THE TRANSNATIONAL CONCEPT FOR ACTION PLANS

Chapter 1: General considerations

Chapter 2: Creating local action plans

Chapter 3: Plan Implementation

Deliverable
D.T2.1.1

Table of Contents

Introduction to the transnational concept for action plans

The purpose of this document is to develop a concept for action plans within the framework of SALUTE4CE project, specifically, within urban pilot project areas and their respective Functional Urban Areas (FUAs) The action plan concept incorporates the methodology for selecting urban environmental acupuncture (UEA) sites and this includes the typology and selection of interventions from work package (WP) T1.

Action planning and its usage within the SALUTE4CE project

The implementation of 16 pilot projects transnationally is no small feat. That is why, a transnational concept for action plans is needed. **This concept is intended to be used as a guide for local actors and should be adjusted to fit the individual needs of each pilot project.**

Action plans will play a decisive role in SALUTE4CE project. They aid in implementation of measures needed to create small green spots or urban environmental acupuncture UEA sites within the four pilot project countries. The creation of a transnational concept for action plans – the final goal of WP T2 of the project – will contribute to continuity among action plans and thus pilot projects by bringing together visions, goals and implementation strategies for UEA sites at the local level.

Action planning is the process of creating a written document that describes how a specific set of actions are to take place in order to bring certain goals and/or visions to fruition. An action plan contains different elements which typically occur in chronological order (Fig. 1, Tab. 1, Chapter 2). There are various definitions of action plans, however the most suitable definition for the SALUTE4CE project originates from Coyle (2011); an expert in developing sustainable and resilient communities:

"It [an action plan] should be used to identify the specific tasks, timelines, and resources necessary for implementation. It will activate the community's vision by enabling the desired outcomes appropriate to the people and place, including the protection of natural landscapes."

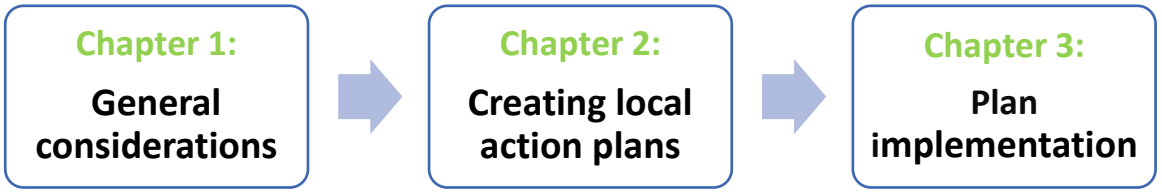
City of Vancouver, Canada (2017)

A plan called the "Greenest City 2020 Action Plan" has been developed as a roadmap to becoming the greenest city in the world by 2020. The plan is well organized and includes 10 goal areas (i.e. different types of goals to be reached) with measurable targets and deadlines (i.e. specific tasks). The goal area "access to nature" includes specific targets, such as: all residents live within a five minute walk of a park, green way or other green space, plant trees and restore/enhance natural areas. Specific resources have been identified in the plan to support these measures (i.e. city stakeholders, students, businesses and institutional partners). A logical well-organized break down of goals, targets to be reached as well as resources necessary are identified increasing the probability that the community's vision becomes a reality.

Vision →Goal areas →Targets (with deadlines) →Identification of resources to support implementation →Implementation

Fig. 1: Action Plan Example City of Vancouver, Canada (Source: Office of Neighbourhoods, City of Vancouver 2017).

The transnational action plan concept contains 3 main chapters they are general considerations, creating local action plans and plan implementation. In order to increase understanding and to provide a quick reference of the concept a concise explanation is presented here.



General considerations (Chapter 1)

This chapter includes an overview of the SALUTE4CE project, an introduction and the purpose of the action plan, what urban acupuncture is and how it will be used. Moreover, the advantages and potentials of the concept are highlighted, for instance, the low budget and fast implementation character, as well as the opportunities of citizen involvement. A description of how urban acupuncture will be utilized within the respective FUA should be provided here; this will be different for each pilot project and/or FUA.

Creating local action plans (Chapter 2)

The challenges and/or problem areas (i.e. acupuncture points) that need to be addressed will be identified as well appropriate interventions (i.e. pinpricks). The identification of problem areas and potential interventions will be based on the results described in WP T1 of SALUTE4CE project (D.T1.1.1., D.T1.2.1). The process of creating a local action plan includes three phases.

- The ***first*** phase is the *preparation phase* (preliminary activities):

In the preparation phase an action planning team will be formed. Several tasks need to be performed such as developing visions for the city or FUA and identifying goals. Gaining public, political and financial support is important in this early stage of planning. A concrete work plan that serves as a guide throughout the planning process is recommended. This could be in the form of a set of milestones, a work program or timetable.

- The *second* phase is the *analytical phase* (gather and evaluate information):

In this phase data collection is the main task relevant documents include but are not limited to landscape, land use, strategic and comprehensive plans. These documents are analyzed and used to better understand the frame conditions relating to the local situation. The functional connections between cities and their hinterlands, such as green belts and green corridors as well as general ecological, economic and social situation should be examined. If necessary, additional data can be collected via surveys or other methods distribution or external organizations. A profile of your FUA should be written based on the general conditions and local situation. Finally, a short (preliminary) list of UEA sites will be created here.

- The *third* phase is the *developmental phase (decide and plan actions)*:

Final selection of the UEA sites takes place in the developmental phase. Here plan measures including specific goal areas and targets are identified. Examples of goal areas include, reducing the urban heat island effect, improving resident well-being and improving social cohesion. Targets for the respective goal areas should include; planting greenery (e.g. trees, bushes, climbing plants and grass) and where pertinent outdoor equipment such as, benches, small architecture or gaming tables. Public feedback in the form of

living labs will contribute to the planning process and help improve the action plan[1]. The result of the final phase is the local action plan.

Plan implementation (Chapter 3)

In chapter 3 a description of how the action plan will be implemented is provided. The defined targets and measures identified in the developmental stage will be undertaken. Where necessary, maintenance and management plans can be created to ensure that pilot projects are maintained in the future. What is more, monitoring and evaluation of the implemented UEA sites can be conducted to measure the impact of UEA site creation. This is based on a set of indicators selected by the action planning team. Finally, a summary of the outlook and future perspectives for your pilot projects is recommended. The text provided in chapter 3 "outlook and future perspectives for UEA sites" can be used as a guide in addition the conditions within the respective country and FUA should be included.

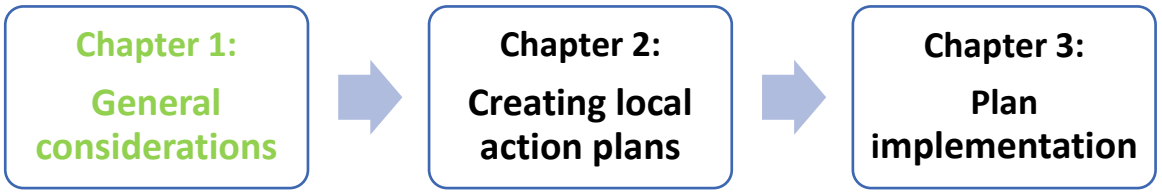
Tab. 1: Overview of action planning within FUAs implementing urban acupuncture

Action Planning Steps		Description of each step
Chapter 1)	General considerations	- Background and aims of the SALUTE4CE Project. - Description of action plan goals: How will urban acupuncture be utilized within the respective FUA?
Chapter 2)	Creating local action plans	Problem statement – potential acupuncture points Potential solution (s) – pinpricks /needles
	Step 1: Preparation Phase (preliminary activities)	- Deciding on responsible parties (e.g. forming an action planning team) - *Developing visions for city/ FUAs and identifying goals* - *Gaining support for the pilot project (e.g. public, political & financial)* - *Defining planning procedures (e.g. Set milestones, work program, timetable)*
	Step 2: Analytical Phase (gather information, evaluation)	- Data collection & generation if necessary - Creation of a FUA profile (i.e. knowledge concerning general conditions and the local situation) - Pre-selection of UEA sites
	Step 3: Developmental Phase (formation of action plan)	- Final selection of UEA sites - Defining plan targets and measures - Public feedback on planning process and concept to improve the action plan (i.e. living labs)
Chapter 3)	Plan Implementation	- UEA site creation - Maintenance & management plan creation - Monitoring & evaluation concepts based on set indicators

(Based on GreenKeys Team 2008)

[1] Guidelines for the workshop structure and output restitution for living labs will be provided by the Links Foundation in July 2021.

