

TAKING
COOPERATION
FORWARD

 Local trainings in: Poland, Italy, Germany, Slovakia

 **DELIVERABLE D.T1.3.2 part A**
TRAINING MATERIALS. Introductory presentation

 SALUTE4CE | PP03 | Silesian Botanical Garden

MODULE NO. 0

CONTEXT INFORMATION



Introductory question: what can we do if it is not possible to achieve standards of public greenery in our urban area?

An example of standard and basic indicators of the availability and quality of public greenery: *Accessible Natural Greenspace Standard (ANGSt)* (England, 2011)

ANGSt recommends that everyone, wherever they live, should have accessible natural greenspace:

- of at least 2 hectares in size, no more than 300 metres (5 minutes walk) from home;
- at least one accessible 20 hectare site within two kilometre of home;
- one accessible 100 hectare site within five kilometres of home; and
- one accessible 500 hectare site within ten kilometres of home; plus
- a minimum of one hectare of statutory Local Nature Reserves per thousand population.

The three underlying principles of ANGSt are:

- Improving access to greenspaces
- Improving naturalness of greenspaces
- Improving connectivity with greenspaces



In some cities it is even difficult to dream of meeting greenery standards



city center (Katowice, Poland)



What if there is no room for large green areas?

let's apply Urban Environmental Acupuncture (UEA)

- ✓ It is argued that many small interventions can improve access to ecosystem services in Functional Urban Areas (FUA), providing an effect that goes beyond the perimeter of the area of intervention. The SALUTE4CE project offers an innovative solution for areas where it is not possible to preserve large open spaces as green areas, but rather many small spots. This solution is called Urban Environmental Acupuncture (UEA)
- ✓ UEA within the SALUTE4CE project is intended to:
 - improve the quality of the urban environment
 - strengthen the functions of ecosystems, specifically ecosystem services
 - improve the urban fabric by increasing the availability and prevalence of green space.
- ✓ To enable this, four Action Plans are being prepared under SALUTE4CE, according to a common methodology, one in each of the four regions participating in the project.



THE PURPOSE OF THE TRAINING

- Objective of UEA training is equipping the local group of leaders with practical knowledge necessary for the selection of Urban Environmental Acupuncture (UEA) sites and interventions, using a multi-criteria approach and expert-participatory procedures.
- The skills acquired during training are to be used in creating and implementing the Action Plan for UEA in our Functional Urban Area (FUA)

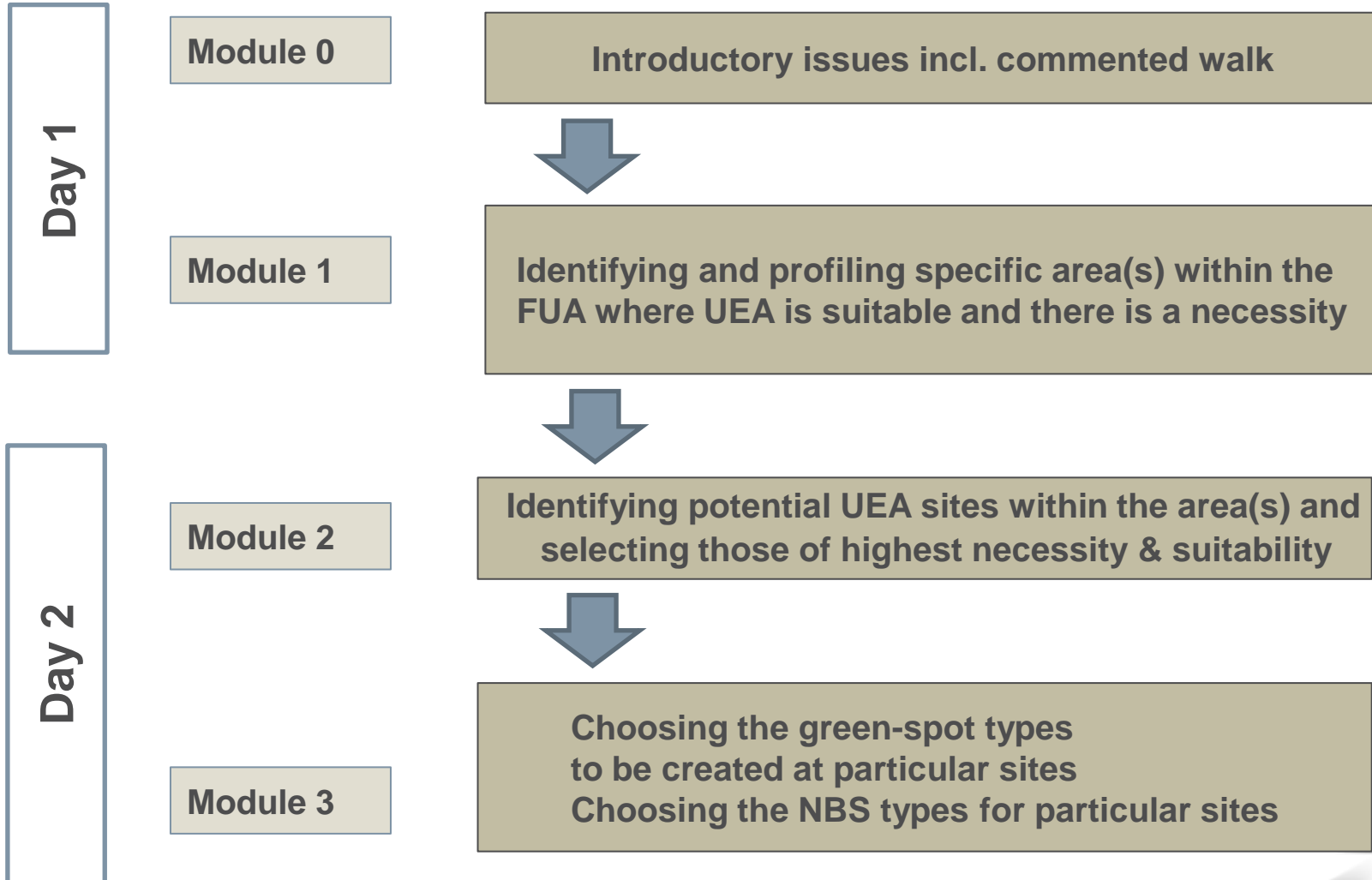


Linking our training with the Action Plan in our FUA

The common procedure of Action Plan		Subject of our training	
<i>Action Planning Steps</i>	<i>Description</i>	<i>The training modules</i>	<i>Knowledge to be acquired by participants</i>
Step 1: Preparation Phase (preliminary activities)	Set milestones, work program, timetable: <ul style="list-style-type: none"> ▪ Visions for city/ FUAs, identify goals ▪ Identify actors, plan citizen participation 	Module 0	Getting to know the basics of the Action Plan and the specific problems of our FUA
Step 2: Analytical Phase (gather information, evaluation)	Collection and analysis of plans, documents (knowledge concerning frame conditions and the local situation)	Module 1	How to identify specific area(s) within the FUA where UEA is suitable and there is a necessity
Step 3: Developmental Phase (formation of action plan)	<ul style="list-style-type: none"> ▪ Selection of UEA sites ▪ Defining plan of measures (e.g. targets, goals) 	Module 2	How to: <ul style="list-style-type: none"> ▪ identify potential sites within the area(s) ▪ select among potential sites those of highest necessity and suitability
	<ul style="list-style-type: none"> ▪ Defining actions ▪ Recommendations for the future ▪ Action plan for FUA 	Module 3	How to (actions for individual site): <ul style="list-style-type: none"> ▪ select the green-spot type ▪ assess the applicability of individual NBS ▪ compare suitability and necessity of various NBS
Implementation strategy	Undertake defined plan measures, actions and recommendations	-	-



OUR TRAINING SCENARIO



RESULT OF THE SALUTE4CE MEETING IN ERFURT (December 2019)

Long-term visions of urban green in individual FUAs, the functions to be played by small green spots, and the purpose of the action plans.

