by residents, and several elements of a playground. Apart from regular mowing of lawn, maintenance of children's elements and trees, no more extensive revitalization has been carried out since the construction of residential blocks. It is a relatively shaded place, this is the reason why the ground parts of walls are covered with moss. The implementation of park trees, shrubs, workout playgrounds and dry hill wall, improves the environment for the residents of the apartment block (approximately 600 persons). The proposed changes have an impact on cyclists who use a frequented cycling route along the eastern side of the territory. This change are also felt by all who use the footpath along the Smrečianka River as a way to transport or work, or use the footpath for walks only (seniors, pupils).







### WEBSITE www.interreg-central.eu/SALUTE4CE



You can find there:

Videos Newsletters Promotional material Manuals on UEA Articles Presentations Project Deliverables Contacts

#### WORKSHOP



4 nvestments sites were implemented in each of the 4 project cities: Alessandria, Chorzów, Impulse Region and Liptovsky Mikulas. 16 new small green spots, of size not more than 0,2 ha were introduced.

Public consultations have taken place in each project FUA following the general concept of UEA. The consultations were concerning both Action Plans and investments. The inhabitants as the most important stakeholders group had an opportunity to propose spots for UEA system in their cities as well as introduce their ideas to the framework of some investments in case of e.g. community gardens or pocket parks.

#### TRAINING



The Training e-Learning Manual is a tool for transfer of

acupuncture in context of FUA and environmental development. It also includes: E-Learning-Modules as

The Training e-Learning Manual is available free of charge on our website, in the manuals folder of publication

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### MANUAL

The Handbook on Urban **Environmental** 

Acupuncture (UEA) includes the results of the knowledge gained and tools developed in SALUTE4CE project and catalogue of case studies and good practice examples.

This handbook is a helpful guide for preparation and implementation of urban acupuncture strategies including small green spots/plots.

The SALUTE4CE Handbook is freely available in both printed and online version.



LP - IETU Institute for Ecology of Industrial Areas, PL

PP02 - CoC Chorzów City, PL

PPO3 - SIBG Silesian Botanical Garden, PL

**PP04 - IOER** Leibniz Institute of Ecological Urban and Regional Development, DE

PP05 - IR Impulse Region, DE

PPO6 - LINKS LINKS Foundation -Leading Innovation & Knowledge for Society, IT

PP07 - LAMORO LAMORO Development Agency, IT

PP08 - MoA Municipality of Alessandria ,IT

PP09 - IURS Institute for Sustainable Development of Settlements, CZ

PP10 - CoLM City of Liptovsky Mikulas, SK

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