Chapter 1 - General considerations



1.1. Background and aims of the SALUTE4CE project

The main objective of the SALUTE4CE project is to protect and develop natural resources via integrated environmental management of green and blue infrastructure, accomplished specifically by planting native and climate resistant vegetation within selected functional urban areas (FUA's) (SALUTE4CE 2019). A FUA is defined as " a spatially continuous settlement system consisting of units separate in administrative term and covers a compact urban area (core) with a functionally linked urbanized *zone" (LUMAT, 2016)*.

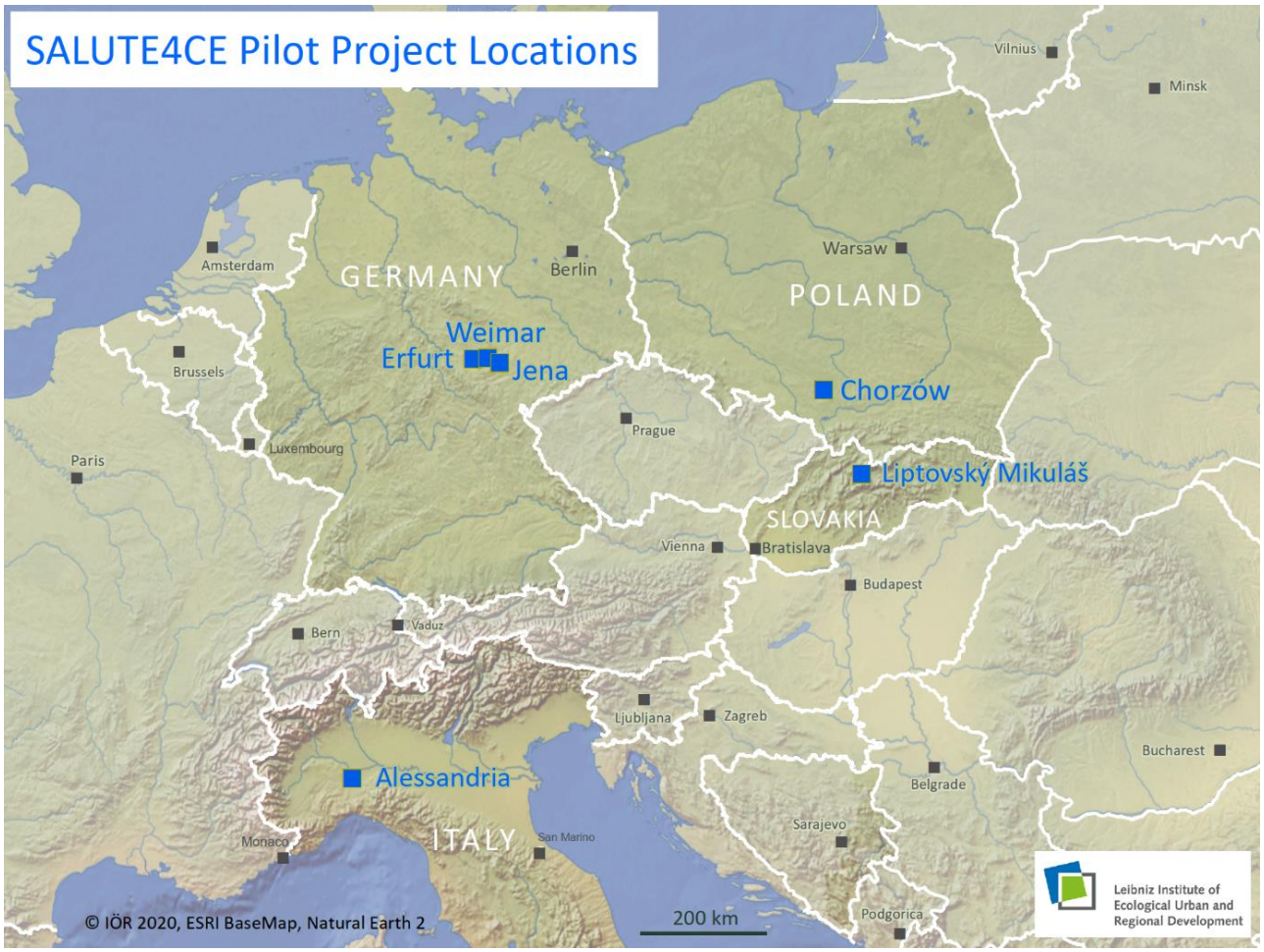


Fig. 2: SALUTE4CE pilot project locations (Source: Hemingway, j. & Witschas, S., IOER, 2019).

The SALUTE4CE project offers a potential solution to urban areas where large open spaces are not available, but rather many small spots. Urban Environmental Acupuncture (UEA) provides the opportunity of improving the urban fabric by increasing the availability and prevalence of green space. Green spaces may complement one another by bridging large and small sites and contributing to the urban green network as a whole. It is argued that many small interventions can improve access to ecosystem services in FUAs, providing an effect that goes beyond the perimeter of the area of intervention. Project partners from Germany, Poland, Italy, the Czech Republic and Slovakia will implement the concept of urban environmental acupuncture using pilot projects within four FUAs (Fig. 1). Within each of the four pilot project countries, four separate interventions will be implemented. Altogether the project will result in the development of 16 interventions resulting in so called, "UEA sites". It is intended that the each pilot project site should have an area of 0.2 hectares or less.

Urban acupuncture has been selected as a guiding principle in reaching the SALUTE4CE project goals of protection and development of natural resources. Here the concept of urban acupuncture will be briefly defined and explained as understood within the project.

1.2. Urban acupuncture and its application within the SALUTE4CE project

The thinking behind urban acupuncture is that small-scale selective adjustments to cities can progressively transform the urban fabric resulting in significant positive impacts on a larger urban scale. Small urban spaces such as: inner courtyards, back alley ways, small abandoned plots, facades, roofs and street verges can be transformed into greenspace thus contributing to the green infrastructure within urban areas. The implementation of small-scale urban acupuncture to increase green space has the potential to gradually heal the overall urban area (Apostolou 2015).

Urban acupuncture has been described as a type of medicine that can be applied to cities. Like traditional Chinese medicine, urban acupuncture is supposed to contribute to healthy responses within cities. This happens through physical interventions or the application of "pinpricks". Not only should urban acupuncture affect the specific place being intervened, it should also improve the function of surrounding areas (Lerner 2003). Cities have been viewed by some as a multidimensional organism or living environment containing sensitive flows within the built human environment. One has to be "in touch" with the living environment of the city in order to identify acupuncture points and the "needle" to be identified in order to determine the appropriate physical reaction (Elkjær 2010). Urban acupuncture within the SALUTE4CE project is intended to improve the quality of the urban environment and strengthen the functions of ecosystems specifically ecosystem services. Due to its main objective, for the purposes of the SALUTE4CE project this approach is referred to as urban environmental acupuncture (UEA).