TERRITORY (FUA) OF ACTION PLAN	FUA 3 CITIES: CHORZÓW, RUDA ŚLĄSKA AND ŚWIĘTOCHŁOWICE	REGION LIPTOVSKY MIKULAS	ALESSANDRIA FUA	ERFURT / WEIMAR
Vision for urban green in the FUA in 2050	Adaptation to climate change, NBS in urban policy, continuation of green infrastructure development	Reduce heat islands, environmental responsible city, healthy city	Green areas as resources, self-sustainability of the urban green areas	Reduce summer heat damage, heat resistant vegetation, increase public interest
Function of small green spots in this vision	Integration of local communities, increasing of urban biodiversity, reduction of climate threats and improving of local urban landscape	To attract the peace, to make the place more fresh, to make the place environmental friendly	Experimentation of green low cost environmental solutions, green areas as educational spaces	Increase quality of life, contribute to large green areas and community building
Purpose of the action plan created in salute4ce	Awareness of eco-system services, cross sector cooperation various stakeholders, IEM-integrated environmental management by FUA authorities, input to local policies and strategies	To apply the ideas into reality, to identify key problems	Include long-term vision, action plan to counter act climate change	Step by step plan, bring together actors



COMMENTED WALK: field visit in the study area and potential UEA sites

By visiting specific locations in our FUA, training participants will receive needed information for:

- Creating the profile for our Functional Urban Area (Module 1)
- Assessment of some potential places in terms of necessity and suitability for their transformation into green spots (Module 2)
- Evaluation of possible interventions, i.e. selection of the type of green-spot and of Nature Based Solutions (Module 3)

The choice of commented walk route and places on this route was preceded by:

- preliminary knowledge of General framework and Physical conditions
- initial field visits

An information brochure for training participants (including a map with a walking route) has been prepared



MODULE NO. 1

DIAGNOSIS OF THE GREENERY DEFICIT AREA



Creating the profile for our Functional Urban Area

An overview: how our project fit into the bigger picture and can contribute to green infrastructure (GI) as whole?

General framework - the main characteristics:

- ✓ Demographics
 - population size and future projections
 - population distribution
 - age distribution

- ✓ Planning framework
 - Administrative organization of departments related to GI
 - The planning and legislative context (policies or strategies that complement the creation of the green spots.
 - Local, regional, national, international conditions and documents surrounding GI

- ✓ Economic and financial circumstances
 - Financial standing of our FUA
 - Financing possibilities for our project

Information that cannot be obtained, can be self-generated via instruments such as surveys (e.g. templates), mappings within the FUA, GIS tools like INVITO, etc.



Creating the profile for our Functional Urban Area

An overview: how our project fit into the bigger picture and can contribute to green infrastructure (GI) as whole?

Physical conditions - the main characteristics:

- ✓ Surface area of the FUA with share of green space/ green infrastructure
- ✓ Information on areas selected for green spots (proportion of green, green structure, soil properties, etc.)
- ✓ Green networking and human resources
 - Possible synergies & advantages: research complimentary strategies, projects, organizations, programs and possible future projects that may be like our project. Who is interested?
 - Potential to gain support for the small green spot(s) (i.e. design, implementation and maintenance)?
- ✓ Number of residents within walking distance of small green spots

Information that cannot be obtained, can be self-generated via instruments such as surveys (e.g. templates), mappings (e.g. flora and fauna) within the FUA, GIS tools like INVITO, etc.



MODULE NO. 2

MODULE 2. ASSESSMENT OF POTENTIAL UEA SITES IN TERMS OF NECESSITY AND SUITABILITY



Greenery deficit area indicated in the result of Module 1

Preselection of UEA sites with use of UEA necessity criteria



A list of preselected UEA sites

Assessment of individual sites in terms of meeting the admission criteria



A list of possible UEA sites which meet the admission criteria

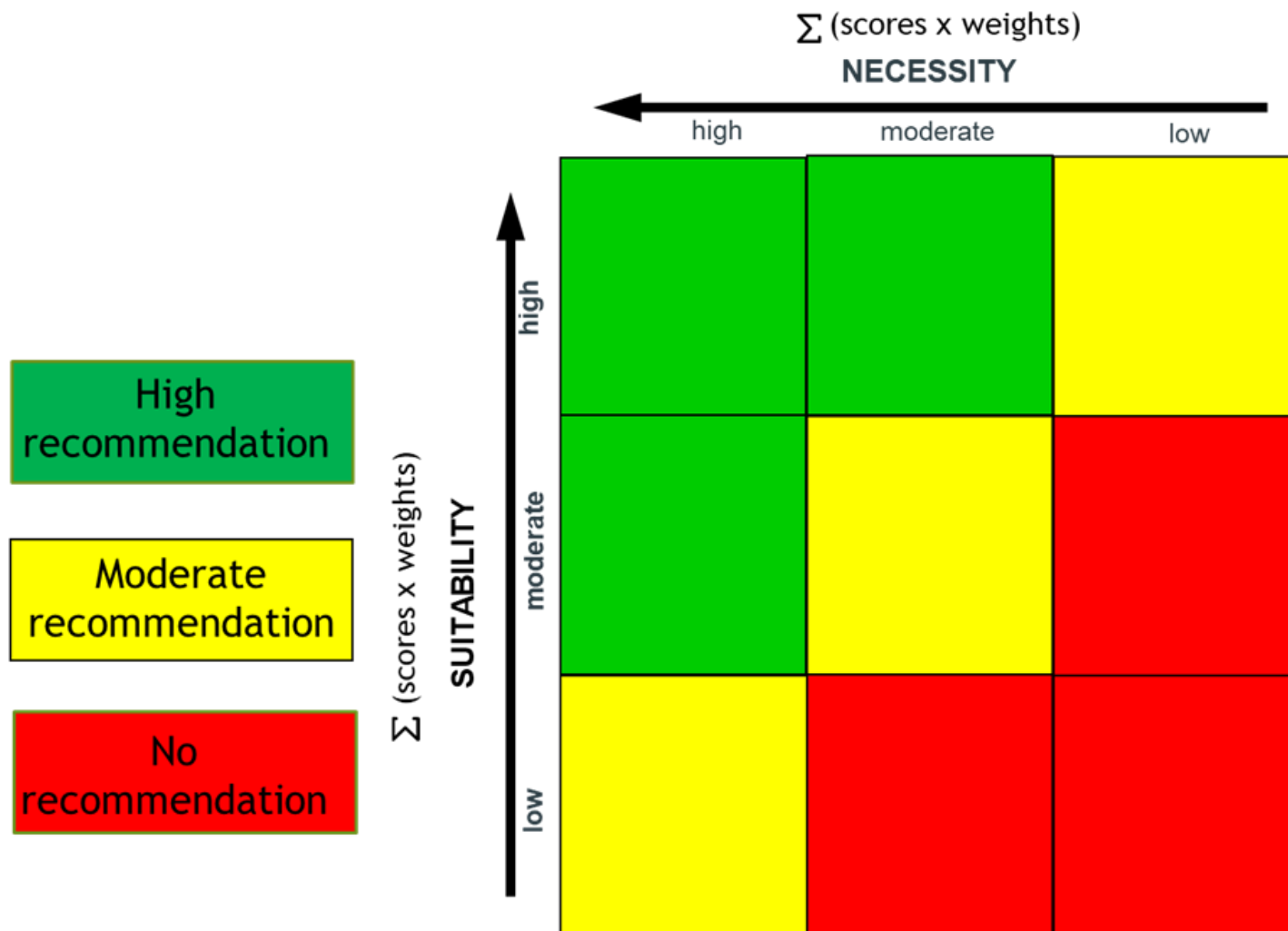
Detailed comparative assessment of UEA sites in terms of necessity and suitability, and with use of McKinsey matrix



Final list of sites with highest necessity & suitability, to be included in Action Plan



McKinsey matrix in application to prepare the list of UEA sites



MODULE NO. 3

SELECTION OF INTERVENTION



NBS TYPES USEFUL FOR TRANSFORMING THE PLACE INTO AN URBAN GREEN-SPOT (PART 1)

<i>rooting</i>	<i>NBS name</i>	<i>Definition</i>	<i>arrangement</i>
ground	Urban meadows	Multi-species plant community of native herbaceous plants in the form of mesotrophic or dry meadow, created in urban space	horizontal
	Verges / flower beds with native perennials	Roadside linear features (verges) or patches (flower beds) of green space of reduced maintenance activities, sown with wildflower-rich grassland seed mix, to provide nectar and pollen to attract foraging insect pollinator species	
	Ground cover plants	A patch of low vegetation usually one species (perennials or low shrubs), of reduced maintenance activities, tightly and permanently covering bare earth	
	Lawn	An area of soil-covered land, planted with grasses, which are maintained at a short height and used for aesthetic and recreational purposes	
	Green pavements	Pavement with soil-filled gaps, with filter properties and with specific creeping grass species with a short growing and minimum maintenance	
	Street trees	Trees grown and planted in a manner consistent with the standards for street trees	
	Park trees	Trees planted in green (greened) areas other than traffic areas or town squares	
	Fruit trees/ shrubs/	Trees or shrubs grown for edible fruit or seeds	
	Large shrubs	Shrub species / varieties growing up to a height exceeding 2 m	
	Rain gardens (under-drained)	Shallow basin filled with porous soil mixture and covered with native vegetation capable of phytoremediation, designed for retention, treatment and infiltration of storm-water	
	Road-side swales for retention and infiltration	Grassed open channel designed for reduction runoff volume as well as retention, treatment and infiltration of storm-water	
	Linear wetlands for stormwater filtration	Shallow, linear basin with impervious bottom, filled with porous soil/gravel mixture and covered with native vegetation capable of phytoremediation. Designed for treatment and filtration of storm-water through surface and subsurface flow	
	Natural pollinators' modules	Terrestrial micro-habitat (10-20 m2) designed to attract pollinators (and biodiversity in general), consisting of plants, water source, housing for biodiversity, and site furnishing	
	Hedge/hedgerow	A line of shrubs maintained to form a physical boundary (a hedge), in association with other flora and physical features (a hedgerow)	
	Rockery	Small garden constructed with aesthetically arranged rocks /stones, with small gaps between in which small plants are rooted	
	Herb spiral	Small garden constructed as a raised, cone-shaped spiral bed, incorporating multiple levels, designed to provide herbs with a variety of growing conditions.	
	Urban wilderness / succession area	A patch of vegetation in the urban tissue, where spontaneous but controlled succession takes place, and maintenance activities aim to ensure the sustainable provision of ES by a multi-species, self-supporting plant community	
Ground crops of vegetables / herbs	A small garden constructed for soil cultivation (patches, containers) of vegetables/herbs		
VRSS slopes with green fences	A fence out of wood, covered with climbers and shrubs, situated on vegetated reinforced soil slope (VRSS), functioning as both green safety elements and biodiversity habitat, separating the space for pedestrians or cyclists from the river / ditch.	vertical/horizontal	
Green pergolas/ green arbors	A structure supporting vines or climbing plants, creating a shaded or semi-shaded space. It is identified by having two or more posts or columns and an open roof. Can be freestanding or attached to a building.		



NBS TYPES USEFUL FOR TRANSFORMING THE PLACE INTO AN URBAN GREEN-SPOT (PART2)

ground or container	Green facades with climbing plants	A wall completely or partially covered with greenery (twining or clinging self-climbers). It can use a trellis system to hold the plants that are rooted in the ground or containers.	
	Wall-mounted living walls	Structures (continuous or modular) containing organic or inorganic growth media in which plants are rooted, attached to concrete walls. Water and nutrients are supplied using an automated irrigation system).	
container	Hydroponic mobile living walls / vertical gardens	Self-supporting constructive system based on metallic structure equipped with waterproof layer, hydroponic textile substrate for vegetation growth, water collection system and automated irrigation system.	vertical
	Vertical vegetable / herb gardens	Vertical free-standing or wall-mounted structures for growing vegetables or herbs outdoors	
	Hanging wall planters (as green street furniture)	Baskets, flower pots, boxes, etc. with decorative perennials, hung on walls, posts, fences, sheds, balustrades, etc.	
	Compacted pollinators' module	Micro-habitat (4-5m ²) created in a planter with impervious bottom, designed to attract pollinators (and biodiversity in general), consisting of plants, water source, housing for biodiversity, and site furnishing	horizontal
	Rain gardens in planter (=self-contained)	A crate / pot with impervious bottom, filled with porous soil mixture and covered with native vegetation capable of phytoremediation, designed for retention and filtration of storm-water	
	Street planters (as green street furniture)	Free standing planters of various shapes, sizes, made of various materials, e.g. wood, concrete, metal, recycled plastic, fiberglass. Not only perennials, but also bushes and trees can be planted in street planters	
	Green covering shelters	Very light type of green roof covered with very light, thin substrate and small vegetation. Installed on small or big coverage infrastructures, like bus shelter or existing covering shelters.	
Green roof / roof terrace	External upper covering of a building which the main objective is to favour the growth of vegetation. Consists of several layers ensuring water tightness and resistance to the penetration of roots as well as allowing the correct development of the vegetation		



EXAMPLES OF NBS

Rain gardens in planter (=self-contained)



www.administrator24.info

Linear wetlands for stormwater filtration



asla.org/bioswales.aspx

Green covering shelters



greenroofoffsets.co.uk/mission.php

Verges/flower beds with native perennials



bbc.com/news/uk-england-48772448



MAXIMUM BENEFITS OF IMPLEMENTING INDIVIDUAL TYPES OF NBS

Possible NBS for a type of greenspot	Profits (concerning Ecosystem Services)			
	Microclimate / air quality	Water management	Green space management	Biodiversity
Urban wildflower meadows	2	1	3	5
Verges / flower beds with native perennials	2	1	4	5
Ground cover plants	2	1	5	3
Lawns	2	1	1	1
Green pavements	1	4	4	1
Street trees	5	5	3	4
Park trees	5	5	4	5
Fruit trees/ shrubs/	3	2	2	4
Large shrubs	4	4	4	5
Rain gardens (under-drained)	4	5	4	4
Road-side swales for retention and infiltration	3	5	4	2
Linear wetlands for stormwater filtration	3	5	4	4
Natural pollinators' modules	5	4	3	5
Hedges/ hedgerows	4	3	3	4
Rockery	2	1	4	3
Herb spiral	2	1	4	3
Urban wilderness / succession area	4	3	5	5
Ground crops of vegetables/ herbs	2	1	1	2
VRSS slopes with green fences	4	4	4	5
Green pergolas/ green arbors	4	1	3	2
Green facades with climbing plants	5	3	4	3
Wall-mounted living walls	5	1	3	3
Green roof /roof terrace	5	3	4	4
Hydroponic mobile living walls / vertical gardens	5	0	2	1
Vertical vegetable / herb gardens	2	0	1	1
Compacted pollinators' module	5	4	4	5
Rain gardens in planter (=self-contained)	4	5	4	4
Street planters (as green street furniture)	3	0	2	2
Hanging wall planters (as green street furniture)	2	0	1	1
Green covering shelters	5	3	4	3

The values in the table below should be kept in mind when assessing the necessity of particular NBS (Day 2 of the training, Module 3)



TYPES OF SPOTS WITH HIGH REVALUATION REQUIREMENTS BY UEA APPLICATION

Traffic areas + Infrastructure areas						Multifunctional public open areas			Areas for peace / reflection			Areas adjacent (a.a.) to buildings (semi-public or private)							(Semi) abandoned areas			Greenspot types (the result of UEA application)			
Traffic/ road border + energy line	Walkway, bicycle track	Play street	Car parking space	Boulevard	Pedestrian area in roadside zone	Town square	Riverside	Recreation area (e.g. playground, sport area)	Memorial site	Churchyard (other than a cemetery)	Cemetery or adjacent area	A. a. to low-rise building estate	A. a. to office- or industrial or business buildings	Backyard, courtyard	Roof / roof terrace	A. a. to multi-story housing	A. a. to retirement houses	A. a. to cultural/ educational facilities	A. a. to children facilities or youth recreational facilities	Urban wasteland (vacant or derelict areas)	Brownfield sites / conversion area (military) with GI potential		Semi- abandoned green areas (e.g. park, agricultural land, forest)		
																								Greened town square (pedestrian zone)	
																									Urban woodland
																									Greened municipal recreational area
																									Multifunctional greened riverside area
																									Urban orchard
																									Community garden
																									Green pedestrian area in roadside zones
																									Greened walkway, bicycle track
																									Greened play street
																									Greened car parking space
																									Greened boulevards/ promenades (pedestrian zone)
																									Pocket park
																									Front garden (in housing area)
																									Greened backyard, courtyard
																									Green roof/ balcony/ terrace garden
																									Green atrium
																									Green area adjacent (a.a) to retirement house
																									Green a.a. to cultural/ educational facilities
																									Educational garden (school or other educational facilities)
																									Green a.a. to office buildings, industrial or business buildings
																									Green a.a. to low-rise building estate
																									Green a.a. to multistory housing
																									Green a.a. to children facilities or youth recreational facilities
																									Greened memorial site