Fig. 3: Visual conceptualization of Urban Environmental Acupuncture "needle and pinprick sites" (Source: Franka Strangfeld, 2020)

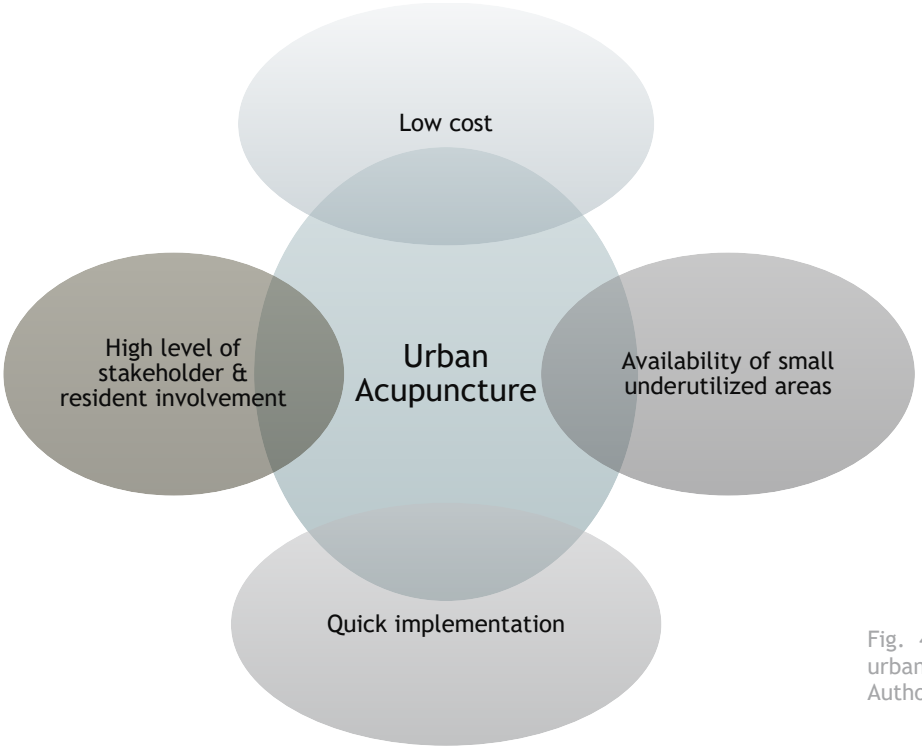


Fig. 4: Advantages/potentials of urban acupuncture (Source: Authors' Illustration)

City practitioners are often aware of difficulties within the districts that they are responsible for, which has motivated identification of "acupuncture points" or specific physical locations needing improvements and "needles" or actions to address urban problems (Hemingway, Mathey, and Wirth 2019). This is also the case within the SALUTE4CE project funded through the Interreg Central Europe Program. Local decision-makers and practitioners have selected underutilized areas within their cities needing improvement as well as measures to address the respective urban problems. The benefits of utilizing urban acupuncture (Fig. 3) are that the financial and time commitments tend to be substantially lower in comparison to large projects. Furthermore, the small scale of the pilot projects utilizing urban acupuncture provide an easier way to involve local stakeholders and residents. Finally, small underutilized areas (Fig. 4) are less desirable for development than large areas and are thus often obtainable and can serve to expand green infrastructure.

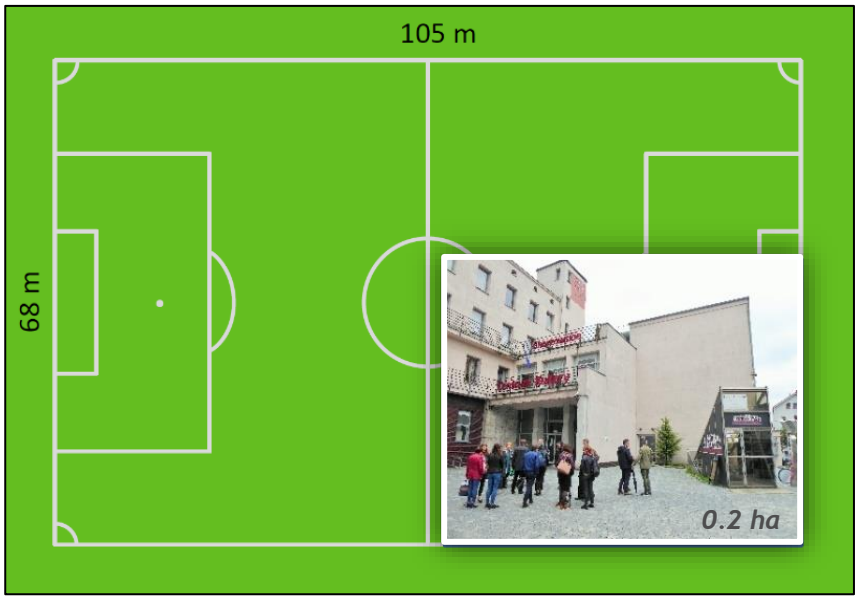


Fig. 5: Size Contrast of Small Green Spots to a Soccer Field (Source: Hemingway et al. 2019, Photo: Wirth 2019)

1.3. The descripton of action planning goals

The utilization of urban acupuncture will be different for each pilot project or FUA. Each SALUTE4CE project partner will need to describe what the action planning goals are within their pilot project, as well as how urban acupuncture will be utilized. The brainstorming activity presented here and conducted during the second project meeting in Erfurt can be used as an inspiration for this tasks.

The Second Project Meeting in Erfurt: Brainstorming Activity with Project Partners

With the aim to collect initial information/details of the conditions in the SALUTE4CE partner cities, during the second project meeting in Erfurt on December 4, 2019 a brainstorming activity was organized.

Project partners were separated into groups based on the relevant pilot projects in 4 FUAs and asked a series of questions to identify what they saw as their action plan area, what their vision for the action plan is, the function of small green spots and the purpose of their action plan. For each question, project partners were requested to document responses.

Fig. 6: Brainstorming of SALUTE4CE project team members in Erfurt, December 2019 (Photo: City of Erfurt)

The results from this activity can be used as a starting point in developing visions within the action plan further. Below is a table compiling the responses from each of the pilot project countries: Poland, Slovakia, Italy and Germany (Tab. 2).

The responses illustrate that for each pilot project country the scale for the action plan is perceived differently. Some listed cities and others region as their FUA. The long-term visions related to dealing with extreme heat and increasing vegetation. The purpose of the UEA sites in contributing to the vision related to social cohesion, contributing to biodiversity, climate change adaptation, increased well-being, and contribution toward greenspace, educational opportunities and the opportunity to experiment with low cost interventions.

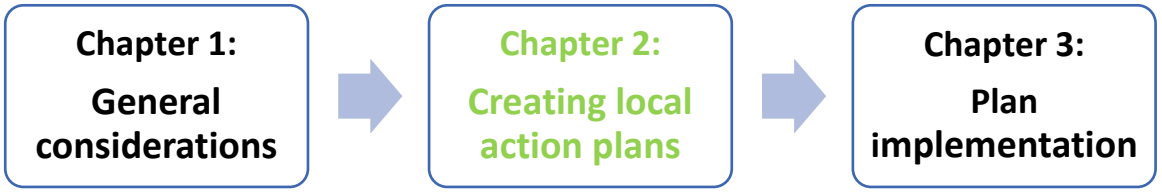
Results of brainstorming activity in Erfurt with all project partners:

Tab. 2: Overview of responses from SALUTE4CE project partner FUA on preparatory questions for UEA development.

QUESTIONS	*POLAND*	*SLOVAKIA*	*ITALY*	*GERMANY*
Q1: FOR WHAT TERRITORY (FUA) YOUR ACTION PLAN SHALL BE CREATED?	FUA 3 cities: Chorzów, Ruda Śląska and Świętochłowice	Liptovský Mikuláš FUA	Alessandria FUA 100,000 inhabitants	Erfurt or/and Weimar
Q2: WHAT IS YOUR VISION FOR URBAN GREEN IN YOUR FUA IN 2050?	Adaptation to climate change, NBS in urban policy, continuation of green infrastructure development	Boost ecological approach integrated into public spaces and infrastructure.	Green areas as resources, self-sustainability of the urban green areas	Reduce summer heat damage, heat resistant vegetation, increase public interest
Q3: WHAT FUNCTION DO UEA SITES PLAY IN THIS VISION?	Integration of local communities, increasing of urban biodiversity, reduction of climate threats and improving of local urban landscape	To increase the share of greenery and give a special character to public space in selected localities.	Experimentation of green low-cost environmental solutions, green areas as educa-tional spaces	Increase quality of life, contribute to large green areas and community building
Q4: WHAT IS YOUR PURPOSE OF THE ACTION PLAN CREATED IN SALUTE4CE?	Awareness of eco-system services, cross sector cooperation various stakeholders, 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

Chapter 2 - Creating local action plans

In this chapter guidance on creating the action plan concept for a FUA (Functional Urban Area) will be provided in more detail than in the first chapter. The action planning process will lead to the selection of UEA (urban environmental acupuncture) sites.



This chapter includes a review of which elements the action plan should contain. Within this planning phase the challenges and/or problem areas (i.e. acupuncture points) that need to be addressed will be identified as well as appropriate interventions (i.e. pinpricks).

The identification of problem areas and potential interventions will be based on the results described in work package T1 (D.T1.1.1 and D.T1.2.1) reports on principles for selection of areas and interventions. The outputs of work package one (WP T1): *Selection criteria can be found under deliverables (WP1) here:* *https://www.interreg-central.eu/Content.Node/SALUTE4CE.html* - the principles for selection of interventions will provide guidance on: matching typology of sites with typology of interventions, selection criteria of intervention type for a given spot (suitability criteria, necessity criteria), procedure of intervention type selection and principles and finally, guidelines for selection of native plant material.

2.1. The *preparation phase* (preliminary activities)

Within the preparation stage preliminary activities take place which set the groundwork for the planning activities to follow. Several activities should take place at this point such as deciding on responsible parties, developing general visions and goals, beginning the process of identifying local stakeholders and residents informally and considering potential challenges and opportunities in future planning.

Forming an action planning team

Before beginning the process of creating an action plan, the action planning team needs be selected. An internal coordinator should be selected; this is the person in charge of leading the implementation of the plan. Three to five core action planning team members should be selected. Within this team a contact person for citizen and resident concerns should be chosen; this can be the coordinator or an additional individual. Other potential members of the action planning team include individuals from municipality departments (e. g. planning, environment, parks and gardens) as well as other relevant institutions or organizations that possess applicable expertise and interest in terms of green infrastructure (e.g. environmental organizations). The action planning team should consider whether an external moderator – outside of the core members (i.e. a neutral person who is not a formal member of the planning team or project) or someone from a planning office should be involved. An external moderator is not required this is the decision of the action planning team.

Fig. 7: Action planning should take place with experts from relevant city departments (Photo © R. Vigh, IOER-Media)

In addition to identifying individuals and assigning roles, the action planning team will be responsible for initiating the planning process, coordinating implementation and citizen involvement. It is important that the action planning team possess the skills, competency and authority necessary to carry out tasks of the analysis and implementation phases. Considering the balance of skills within the core group is also important. It is useful to have Individuals on the action planning team that are influential and valuable in the process of planning for the UEA sites, they should also be motivated and have the time to contribute to the process (GreenKeys Team 2008).

Questions to consider when forming an action planning team:

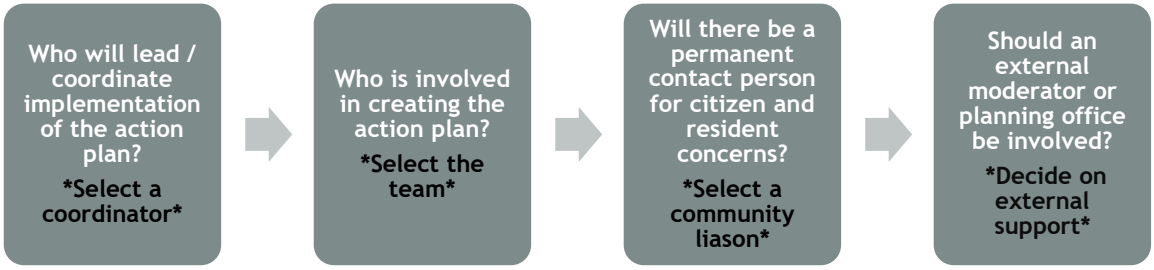


Fig. 8: Overview of questions to consider when forming an action planning team (Source: Author's Illustration)

Defining planning procedures

The tasks of the action planning team include defining responsibility, creating pilot project visions and goals, organizing living labs, public relations, collecting data and external expert outreach among others. It will be necessary to create a working plan with deadlines for the team to ensure that goals are met. Specifying who is responsible for which task and by when. Also important is identifying required formal (legal) procedures which need to be considered as part of the planning and implementation process (GreenKeys Team 2008).

Developing visions and goals

The action planning team should develop visions and goals for the pilot project based on the goals of the SALUTE4CE project and tailored to the respective FUA (see example in chapter 1.3!). The specific objective of the SALUTE4CE project is to improve environmental management of functional urban areas to make them more livable places. This is accomplished by promoting for example, the planting of native and climate resistant vegetation in order to restore biodiversity and natural heritage. These aspects should be reflected in the visions and goals developed as part of the action planning process. The potential impacts of implementing the action plans as stated in the SALUTE4CE project application are change of urban landscape, strengthening of stewardship of nature capital, change in governance and change in resilience of FUAs to climate change. Through your action planning activities, you will be improving capacity of the public sector and related entities to enhance integrated management of green and blue infrastructure within the respective FUA by creating UEA sites on abandoned or underutilized urban plots. The innovative transnational solutions created within the SALUTE4CE project will provide an integrated territorial and environmental approach through the utilization of novel concepts of UEA. Visions and goals can be modified and improved upon throughout the action planning process. Particular importance should be placed on input gained from residents and other stakeholders during living labs or other formats.

Gaining support for the pilot project

Public support

Important to the success of any action plan is the cooperation of the planning experts with the public. The public may include residents, interest groups and relevant experts and stakeholders. This is particularly important where the community should be involved in planning, building, maintaining or monitoring UEA sites. It is important to reach out to and involve the public and other important stakeholders in the very beginning of the action planning process. The public should be included throughout the planning process; and be kept up-to-date about the progress of planning, including the development of planning procedures. Additionally, the public can contribute to building visions by making the needs of the community known. By getting to know local residents or the future potential users of the respective small green spot, one can gain

knowledge concerning the local situation and the needs of various groups and their expectations (i.e. what ecosystem services are particularly needed). The public can participate in action planning of the UEA site in a variety of ways including both formal and informal collaboration. Specifically, as part of the SALUTE4CE project, the public will be invited to participate in living labs, other possibilities include public events, goal-oriented workshops, or as part of the communication of the SALUTE4CE project via PR campaigns, websites or social media channels (GreenKeys Team 2008).