RECOMMENDATIONS ON THE APPLICABILITY OF DIFFERENT TYPES OF NBS FOR DIFFERENT TYPES OF GREEN-SPOTS

Greenspot types	Possible NBS for a type of greenspot																							
	Greened town square (pedestrian zone)	Urban forest / woodland	Multifunctional greened riverside area	Greened municipal recreational area	Urban orchard	Community garden	Green pedestrian area in roadside zones	Greened walkway, bicycle track	Greened play street	Greened car parking space	Greened boulevards/ promenades (pedestrian zone)	Pocket park	Front garden (in housing area)	Greened backyard, courtyard	Green roof/ balcony/ terrace garden	Green atrium	Green a.a. to retirement houses	Green a.a. to cultural/ educational facilities	Educational garden (school or other educational facilities)	Green a.a. to office buildings, industrial- or business buildings	Green a.a. to low-rise building estate	Green a.a. to multistory housing	Green a.a. to children facilities or youth recreational facilities	Greened memorial site
Urban wildflower meadows	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Verges / flower beds with native perennials	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Ground cover plants	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Lawns	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Green pavements	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Street trees	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Park trees	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Fruit trees/ shrubs/	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Large shrubs	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Rain gardens (under-drained)	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Road-side swales for retention and infiltration	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Linear wetlands for stormwater filtration	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Natural pollinators' modules	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Hedges/ hedgerows	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Rockery	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Herb spiral	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Urban wilderness / succession area	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Vegetable garden	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
VRSS slopes with green fences	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Green pergolas/ green arbors	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Green facades with climbing plants	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Wall-mounted living walls	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Green roof /roof terrace	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Hydroponic mobile living walls / vertical gardens	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Vertical vegetable / herb gardens	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Compacted pollinators' module	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Rain gardens in planter (=self-contained)	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Street planters (as green street furniture)	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Hanging wall planters (as green street furniture)	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Green covering shelters	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green



EXAMPLES OF GREENSPOTS

Green atrium



dreamstime.com

Pocket park



centercityphila.org/parks/john-f-collins-park

Educational garden (school or other educational facilities)



www.aswarsaw.org/learning/service-learning/blog/~board/service-learning-programs/post/look-for-runners-not-the-athletes

Greened play street



tprochnow.com/publication/cha/



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SALUTE4CE PROJECT PARTNERSHIP



TRAINING MATERIALS

Instruction for work in workshop group

(FOR COMMON USE OF THE TRAINER AND TRAINING PARTICIPANTS)

Prepared on the basis of *D.T1.3.1. Transnational concept of local trainings on urban environmental acupuncture*

DELIVERABLE D.T1.3.2 Part B

final 2.0
09 2020





INTRODUCTION

The goal of the training is to prepare local experts for team work on the Urban Environmental Acupuncture (UEA) Action Plan at our FUA. On a real example, they will learn about the analytical procedure for good designation of the area covered by the plan, as well as for a good selection of UEA application sites and a good choice of intervention type for these places.

Participation in the training is also an opportunity for local experts to learn in practice how to transform terrain data into information necessary for a good choice of places and of intervention types. The acquired skills will also prove helpful in the case when, in order to prepare the UEA Action Plan, it will be necessary to overcome difficulties resulting from limitations in the availability and quality of data on potential green-spots.

This document is only a part of the materials necessary to implement local training. When preparing to participate in the training, both the participants and trainers should also be familiar with D.T1.3.2 Part A: Introductory presentation. Crucial instructions for the trainer are delivered in D.T1.3.1 - Transnational concept of local trainings on urban environmental acupuncture. In particular, the way for preparing the two-day meeting, the methods and rules of work including workshops, detailed scenarios for the implementation of Module 1, Module 2 and Module 3, as well as the rules for evaluating the results are presented in that document.

This document concerns the part of the training that is carried out in workshop groups, and it contains the templates on which the group's achievements will be documented, following the procedure for diagnosis of the greenery deficit area (Module 1), assessment of potential UEA sites (Module 2) and selection of intervention (Module 3). The logical framework of this document, as well as individual templates, is in line with the methodology already developed within the SALUTE4CE project (documents: D.T1.1.1 and D.T1.1.2).

Workshop groups work in parallel, and their achievements are the subject of comparisons and further discussion (joint seminar summarizing each module). The achievements of the workshops and seminar discussion may turn out to be very useful in the context of further work on the UEA Action Plan. In particular, they will contain specific proposals concerning the choice of the proposed green-spots, as well as of possible types of interventions.

Work in workshop groups is based on materials prepared by the trainer. Please be open to discussion. Please enjoy the possibility of mutual learning. Please join efforts to jointly work out and transparently record the group's achievements.

Training results do not have to be full analysis or final evaluation of UEA sites! However, it is about familiarizing yourself with methods and procedures!



Greenery deficit areas deserving to be included in the Action Plan

Our FUA has extensive areas of green deficit. We are talking about the deficit when the standards of public access to the right size and quality of greenery are not met in the residential zone. As a reference, we can take urban standards in force or recommended for our FUA. A permanent deficit occurs when there is no chance for the implementation of large (over 0.2 ha) green areas, e.g. due to the intensity of development. Therefore, UEA application under the Action Plan may be - in the short-term as well as in the long-term perspective - the only way to alleviate the deficit and improve the situation of residents.

As part of our training, we will focus on a single, carefully selected area of greenery deficit, which is as representative as possible for our FUA. The commented walk route (see Module 0, in *Training materials, part A*) runs through this selected area.

The skills to be acquired through this training:

The two-day training includes 3 modules, following a logical system of work steps. When you have a look on the following table, you will find the modules on the left-hand side and development goals on the right-hand side.

Module 1. DIAGNOSIS OF THE GREENERY DEFICIT AREA	How to: <ul style="list-style-type: none"> ✓ identify specific area(s) within the FUA where UEA is suitable and there is a necessity (the areas to be included in Action Plan)
Module 2. ASSESSMENT OF POTENTIAL UEA SITES	How to: <ul style="list-style-type: none"> ✓ identify potential sites within the area(s) ✓ select among potential sites those of highest necessity and suitability
Module 3. SELECTION OF INTERVENTION	How to (actions for individual site): <ul style="list-style-type: none"> ✓ select the green-spot type ✓ assess the applicability of individual NBS ✓ compare the applicability and necessity of various NBS

MODULE 1. DIAGNOSIS OF THE GREENERY DEFICIT AREA

Description of work in groups

Content:

- ✓ Exercises in collecting and analysis of the information about the visited area by using local plans, strategies, programs, diagnoses, reports, etc., as well as data available on digital platforms (and - optionally - using the InViTo tool)



- ✓ Delimitation of the area to be included in Action Plan, based on the achievements of the commented walk and of practical exercises

Tasks for the trainer to perform on the days preceding the meeting:

- ✓ prepare a preliminary proposal for the delimitation of the green deficit area and its concise description in the categories: "general framework" and "physical conditions" (on M1A form)
- ✓ prepare a list of data sources for quick analysis (on the M1C part 1 form), including primarily links to relevant digital platforms, planning / strategic documents, status reports, programs, etc.
- ✓ check the practical availability and usability of data through pre-training
- ✓ prepare a map background for the greenery deficit area for delimitation
- ✓ ensure access to the digital platform and online analysis tools during training

Tasks for participants

Please perform all the tasks described below as a team, with the help of the group supervisor. Please use the data sources provided as well as our previous knowledge of this area.