Political support

A successful action planning process and implementation of your UEA sites is largely dependent on political support within your FUA. Political support should be had at the beginning stages of planning and steadily improved upon throughout the planning process. Political support for the project has already been given at the European level through the Interreg CENTRAL EUROPE Program and is in line with national planning strategies from several project partner countries (See: D.T1.4.1 *[https://www.interreg-central.eu/Content.Node/SALUTE4CE/SALUTE4CE-D.T1.4.1-document.pdf]* review of status quo of integrated environmental management for FUAs in national policies).

Local political support should be obtained from the mayor or city council in the form of an approval letter or resolution. Political support is especially important when challenges arise in the planning process (implementation of tasks and actions) and can be important when presenting results of the pilot projects. Additionally, visions, goals and targets need to be accepted and confirmed by local representatives. The political support gained early in the planning process will prove to be vital in the planning process in later. In order to maintain a dialog, the action planning team is recommended to inform the city council and mayor of the planning process and the potential of the pilot projects to improve green infrastructure or quality of life within the respective FUA (GreenKeys Team 2008).

Financial support

Within the framework of the SALUTE4CE it is necessary to obtain financial support to implement UEA sites. Potential sources of financial support could be one or a combination of the following: citizen donations via city greening initiatives, commitment from the mayor through the city budget, EU funds, federal or state funds addressing biodiversity or climate change adaptation or even funds collected as part of a lottery.

The results of the preparation phase are:

- → **Formation of an action planning team**
- → **Creation of a working plan with assigned tasks and deadlines**
- → **Initial (working) vision and goals**
- → **Identification of public, political and financial support**

2.2. The *analytical phase* (gather and evaluate information)

After having conducted the preliminary or preparatory stage of action planning you should have identified those responsible for action planning, have made initial contacts to local residents and stakeholders and have become familiar with the potential opportunities and challenges with implementing your UEA sites. Visions and goals have already been developed and can be further refined if needed. The results of the

preliminary stage will guide the analytical phase, as you should be familiar enough with your city/FUA to know which information will be important to analyse.

The analytical phase consists of:

- Data collection (and generation if necessary)
- Creation of a profile for your Functional Urban Area
- Pre-selection of UEA sites (final selection in development phase)

Data collection (and generation if necessary)

In the analysis phase of the action planning it is necessary to review which information you will need to collect for your analysis. It will be necessary to collect data in order to create a profile of your FUA and to conduct a pre-selection of UEA sites. The specific types of information required are mentioned later in this chapter. Nevertheless, the action planning team should have already identified some of the necessary information for your pilot project in the preliminary phase. The action planning team will have to do some research in order to identify which documents or information already exist. If some of the required data is not available, it may have to be self-generated via templates or surveys or procured from an organization possessing the skills and tools. The process of generating data is a separate process from living labs. Keep in mind that the data collected or generated should be reliable and up-to-date in order to support proper decision-making and planning in the developmental phase.

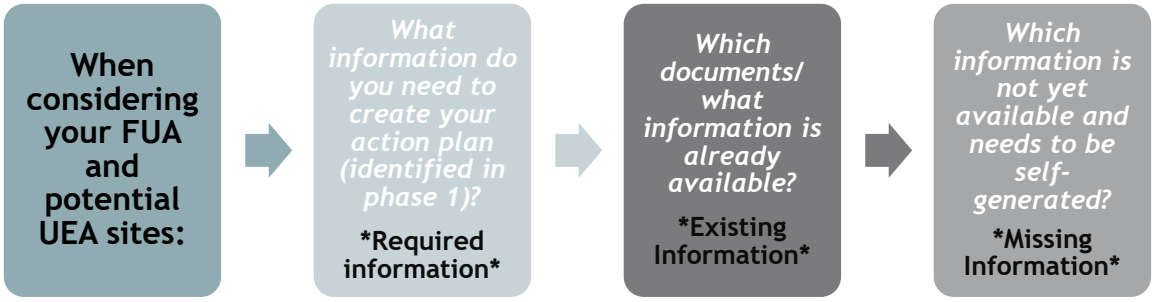


Fig. 9: Overview of questions to consider in the analysis phase (Source: Authors' illustration)

Creation of a profile for your Functional Urban Area (FUA)

Here you will create a profile of your FUA, this is an overview which will help in understanding how your pilot project(s) fits into the bigger picture and can contribute to green infrastructure as whole. To do this, data should be collected and examined in two areas: the general framework and physical conditions.

General framework

The focus of data collection and analysis here are on understanding the main characteristics of your FUA.

The main characteristics described should be:

- Demographics
  - population size and future projections
  - population distribution
  - age distribution
- Planning framework
  - Administrative organization of departments related to green infrastructure
  - The planning and legislative context to see if there are policies or strategies that complement the creation of UEA sites.
  - Local, regional, national, international conditions and documents surrounding green infrastructure
- Economic and financial circumstances
  - Financial standing of your FUA
  - Financing possibilities for your pilot project

Relevant documents: Landscape, land use, strategic and comprehensive strategies and plans

Physical conditions

The focus of data collection and analysis here is on understanding the main physical conditions of your FUA and potential UEA sites. This helps to identify the key problems and the spatial hot spots.

Fig. 10: Planning requires data (Photo: © R. Hecht, IOER-Media - project "meinGrün")

The main characteristics described here should be:

- Surface area of the FUA with share of green space/green infrastructure
- Information about areas selected for green spots (proportion of green, green structure, soil properties, plant and animal species, environmental hazards, etc.)
- Green networking and human resources
  - Research complimentary strategies, projects, organizations, programs and possible future project that may be similar to your pilot project. By doing this, synergies can be discovered and taken advantage of helping to identify who may be interested in cooperating.
  - Potential to gain support for UEA sites (i.e. design, implementation and maintenance)
- Number of residents within walking distance of UEA sites (if data available and analysis is possible at this stage)

Relevant documents: Thematic literature, special measurements, mapping, etc.

*Information that cannot be obtained can be self-generated via instruments such as surveys (e.g. templates), mappings (e.g. flora and fauna) within respective FUAs.

Pre-selection of Urban Environmental Acupuncture (UEA) Sites

In the preparation phase general visions were developed which should help to guide the decision-making process when selecting UEA sites. The process of selecting UEA sites has been developed by the Silesian Botanical Garden as part of SALUTE4CE work package T1, deliverable D.T1.1.1.

This is a transnational methodology for preliminary selection of UEA spots and is designed according to the multi-criteria decision analysis (MDCDA) framework, also known as the McKinsey Matrix model. Two large groups of assessment criteria have been designed called suitability and necessity. This includes a set of indicators used for scoring individual spots. The characteristics of the place itself and its spatial functional connections at the FUA scale are evaluated (SALUTE4CE, 2019).

The selection of areas and potential sites for UEA should be completed using the above-mentioned expert methodology developed in D.T1.1.1 “common criteria of suitability and necessity” and “methodological guidelines”. After the potential areas have been identified, an analysis of sites should be conducted, this will support the final decision-making in the next phase of action planning.

The process of selecting the UEA sites in the analysis phase includes selecting the relevant *intervention areas* of your FUA or city, identifying *potential sites* within these areas and *analyzing* the potential sites in preparation for the final selection.

The process of selecting UEA sites should be completed by the action planning team together with local stakeholders.

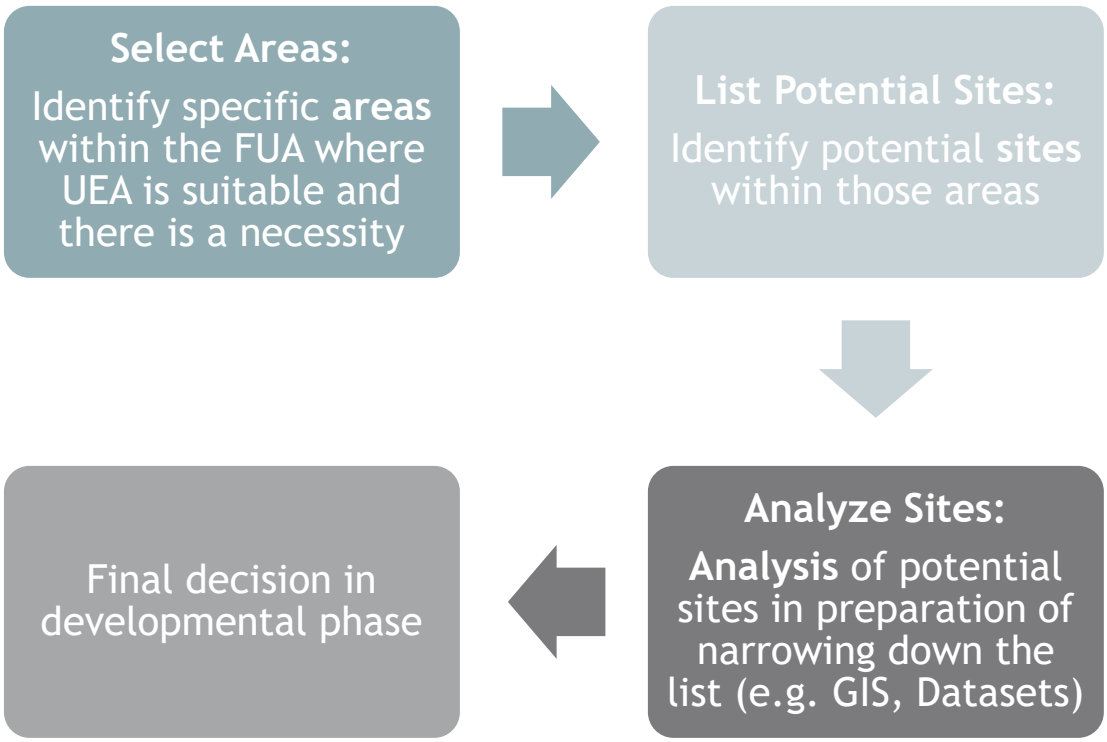


Fig. 11: Selection process of UEA sites to be conducted within the analysis phase (Source: Author´s illustration).

Relevant documents: FUA or city map, GIS tools or other visuals showing the suitable areas for UEA and potential sites.

Before completing the analytical phase, the action planning team should have acquired the information necessary to create the action plan in the next phase. This entails, final selection of UEA sites, defining plan measures including specific targets and goals, and defining those actions and recommendations for the future. It is important the action planning team reflect, and review data collected to ensure that all necessary data has been assembled. As a guide, the action planning team should review the working plan that was created in the preparation phase to see if assigned tasks and deadlines have been met. Additionally, the visions and goals created in the preparation phase can be reviewed, refined and revised as the team sees appropriate. The team should also review the identified public, financial and political support to see if anyone is missing from the list. Finally, the data collected concerning potential opportunities and challenges can be reviewed to determine if there are any remaining unanswered questions (Fig. 11).

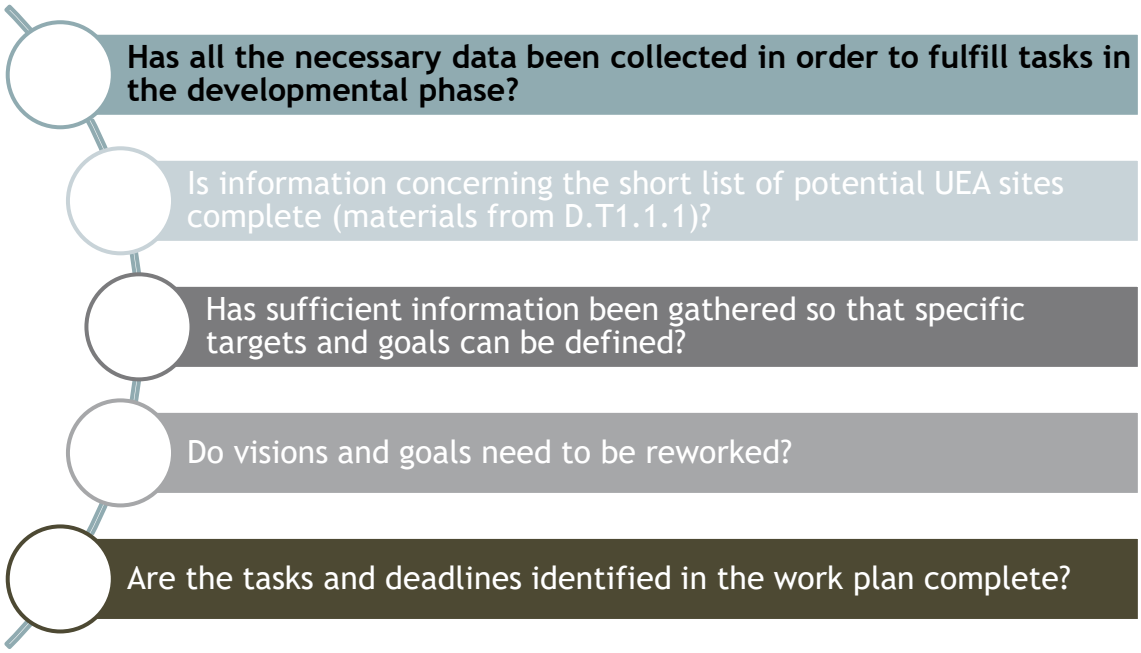


Fig. 12: Questions to be answered for reflecting and reviewing data collected in the analysis phase (Source: Author´s illustration).

Once all the tasks have been met in the analytical phase the action planning team and stakeholders can move on to the developmental phase where final decisions will be made concerning which actions will be implemented. At this point, all the tools necessary to create and implement an action plan for your pilot projects should be assembled.

Results of the analytical phase are:

- → **Assembly of required information**
- → **Completed profile of functional urban area or city profile**
- → **A short-list of potential UEA sites including site analyses**

2.3. The *developmental phase* (decide and plan actions):

Now that an overview of the general conditions, the physical situation and the extent of human resources are known, the action planning team should possess a broad and in-depth understanding of their FUA, the planning context and potential UEA sites. How knowledgeable the team is concerning their FUA and potential pilot project UEA sites is crucial in the decision-making process in this phase. Therefore, it is important to have prepared well before reaching the developmental phase where plan actions will be decided.

The general framework for the decision-making process moves from broad to specific. In that one has identified a specific problem within the FUA which can be addressed by increasing green infrastructure, many project partners of SALUTE4CE project identified extreme heat related to climate change as a problem for example. Vision and goals for the respective pilot project FUA should be well developed at this point. And a short-list of potential UEA sites has been created. This list will be narrowed down based on data collected in the analytical phase and further reviewed.