1. analyse the preliminary description of the area prepared by the moderator. Please make any additions or corrections (using the M1A form)
2. try to identify circumstances that could disturb or condemn the implementation of the Action Plan (using the M1B form)
3. analyse the quality and completeness of data about the area (with possible supplementation of the list prepared by the trainer on the M1C part 1 form). Please specify the conclusions of the analysis using the form M1c part 2.
4. Based on the initial proposal and our own analysis, specify the area that deserves to be implemented by the Action Plan (i.e. where green-spots should be created in the perspective of several years). The borders are applied to the prepared map (on the screen or on the map printout)
5. prepare the achievements of common work to be presented to other training participants

Exercises M1A-C. Analysis of the necessity and usefulness of the area for the implementation of the UEA Action Plan

Introduction

Particular fragments of FUA differ in terms of necessity and suitability for introducing greenery. The area(s) predestined to be included in the Action Plan are those that are characterized by significant necessity and significant suitability at the same time. It is about areas where the deficit of publicly available greenery can be mitigated in only one way: by creating green-spots, as it is impossible to create larger objects. The logic of delimitation of such areas(s) is based on the recognition of those areas that clearly qualify for exclusion, due to the lack/insignificance of necessity or the lack/insignificance of suitability. Consequently, the remaining part of FUA will be indicated for subscription as areas of likely co-existence of significant necessity and suitability.



In practice, it does not happen that all relevant data about the area is complete, fully up-to-date and processed into information comprehensible to non-specialists. Identification of information gaps should always be documented as part of the team work record. Thanks to this, it will be easier to deepen or verify the analysis you have just made.

M1A. Label of the area of possible Action Plan implementation

Please insert information into the table below.

The borders of the area of interest were initially marked on the FUA map by the trainer and then verified, based on the achievements of the commented walk (Module 0).

Working name of the area	Location characteristics (text description)	Delimitation of the area (coordinates, map, link to the map, etc.)
	<i>Please specify as below: size of area, approximate number of inhabitants, main social problem (s), main environmental problem, approximate share (%) of inhabitants for whom urban standards specifying access to the public green / blue infrastructure is not met</i>	

M1B. The area of possible Action Plan implementation: significance of necessity and suitability - circumstances that can make it very difficult or impossible to implement the Action Plan in this area

Using all available information about the area, please try to assess the area in terms of necessity and suitability for AP implementation. If necessary, please refer to the explanation of criteria in document D.T1.1.1 subsection “STAGE NO. 1. Delimitation within the FUA of those areas to be included in the AP” p.p 2-3.

	Special circumstances (are there any?)	Diagnosis (brief description)
Possible reasons for low necessity	Access to public green spaces is sufficient (standards met) and permanent?	<i>Please describe in 1-2 sentences</i>
	Quick provision of access to public green spaces is already decided without the need to application of UEA?	<i>Please describe in 1-2 sentences</i>



	Despite the scarcity of public greenery, the benefits of a possible implementation of Action Plan would be insignificant?	<i>Please describe in 1-2 sentences</i>
Possible reasons for low suitability	According to local law, it is not possible to introduce additional greenery in the form of green-spots (planning barrier)?	<i>Please describe in 1-2 sentences</i>
	The implementation of large projects requiring permanent removal of greenery is decided (technical barrier)?	<i>Please describe in 1-2 sentences</i>
	Implementation of Action Plan would be impossible due to the conditions resulting from the ownership of the land (ownership barrier)?	<i>Please describe in 1-2 sentences</i>
Is the necessity and suitability of the area for the implementation of the UAE Action Plan significant enough? (Does the area deserve the implementation of UEA Action Plan?) <i>Please conclude in 1-2 sentences</i>		
<p>Proposition to re-delimit the area.</p> <p>Assuming that, in the light of the results of this exercise, the area deserves implementation of Action Plan - is there a need to redefine or refine the area boundaries?</p> <p><i>Please conclude in 1-2 sentences</i></p>		

M1C. Comments on information that was used in exercises M1A, M1B: list on information sources, and conclusions on quality & completeness.

List of information sources

Please specify the sources of information in the table below (the titles of studies, names of documents links, etc.) that were used in the Exercises M1A, M1B.

Source (title, name or link)	No of source
	1.
	2.
	3.
	4.
	5.
	6.



	7.
	8.
	9.
	10.
	11.
	12.
	13.
	14.
	15.
	...

Quality and completeness of information

Please provide comments on the quality and completeness of the information contained in the sources you have listed.

Information required for evaluation of ...	Notes on quality and completeness of information	The numbers of most important sources
necessity	<p><i>Please describe in a few sentences the quality and completeness of the data or processed information, allowing the area to be assessed in terms of:</i></p> <ul style="list-style-type: none"> - current accessibility of public green areas, - prospects of improving accessibility in the event that the area is not included in the Action Plan, - significance of the benefits of the possible implementation of the Action Plan in this area 	
suitability	<p><i>Please describe in a few sentences the quality and completeness of the data or processed information, allowing the area to be assessed in terms of:</i></p> <ul style="list-style-type: none"> - Planning barriers for introduction of additional greenery in the form of green-spots - Technical barrier (if there is decided implementation of large project(s) requiring permanent removal of greenery in the area - Ownership barrier (if implementation of Action Plan would be impossible due to the conditions resulting from the ownership of the land) 	
<p>What should be improved that the information is of higher quality and more complete? <i>Please describe in few sentences</i></p>		



MODULE 2. ASSESSMENT OF POTENTIAL UEA SITES

Description of work in groups

Content:

- ✓ exercises in collecting and analysing information about pre-selected, potential UEA application sites by using local plans, strategies, programs, diagnoses, reports, etc., as well as data available on digital platforms (and optionally using the InViTo tool)
- ✓ assessment of pre-selected sites in terms of meeting admission criteria, and in terms of necessity/suitability for UEA necessity and suitability, based on the achievements of the commented walk and of further practical exercises

Tasks for the trainer to perform on the days preceding the meeting:

- ✓ when pre-selecting of possible sites, make sure that at least two of them meet the admission criteria, and one does not meet some of these criteria
- ✓ prepare a list of data sources for the assessment of the sites in terms of meeting the admission criteria (on the form No. M2B part 1) and in terms of UEA necessity/suitability (on the form No. M2E part 1), including primarily links to relevant digital platforms and relevant documents
- ✓ check the practical availability and usability of data through pre-training
- ✓ prepare a concise, preliminary description of pre-selected sites, using the form No. M3A (boxes: “site identification” and “characteristics of the site”)
- ✓ ensure access to the digital platform and online analysis tools during training

Tasks for participants

Please perform all the tasks described below as a team, with the help of the group supervisor. Please use the data sources provided as well as our previous knowledge of this area.

1. analyse the preliminary description of the sites prepared by the moderator; Please make any additions or corrections (using the M3A form, boxes “site identification” and “characteristics of the site”)
2. assess pre-selected sites in terms of meeting the admission criteria, using the M2A form
3. assess (scoring) the potential (at least two) UEA sites in terms of necessity and suitability, using the M2C and M2D form respectively
4. agree the final assessment of the sites using the McKinsey matrix(the M2F form)
5. analyse the quality and completeness of data about all sites (with possible supplementation of the lists prepared by the trainer on the M2B part 1 form and the M2E part 1 form). Please specify the conclusions of the analysis using the forms M2B part 2 and M2E part 2 respectively
6. prepare the achievements of common work to be presented to other training participants.



Exercise M2. Assessment of pre-selected, potential UEA application sites in terms of necessity and suitability for UEA implementation (including mandatory criteria)

Introduction

Each of preselected, potential UEA application sites should first be confronted with a list of mandatory criteria, which **MUST** be complete in order for a given place to be evaluated further. To qualify a site for further analysis, it is necessary that it meets all of the criteria (failure to meet at least one of them is equivalent to elimination).

Each site meeting the mandatory criteria is assessed according to the detailed criteria of necessity and suitability. As far as the availability of prognostic data, the assessment should take into account not only the needs arising from the current use of land, but also the projected prospective analysis over the time horizon.

The set of criteria used in exercise M2 is consistent with document D.T1.1.1 "Methodology of selection of spots for urban environmental acupuncture (UEA)" - sub-chapters „Stage no. 4. Making a long list of potential AS“ and „Stage no.5. Selection of as for implementation under AP“.

The better the information at the disposal of the evaluators, the greater the chance of avoiding a wrong decision to admit or to eliminate a given site from further analysis. This also applies to the assessment and comparison of individual sites with regard to their necessity and suitability for UEA.