The developmental phase consists of final selection of UEA sites, based on:

- Selection of the green spot type
- Assessment of NBS applicability
- Public participation and feedback

- Defining plan targets and measures
  - Defining detailed actions (e.g. planting trees, installing benches)
- Public feedback on the planning process and concept in preparation of the action plan

Final selection of UEA sites

Based on results of the analytical phase a short list of UEA sites has been created. Subsequently, selection of the green spot type and assessment of NBS applicability will be conducted resulting in a final selection of NBS. This should be based on the methodology developed by SIBG (D.T1.2.1.).

In order to further narrow down the potential UEA sites, the use of the "most probable transformation of UEA sites" table is recommended. Selection of the type of green spot to be implemented is based on the type of site that one is working with such as: traffic areas, multifunctional public areas, areas for peace/ reflection, semi-public areas or fallow (vacant) areas. The table supports the decision-making process in whether the original function of the site will remain the same, be changed or if it is at all possible to transform the site into a certain type of UEA site (e.g. urban orchard, green roof, community garden, etc.). For further description of the technical features of UEA solution types see the table: "*some technical features of the UEA solutions*"; here is an overview provided of whether there is no ground contact, position of terrain and potential importance of rainwater management (SALUTE4CE, 2019).

Defining plan measures

Based on the NBS selected, the action planning team will have to select actions necessary in order to implement the pilot projects. This includes targets or goals of the pilot project, that is, what is the purpose of your UEA sites? Which NBS have been selected and what must be constructed? This should include planting greenery such as, trees, bushes, climbing plants and grass and where pertinent benches, small architecture or gaming tables (For more information see D.T1.1.1 "common criteria of suitability and necessity"). Your action planning team can further consider what restrictions exist after the UEA sites have been selected (i.e. whether certain features are permitted such as greenery or flowers requiring care or large trees).

Public feedback on the planning process

Living labs

Living labs are to be conducted in the project FUAs with local inhabitants and supported by scientific partners. Workshops should be organized locally together with project partners and other professionals. This is part of work package C – communication. Living labs should consist of a guided discussion (e.g. round tables) and workshops in order to develop action plans for the UEA sites. This includes local and regional public authorities. The goals of the living labs should be to aid in criteria for selection of UEA sites, setting priorities and gaining knowledge from local stakeholders[2] (SALUTE4CE, 2019).

[2] Guidelines for the workshop structure and output restitution for living labs will be provided by the Links Foundation on July 2021.

Fig. 13: Planning urban green via living labs (Photo: © R. Vigh, IOER Media)

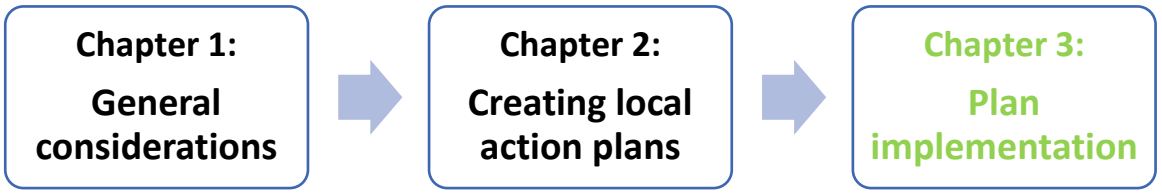
Living labs can be used to inform stakeholders and the public concerning the results of the preparation and analytical phases, especially as they serve as a platform to the developmental phase. That means, reiterating who is responsible for action planning, which outreach activities have already taken place, which vision and goals have been developed as well as potential opportunities and challenges expected when implementing the small green spot. It is also important to provide an overview of the frame conditions, physical situation and human resources identified. Local stakeholders should be given opportunities to provide feedback on the results of action planning thus far, so that improvements can be made where necessary. The opinions and ideas of local stakeholders and residents (i.e. those that will be impacted by the implementation of a small green spot) are likely to be useful when deciding on an implementation strategy and therefore should be taken seriously.

In this phase decisions will be made concerning exactly which measures will be implemented. These decisions should be guided by the tools developed in WP T1 (https://www.interreg-central.eu/Content.Node/SALUTE4CE.html). The materials developed in WP T1 will provide guidance on the challenges which can be addressed by implementing urban green space, which ecosystems services will specific measures offer and how much maintenance is required to maintain them.

Results of the developmental phase are:

- → **Action plan (proposal for the outline see the annex), including:**
  - **Final selection of UEA sites**
  - **Selection of targets and measures (i.e. measures to be implemented based on WP T1)**
  - **Deadlines to meet targets and measures**
- → **Public Feedback on the planning process (i.e. via living labs)**
- → **Final selection of measures**

Chapter 3 - Plan Implementation



Implementation is the most challenging part of the planning process. In many cases, lack of implementation is a result of disproportion between the ambition of the planners on the one hand and the resources and capacity available to actually implement it on the other. Therefore, a proper analysis of resources and potentials is needed.

Keeping this in mind, we will review the selected targets and measures and go more into detail concerning their implementation. Specific elements which should be documented for each measure will be mentioned in this chapter. Although it should be noted that situations may arise where it is deemed necessary to revise and adapt actions, if barriers are encountered. This may require a repetition of the analytical and developmental phase for some measures.

Three issues of plan implementation will be given particular attention:

Implementation of set targets and measures (planting, installing equipment, etc.) in general. This includes the involvement of the population. The output is new UEA sites with completely implemented measures (see section 3.1).

Maintenance of UEA sites. Before any kind of vegetation can enfold its ecological functions, it requires much care. The output can be a maintenance and management plan including a time schedule (see section 3.2).

Monitoring of the process. It is important to have a long-term overview of the success of the measures. As a rule, it is based on selected indicators. The output is a monitoring and evaluation concept (see section 3.3).

3.1 Implement set targets and measures

UEA site creation

At this point each of the action planning teams for each pilot project is well prepared to implement their UEA sites. The preparation of the action plan began with general considerations considering project goals and how urban acupuncture would be utilized within their FUA (chapter 1). It was preceded by the creation of local action plans as part of a three-step process. The preparation phase, analytical phase and developmental phase. Here action planning teams created visions for their cities with local actors and citizens, collected and analysed documents in order to gain a better understanding of the local situation. Resulting in readiness to complete the final selection of UEA sites including defining of plan measures, actions and recommendations for the future (chapter 2). Finally, all these preparations have paid off and placed the team in a position to undertake defined plan measures, actions and recommendations.

Revising and adapting actions if needed

If during plan implementation complications arise where implementation of certain measures is no longer possible it may be necessary to rework your action plan. This would require partially repeating the analytical and developmental phases for certain measures. In this case it is wise for the action planning team to seek the counsel and inform external and local stakeholders and the project lead. It is important to communicate potential postponements in project implementation in order to avoid disappointment and to seek support where possible to minimize delays.

Tip: Implementing set targets and measures

- Each implemented action can be used to promote your UEA site. Tools already developed as part of the communication package, such as: twitter, the project website and newsletter, flyers and press releases can be used to publicise the progress made during pilot project implementation (Coyle 2011: 57).
- Signage or other forms of advertisements can be used to inform the public of the intended goals of each measure and which benefits are expected for the community as a result. This can also be a way to inform the public of the EU funding received.

3.2 Preparation of a maintenance and management plan

"Nothing thrives without care and the most excellent things lose their value through unreasonable treatment." This famous quote by the German gardener and landscape architect Peter Joseph Lenné is still relevant in landscape and green planning today. Green spaces are a long-term investment: it can take some time before they are able to fully provide their functions. To guarantee this, they need an adequate care.

For each of the UEA sites a maintenance and management plan should be prepared. It is important that the UEA sites are not only created but maintained for future use. Without proper care greenspaces especially those in high demand will exhibit signs of wear and tear. It would be a shame for the well-thought out design of each UEA site to deteriorate shortly after implementation.

Potential barriers toward UEA site maintenance include a lack of a legal requirement, a lack of funding and uncertainty concerning who is responsible for maintenance (GreenKeys Team 2008).

The action planning team will need to decide:

- What needs to be maintained and managed (considering both infrastructure and plantings)?
- Who will be responsible for maintenance and management of the UEA site?
- How often do maintenance measures need to occur?
- How will maintenance and management of the UEA site be funded?

The action planning team will need to examine each UEA site and decide what will be necessary to maintain in the future. This includes both infrastructure such as benches or gaming tables as well as greenery and plantings. Even something as simple as mowing the grass will have to be considered. How often does maintenance need to occur for each of the elements within your UEA site? How will maintenance and management be funded in the future? Partnerships between public agencies and private non-profits have been used in the past to maintain urban parks. Additionally, volunteers and businesses may have an interest in contributing to maintaining urban parks.

Tip: Gaining financial support in maintenance and management of the UEA site

- Many UEA sites serve multiple purposes for example they contribute to city cooling, water retention and increased resident well-being. These contributions can be used to acquire financial support. If financial resources for maintenance and management are lacking consider gaining financial support from various organizations that benefit from UEA (i.e. city planning departments, parks or utilities and public health) (Nagel, 2017).

3.3 Monitoring of pilot project impacts

It is critical to review and evaluate measures for urban green spaces in order to determine whether the measure delivers the intended benefits (i.e. functional aspect) and to examine whether certain population groups might benefit less or more of urban green (i.e. aspect of fairness and social justice).

In order to measure the impacts of implementing the UEA sites it will be necessary to select and develop indicators. First, consider what it is that you want to know about the effects of your UEA. This will be related to the anticipated impacts of the UEA site. For example, if the purpose of your UEA site is to counteract the urban heat island effect one would measure temperature reductions or increase in shade cover. If the purpose of the pilot project is to increase community interaction one might measure number of visits for a given time period and visitor origin. Regardless of the purpose of your UEA site, and respecting the relationship between ecological and social goals one will have to consider:

- How to monitor desired changes or impacts (i.e. what needs to be measured)?
- When and how often do indicators need to be measured?

Information related to resident satisfaction, indicators or UEA site usage can be collected via online or paper surveys, site visits i.e. inspection of pilot projects, environmental indicators based on the relevant jurisdictional methods and standards according the relevant project goals. Monitoring may vary according to the desired impact of UEA sites and be carried out by maintenance professionals, biologists, arborists, natural science professionals or trained volunteers. Checklists should be created which are used to examine both the landscape and other infrastructure on site (Coyle 2011: 254).

Tip: Monitoring pilot project impacts

- "Monitoring requires easily measurable indicators, expressed possibly in numeric form, that provide important and relevant information to project leaders and decision-makers."

  (GreenKeys Team 2008: 89)

Outlook and future perspectives for UEA sites

Future recommendations for the UEA Site

The action planning team and relevant stakeholders should provide future recommendations regarding each UEA site. Relevant recommendations for the future may relate to short, medium and long-term usage of UEA sites, necessary maintenance of infrastructure and greenery, human resource issues such as, selection of a long-term community liaison and future legal procedures such as renewal of contracts.

The European context

Consideration of the broad political and policy agenda within the EU regarding green infrastructure is also important to consider in examining the outlook and future perspectives for the UEA sites. The nature of small urban spaces and their potential for significant positive impacts on a larger scale is certainly appealing in addressing concerns of the European commission. The recently published EU biodiversity strategy has called for "enterprising and incentivizing" green infrastructure in order to increase biodiversity via action from citizens, businesses, social partners and the research and the knowledge community, as well as strong partnerships between local, regional, national and European level (European Commission 2020). The EU commission encourages corridors to prevent genetic isolation, allow for species migration, and maintain and enhance healthy ecosystems. Investments in green and blue infrastructure and cooperation across borders among Member States should be promoted and supported (European Commission 2020). It has recently acknowledged the importance of green urban spaces for physical and mental wellbeing in times of pandemics (e.g. COVID-19) (European Commission 2020). And further emphasizes the promotion of healthy ecosystems, green infrastructure and nature-based solutions which are systematically integrated into urban planning, including in public spaces, infrastructure, and the design of buildings and their surroundings (European Commission 2020). Previous communications from the EU Commission specifically the EU strategy on Green Infrastructure have emphasized the need to mitigate the urban heat island effect, create innovative methods to integrate green infrastructure, improve the knowledge base concerning benefits of ecosystem services and increase the number of skilled individuals to implement green infrastructure (European Commission 2013).

Tip: Future perspectives for UEA sites

"To bring nature back to cities and reward community action, the [European] Commission calls on European cities of at least 20,000 inhabitants to develop ambitious Urban Greening Plans by the end of 2021. These should include measures to create biodiverse and accessible urban forests, parks and gardens; urban farms; green roofs and walls; tree-lined streets; urban meadows; and urban hedges. They should also help improve connections between green spaces, eliminate the use of pesticides, limit excessive mowing of urban green spaces and other biodiversity harmful practices. Such plans could mobilise policy, regulatory and financial tools. To facilitate this work, the Commission will in 2021 set up an EU Urban Greening Platform, under a new 'Green City Accord' with cities and mayors"

(European Commission 2020)

Results of plan implementation are:

- → **UEA site creation**
- → **Maintenance and management plans with timetable**
- → **Monitoring and evaluation concepts based on an set of indicators**

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Annex

Example of an action plan outline*

"Action Plan for the City/FUA of […] based on Urban Environmental Acupuncture"

1. Introduction
   - 1.1 Concept of the Action Plan in the context of SALUTE4CE project
   - 1.2 Objectives of the Action Plan
2. Creation of an Action Plan for the City/FUA
   - 2.1 Challenges (initial situation)
   - 2.2 Visions and aims of the City/FUA
   - 2.3 Involvement of stakeholders and inhabitants
   - 2.4 Work program and schedule
3. Urban Environmental Acupuncture sites in the City/FUA
   - 3.1 Selection of UEA sites
     - 3.1.1 Site analyses
       - i. General information (demography, planning framework etc.)
       - ii. Physical information (morphology, hydrology etc.)
     - 3.1.2 Preselection and assessment of sites (using the WP1 assessment matrix)
     - 3.1.3 Specification of implementation sites
   - 3.2 Planning single actions
     - 3.2.1 Identification of measures and approaches
     - 3.2.2 Living lab discussion (public feedback)
     - 3.2.3 Specification of measures and approaches
   - 3.3 Recommendations
     - 3.3.1 Management and maintenance planning (incl. responsibilities and financing)
     - 3.3.2 Controlling (Monitoring)
     - 3.3.3 Outlook and future prospects
4. Summary (in English language; 5-10 pages, with the same outline as shown above)

** Based on an idea by Christian Bachmann/Die Impulsregion.*

Imprint

THE TRANSNATIONAL CONCEPT FOR ACTION PLANS

Scientific Report

In the framework of the project „Integrated environmental management of small green spots in functional urban areas following the idea of acupuncture“ – SALUTE4CE (2019-2022)

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Authors:

Jessica Hemingway, Juliane Mathey, Peter Wirth

Leibniz Institute of Ecological Urban and Regional Development

Weberplatz 1, 01217 Dresden, Germany

www.ioer.de

Dresden, August 2020