The assessment procedure used in the M2A, M2C, M2D and M2F exercises should be used to complete a long list of potential UEA sites. The procedure described in the exercises M2C, M2D, M2F should also be repeated for the final selection of UEA sites. It may also be useful in the case of ongoing verification of the Action Plan's findings during its implementation.

M2A. Mandatory criteria that must be fully met in order for a site to be considered in the further evaluation

Using the template below, please document the fulfillment/non-fulfilment of the mandatory criteria by individual, pre-selected places. If the place meets a given criterion, please put the "+" sign, and if it does not, the "-" sign. If for a given place, even in one window, the sign "-" appears, it means that this place would be eliminated from further analysis, because of its inability to be converted into a green-spot.

Condition to be met	Site A	Site B	Site C	Site ...
No need for requalification of the site				
Clear legal status of the site and clear path of arrangements / permits				



No irreversible conflicts with existing / planned infrastructure				
No contradiction with applicable plans / programs / projects to which the place is covered (contradiction occurs e.g. when in the light of strategic / planning documents or for technical / architectural reasons, public greenery is not allowed in this place)				
No explicit conflicts with local stakeholders				
Conclusion: "Yes" or "No"				

M2B. Description of information sources for the assessment of the site in terms of meeting the mandatory criteria

List of information sources

Please specify the sources of information in the table below (the titles of studies, names of documents links, etc.) that were used in the Exercise M2A.

Source (title, name or link)	No of source
	1.
	2.
	3.
	4.
	5.
	6.
	7.
	8.
	9.
	10.
	11.
	12.
	13.
	14.
	15.
	...



Quality and completeness of information

Please provide comments on the quality and completeness of the information contained in the sources you have listed

Information required for evaluation of ...	Notes on quality and completeness of information	The numbers of most important sources
Compliance with urban planning documents	<i>Please comment in 1-2 sentences the quality and completeness of the data or processed information, allowing the site to be assessed</i>	
Legal status of the place and path of arrangements/permits	<i>Please comment in 1-2 sentences the quality and completeness of the data or processed information, allowing the site to be assessed</i>	
Existing and planned infrastructure (in terms of possible conflicts)	<i>Please comment in 1-2 sentences the quality and completeness of the data or processed information, allowing the site to be assessed</i>	
Other actions (planned/planned/programmed for this place)	<i>Please comment in 1-2 sentences the quality and completeness of the data or processed information, allowing the site to be assessed</i>	
Potential conflicts with local stakeholders	<i>Please comment in 1-2 sentences the quality and completeness of the data or processed information, allowing the site to be assessed</i>	
What should be improved to make access to information better and information more complete? <i>Please describe in few sentences</i>		

M2C. The necessity assessment of UEA application: expected benefits from UEA application in particular sites

Using the template below, please perform a comparative assessment of the necessity to transform into a green-spot for several potential UEA sites.

Category of benefits	Individual weights	Type of benefit	Individual scores of benefits (0; 1; 2)



	of benefits		Site A	Site B	Site C
Integration of the local community		Creating "neighbourhood spaces" for spending free time and socialization			
		Increasing sense of security			
		Creating a positive identity of the place and its vicinities			
		Increasing (or creating) the visual appeal of the place			
Environmental component of life quality		Improving accessibility/ quality of public greenery (in terms of urban standards or ecosystem services)			
		Improving the micro-climate (incl. reducing the exposure of people to the heat island effect)			
		Improvement of the usability of the green by increase the quality of stay			
		Improving accessibility of green space for elderly, mothers with children and/or disabled persons			
Coherence / connectivity/ continuity of urban (Blue)Green Infrastructure network		Spatial/functional linking with already existing or planned blue or green areas / green spots			
		Increasing of urban biodiversity (e.g. introduction of native plant species, elimination of invasive plant species).			
		Providing the nutrition functions for wildlife (small animals incl. butterflies and other pollinators, or small birds)			
Components of circular economy in terms of land management		Enabling reuse of urban wasteland by the local community			
		Improving rainwater management (by local use of excess rainwater, or infiltration to the ground, or local retention)			
Functional diversity of public space		Local enrichment of public space with new functions (on a scale of the place)			
		Increasing functional coherence of a network consisting of various types of public spaces			
Sum of weights = 30		TOTAL SCORING			

- Possible scores for a type of benefit: 2 - big benefit; 1 - moderate benefit; 0 - insignificant benefit or no benefit.
- The decision to select the weights for each benefit belongs to the workshop group. The specificity (social, environmental, spatial) of a given FUA should be taken into account.
- The sum of the weights equal to 30 was adopted for computational reasons to facilitate the performance of the M2F exercise



- Total score for a site: Σ (individual weight x individual score)
- Maximum total score: 30 (excluding weights), 60 (including weights)

M2D. Assessment of particular sites in terms of suitability for UEA application: favourable and unfavourable conditions

Using the template below, please perform a comparative assessment of the suitability to transform into a green-spot for several potential UEA sites.

Category of conditions	Weight of factor	Type of factor	favourable / unfavourable	Individual scores (0; 1; 2)		
				Site A	Site B	Site ...
Technical conditions		Difficulties resulting from the specificity of the location, increasing the workload and costs of maintenance, cleaning services and quick repair	unfavourable			
		Expected nuisance / time consumption for necessary construction, environmental and conservation approvals / permits, for the implementation of UEA here	unfavourable			
		Cost-consuming or time-consuming preparatory work necessary, compared to final implementation and maintenance of greenery	unfavourable			
		The possibility of introducing and maintaining solutions integrating greenery with the management of excess rainwater or their infiltration into the ground	favourable			
Spatial connections		Expected restrictions on the use of AS resulting from proximity to “incompatible” objects (e.g. shopping centres, industrial centres, administrative centres, logistics centres, urban infrastructures, wastelands)	unfavourable			
		Expected functional/spatial links with nearby compatible facilities (e.g. residential centers, sports centers, cultural centers, educational centers)	favourable			
Legal / planning conditions		Expected restrictions on the use of AS resulting from ownership conditions (public, private)	unfavourable			
		Potential impediments to implementation or limitations in the use of AS, resulting from current / planned expansion or reconstruction of urban infrastructure at the site	unfavourable			



		Restrictions on implementation or use arising from the requirements of protection for cultural or natural values already existing in a given place	unfavourable			
Local community		The threat of vandalism or anti-social behaviour, the attractiveness of the place for criminals (compared to neighbouring areas)	unfavourable			
		Confirmed acceptance of local community (in the context of possible conflicts with owners / users of adjacent properties)	favourable			
		Despite the lack of greenery, a place preferred by owners / users of adjacent properties) for spending free time	favourable			
Environmental component of life quality		Existing or anticipated restrictions on accessibility for elderly, mothers with children and / or disabled persons (in AS or in the immediate vicinity)	unfavourable			
		Environmental conditions limiting possibilities / comfort for people to stay (air quality, exposure to noise, risk of flooding etc.)	unfavourable			
		The implementation of UEA will create the possibility of long-term (many years) use of the planned AS as a green spot in public space	favourable			
Sum of weights = 30		Total scoring:				

- Possible individual scores for unfavourable factor: 2 - not occurring or insignificant, 1 - moderate, 0 - big
- Possible individual scores for favourable factor: 2 - considerable, 1 - moderate, 0 - not occurring or insignificant.
- The decision to select the weights for each factor belongs to the workshop group. The specificity (social, environmental, spatial) of a given FUA should be taken into account.
- The sum of the weights equal to 30 was adopted for computational reasons to facilitate the performance of the M2F exercise
- Total score for a site: Σ (individual weight x individual score)
- Maximum total score: 30 (excluding weights), 60 (including weights).

M2E. Description of information sources for the assessment of particular sites in terms of UEA necessity and suitability for UEA application

List of information sources

Please specify the sources of information in the table below (the titles of studies, names of documents links, etc.) that were used in the Exercise M2C, M2D.



Source (title, name or link)	No of source
	1.
	2.
	3.
	4.
	5.
	6.
	7.
	8.
	9.
	10.
	11.
	12.
	13.
	14.
	15.
	...

Quality and completeness of information

Please provide comments on the quality and completeness of the information contained in the sources you have listed

Topic	Notes on quality and completeness of information	The numbers of most important sources
Local community	<i>Please comment in 1-2 sentences the quality and completeness of the data or processed information, allowing the site to be assessed</i>	
Environmental component of life quality	<i>Please comment in 1-2 sentences the quality and completeness of the data or processed information, allowing the site to be assessed</i>	
Legal / planning conditions	<i>Please comment in 1-2 sentences the quality and completeness of the data or processed information, allowing the site to be assessed</i>	
(Blue-)Green Infrastructure	<i>Please comment in 1-2 sentences the quality and completeness of the data or processed information, allowing the site to be assessed</i>	



Land use and technical conditions	<i>Please comment in 1-2 sentences the quality and completeness of the data or processed information, allowing the site to be assessed</i>	
Quality and functionality of public space	<i>Please comment in 1-2 sentences the quality and completeness of the data or processed information, allowing the site to be assessed</i>	
What should be improved to make access to information better and information more complete? <i>Please describe in few sentences</i>		

M2F. Combined assessment of necessity and suitability of potential UEA sites with use Mc Kinsey Matrix (GE version)

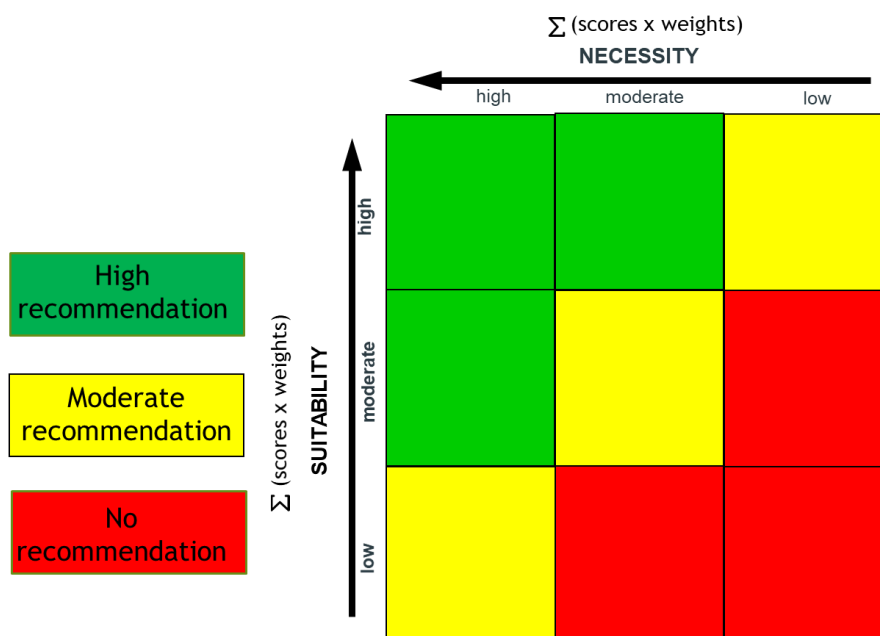
Each potential UEA site can be reflected by scoring - as a point in the matrix area - in the green, yellow or red field. The location of threshold values can be arbitrary and result from the adopted needs/assumptions of the analysis.

The matrix can be used in two stages of the UEA sites selection procedure. For the first time - to compile a long list of potential selection sites, through an initial assessment of necessity and suitability (see D.T1.1.1, Stage no. 4). The second time - for the optimal selection of sites for the implementation of the Action Plan (see D.T1.1.1, Stage no.5). The use of a matrix can be particularly useful when you need to choose from a large number of sites.

Please perform the following steps:

- enter the scores established in exercises M2C and M2D into the table below.
- set, by consensus, threshold values for individual colors of the matrix, and scale both axes accordingly
- position the necessity and suitability scoring for individual sites graphically as points on the matrix

	Site A	Site B	Site C	Site....
Suitability				
Necessity				



MODULE 3. SELECTION OF INTERVENTION

Description of work in groups

Content:

Session 1 - selecting the type of site transformation for a given site

- ✓ exercises in analysing the already collected data, and using digital platforms (and optionally -using the InViTo tool) in the context of possible types of site transformation
- ✓ selection of the preferred green-spot type for individual sites

Session 2 - Selecting the Nature Based Solutions for a given site

- ✓ exercises in analysing the already collected data, and using digital platforms (and optionally -using the InViTo tool) in the context of NBS assessment criteria
- ✓ assessing (scoring) necessity and suitability of possible NBS
- ✓ selection of the preferred NBS for the sites

Tasks for the trainer to perform on the days preceding the meeting:



Session 1, Session 2

- ✓ check the practical availability and usability of data, and examine possible intervention solutions for particular sites through pre-training
- ✓ ensure access to the digital platform and online analysis tools during training

Tasks for participants

Please perform all the tasks described below as a team, with the help of the group supervisor. Please use the data sources provided as well as our previous knowledge of this area.

Session 1

1. analyse the already collected data in the context of possible transformation types, using the recommendations contained in Auxiliary Table No. 1.
2. formulate a preliminary list of possible transformation types using the M3A form
3. choose the type of transformation
4. prepare the achievements of common work to be presented to other training participants.

Session 2

1. analyse the already collected data in the context of possible choice of NBS, using the definitions contained in Auxiliary Table No. 2, and the recommendations contained in Auxiliary Table No. 3.
2. formulate a preliminary list of NBS using the M3A form
3. assess individual NBS in terms of meeting the admission criteria, using the M3B form
4. assess (scoring) the acceptable (at least two) NBS in terms of suitability and necessity, the M3C and M3D forms respectively. For the necessity assessment please also use the Auxiliary table No. 4.
5. agree the final choice of NBS using the McKinsey matrix (the M3E form)
6. prepare the achievements of common work to be presented to other training participants.

Introduction

The assessment procedure used in the M3A, M3B, M3C, M3D and M3E exercises should be used to select the type of intervention, which is defined as selection of green-spot type and, then, selection of a set of nature based solutions (NBS) to be implemented at the site.

The procedure itself, as well as the sets of criteria used in exercise M3 are consistent with document D.T1.2.1 " Report on principles for selection of interventions".

This procedure can may also be useful in the case of ongoing verification of the Action Plan's findings during its implementation.

The better common understanding of information about the site, the greater the chance for making a good decision to choose such and not another intervention, i.e. the target type of green-spot and nature based solutions (NBS).



M3A. Expected type of intervention: site transformation and NBS selection

Site

Using the templates below, please agree on the target type of green-spot (see Auxiliary table no.1) and then the initial list of NBS (see Auxiliary table No.2 & Auxiliary table No. 3)

Label of the site to be transformed into a green-spot

Working name of the site	Coordinates	No. in the geodetic register

Characteristics of the site

Current type of spot (according to the predefined list)	The current way of using space and its vicinities
<i>Please define current type of spot with use Auxiliary table No. 1. Types of spots with high revaluation requirements by UEA application (see second row of the table)</i>	<i>Please describe in few sentences, taking into consideration: current land use, size of the site, approximate number of interested citizens, main social problem(s), main environmental problem(s), spatial restrictions.</i>

Planned transformation of the site through UEA

Target types of green-spot initially considered (according to the predefined list)	Target type of greenspot agreed during the training
<i>Please define possible types of target green-spot in accordance with Auxiliary table No. 1. Types of spots with high revaluation requirements by UEA application (see last column of the table)</i>	<i>Please enter the type of green-spot chosen by consensus among the members of the workshop group</i>

Initial list of NBS

NBS list initially considered (according to the predefined list)	Initial NBS list agreed during the training
<i>Please define possible types Nature Based Solutions (NBS) in accordance with Auxiliary table No. 3. Recommendations on the applicability of different types of NBS for different types of green-spots. Particular types of NBS are briefly characterized in Auxiliary table No. 2. NBS types useful for transforming the place into an urban green-spot</i>	<i>Please enter the types of NBS chosen by consensus among the members of the workshop group</i>



Comments

If needed, please describe in 1-2 sentences any doubts or difficulties in choosing the type of green-spot or in creating the initial NBS list

M3B. Mandatory criteria that must be fully met in order for a type of NBS to be considered as possibly suitable for the site in the further evaluation

Site

Using the template below, please document the fulfillment / non-fulfillment of the mandatory criteria by individual, initially selected NBS. If the NBS meets a given criterion, please put the "+" sign, and if it does not, the "-" sign. If for a given NBS, even in one window, the sign "-" appears, it means that this NBS would be eliminated from further analysis, because of due to its inability to be implemented in this green-spot

Conditions	NBS A	NBS B	NBS C	NBS D	NBS E	NBS ...
Clear path of arrangements/permits for this type of NBS						
No irreversible conflicts of this type of NBS with underground or overhead facilities (neither planned nor already existing)						
Sufficient space for a given NBS, both for the implementation of executive work and for the subsequent functioning of the green spot						
No contradiction with applicable plans/programs/projects to which the place is covered (contradiction occurs when in the light of strategic/planning documents or for technical/architectural reasons, this kind of NBS is not allowed in this place)						
No explicit conflicts with local stakeholders for this type of intervention						
<i>Conclusion: "Yes" or "No"</i>						

M3C. Assessment of particular NBS in terms of suitability for UEA application in the site

Site



Using the template below, please perform a comparative assessment of the suitability for application in the site for several NBS types

Category of conditions	Weight of factor	Type of factor	Favourable/ unfavourable	Individual scores (0; 1; 2)				
				NBS A	NBS B	NBS C	NBS D	...
Expected technical or procedural difficulties in implementation		Expected difficult / time-consuming procedures of arrangements / permits, necessary for taking the NBS type	unfavourable					
		Potential conflicts of the NBS with existing facilities, possible to overcome but requiring additional technical designs and/or additional arrangements/permits	unfavourable					
Expected financial difficulties in implementation		Due to the conditions of the site, expected necessary additional cost-consuming or time-consuming preparatory work for the NBS type	unfavourable					
		Due to the conditions of the site, expected higher labour-consuming and/or cost-consuming maintenance compared to typical for a particular type of NBS	unfavourable					
Expected technical or procedural difficulties to maintain		Unclear scope of competences and unclear obligations in the scope of maintenance of a given NBS type	unfavourable					
		Deficiency of practical experience / shortage of designers/shortage of technical teams that could implement this type of NBS	unfavourable					
Social context		Presumed difficulty in financing the type of NBS (e.g. due to lack of funds in the city budget for a given type of NBS, or difficulty in obtaining external funds)	unfavourable					
Practical experience, referring to best practices		Highly likely lack of acceptance of local community for this type of NBS	unfavourable					
		Compatibility of a given NBS type with the type of green-spot	favourable					
Sum of weights = 35		Total scoring:						

- Possible individual scores for unfavourable factor: 2 - not occurring or insignificant, 1 - moderate, 0 - big
- Possible individual scores for favourable factor: 2 - considerable, 1 - moderate, 0 - not occurring or insignificant.



- The decision to select the weights for each factor belongs to the workshop group. The specificity of a given site should be taken into account.
- The sum of the weights equal to 35 was adopted for computational reasons to facilitate the performance of the M3E exercise
- Total score for a NBS: Σ (individual weight x individual score)
- Maximum total score: 18 (excluding weights), 70 (including weights)

M3 D. Assessment of particular NBS in terms of its application necessity in the UEA site

Site

Using the template below, please perform a comparative assessment of the suitability for application in the site for several NBS types.

Category of benefits	Weight of the category	Examples of benefits	Individual scores of benefits (0; 1; 2; 3; 4; 5)				
			NBS A	NBS B	NBS C	NBS D	NBS ...
Microclimate/airquality		Reducing exposure of people to the heat island effect (incl. providing climate refuges for vulnerable resident populations), Improvement of air quality (removing air pollutants, slowing down the creation of secondary pollutants, increasing oxygen concentration), Reduction of noise					
Water management		Improving rainwater management (by local use of excess rainwater, or infiltration to the ground, or local retention) Linking green space with storm-water infrastructure Decreasing the amount of impervious surface					
Green space management		Creating (or protecting) areas of low intensity management and relatively low cost of maintenance, where nature can „run wild“ and species can establish themselves spontaneously; Promoting heat-tolerant and draught-tolerant species/ varieties Supporting a local NGO or citizens" initiative to maintain green spaces					
Biodiversity		Increasing of urban biodiversity (e.g. introduction of native plant species, elimination of invasive plant species). Providing the nutrition functions for wildlife (small animals incl. butterflies and other pollinators, or small birds); Protecting and enhancing native biotopes, especially those that are ecologically significant and threatened Increasing urban soil protection/ regeneration					
Quality of stay		Increasing synergies between different functions, reduction of conflicts Objectively increasing the safety of staying in a given site Increasing (or creating) the visual appeal of the site; Increasing multifunctionality of public space at the site)					



Integration of the local community		Creating "neighbourhood spaces" for spending free time and socialization; Increasing sense of security; Creating a positive identity of the place and its vicinities; Improving the attractiveness of the site for elderly, mothers with children and/or disabled persons					
Functional diversity of public spaces		Increasing functional coherence of a network consisting of various types of public spaces; Spatial/functional linking with already existing or planned blue or green areas / green spots Increasing quality / coherence of urban Green Infrastructure network at the city or FUA scale					
Sum of weights =14	Total scoring						

- When specifying individual scores, please take into account the *Auxiliary table No 4. Maximum benefits of implementing individual types of NBS*. Possible scores for a type of benefit: Possible scores: 5; 4; 3; 2; 1; 0, where 5: a very big benefit; 0 - insignificant benefit or no benefit.
- The decision to select the weights for each benefit belongs to the workshop group. The specificity of the site should be taken into account
- The sum of the weights equal to 14 was adopted for computational reasons to facilitate the performance of the M3E exercise
- Total score for a NBS Σ (individual weight x individual score)
- Maximum total score: 35 (excluding weights), 70 (including weights)

M3E. Mc Kinsey Matrix (GE) in application to final selection among alternative NBS

Each analysed potential NBS can be reflected by scoring - as a point in the matrix area - in the green, yellow or red field. The location of threshold values can be arbitrary and result from the adopted needs / assumptions of the analysis.

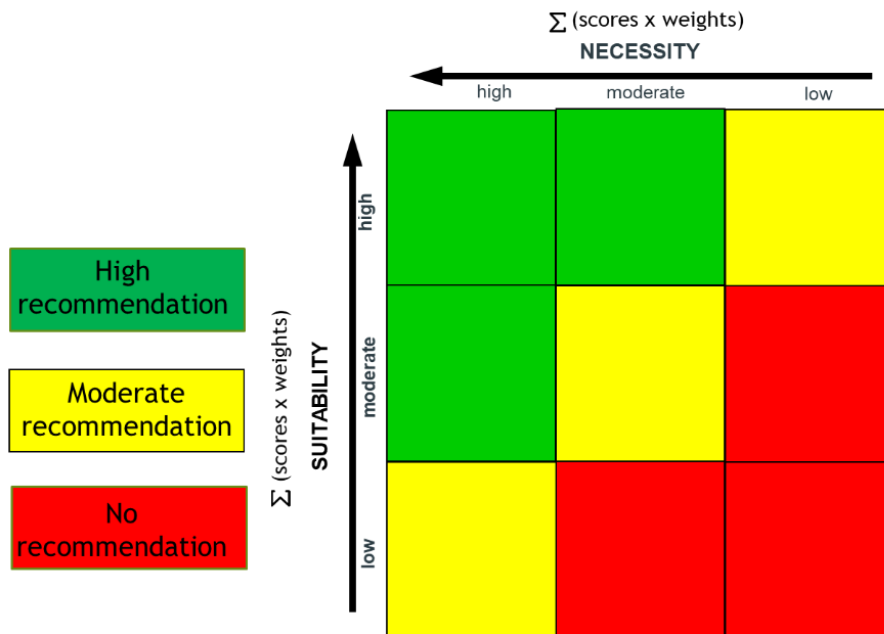
The matrix can should be used for final selection of NBS, especially when there is a need to choose from several or a dozen of NBS. For more details concerning the use of Mc Kinsey matrix - the - se the document D.T1.2.1, Chapter 3.4.6. Final selection of NBS

Please perform the following steps:

- enter the scores established in exercises M3C and M3D into the table below.
- set, by consensus, threshold values for individual colors of the matrix, and scale both axes accordingly.
- position the necessity and suitability scoring for individual NBS graphically as points on the matrix

Scoring of suitability and necessity for particular NBS:

	NBS 1:	NBS 2:	NBS 3:	NBS
Suitability				
Necessity				



Comments

If needed, please describe in 1-2 sentences any doubts or difficulties in assessment and final selection of NBS