CONAMA 2020

CONGRESO NACIONAL DEL MEDIO AMBIENTE

URBAN GreenUP

As to the value of the re-naturing with nature-based solutions (NBS) in your city.

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This publication has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 730426 (URBAN GreenUP)

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1. TITLE

As to the value of the re-naturing with nature-based solutions (NBS) in your city.

2. KEYWORDS

Keywords: *methodology; re-naturalization; NBS; nature-based solutions; city; impact; sustainability; environmental benefits; social benefits; economic benefits; process; diagnosis; Risks evaluation; the barriers; procedures; action plan; urban challenges; urban development; green development; water management; coastal resilience; management of urban green spaces; air quality; urban regeneration; participatory planning; governance; social cohesion; public health; economic opportunities; green jobs*

3. SUMMARY

The methodology outlined in this report provides a way to implement Nature-Based Solutions (NBS) in urban areas, "solutions that are inspired and supported by nature (Cohen-Shacham et al., 2016), which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. (Maes J et al., 2015)" (Source: Sustainability 2020). The governance of urban areas is directly linked to the decisions being made regarding economic and social stability which are all tied to the inclusiveness, functionality and quality of life of urban landscapes (Kabisch et al., 2016). NBS are offered as a mechanism to promote resilience within socio-political discussions of landscape and urban development. But, what is the real value of re-naturing in my city? How to establish the goals? How can NBS be designed and implemented? What is the step by step action plan that can help you to achieve the goals you have in your city? This document addresses these questions, and is directed toward cities who are developing plans to re-nature their cities through the use of NBS.

To begin to answer these questions, let´s try to answer the opposite question, what would be a potential scenario of growth for our city without consideration of re-naturing? How would your city address challenges related to climate mitigation and adaptation? How would you address public health and well-being, air quality, urban regeneration and space management? What about the potential for a better economy? The nature-based solutions (NBS) are solutions to a number of societal challenges and not only climate change issues, but also water management, coastal resilience, urban green space management, air/ambient quality, urban regeneration, participatory planning and governance, social justice and social cohesion, public health, economic opportunities and green jobs (Source: based on classification created by the EKLIPSE initiative).

This guide will help you with the process on exploration, diagnosis and evaluation, as well with the definition of the impact that process on re-naturing may have on your city. Using NBS as a means of climate change adaptation and to mitigate carbon emissions can provide more resilient responses than conventional approaches. Improving risk management and resilience using NBS can lead to greater benefits than conventional engineered methods and offer synergies in reducing multiple risks.

4. INTRODUCTION

The real value of re-naturing in your city

The methodology outlined in this report provides a way to implement Nature-Based Solutions (NBS) in urban areas, "solutions that are inspired and supported by nature (Cohen-Shacham et al., 2016), which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. (Maes J et al., 2015)" (Source: Sustainability 2020).

The governance of urban areas is directly linked to the decisions being made regarding economic and social stability which are all tied to the inclusiveness, functionality and quality of life of urban landscapes (Kabisch et al., 2016). NBS are offered as a mechanism to promote resilience within socio-political discussions of landscape and urban development. But, what is the real value of re-naturing in my city? How to establish the goals? How can NBS be designed and implemented? What is the step by step action plan that can help you to achieve the goals you have in your city? This document addresses these questions, and is directed toward cities who are developing plans to re-nature their cities through the use of NBS.

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5. RUP METHODOLOGY

How to effectively start the re-naturing?

"Citizens are at the heart of a city and also at the heart of the challenges cities face through on-going urbanisation and demographic mix, consumption habits as well as increasing expectations as regards quality of life. Citizens must therefore also be at the heart of the solution"(Source: European Innovation Partnership on Smart Cities and Communities - Strategic Implementation Plan, 2013).

Co-creation is an advanced, modern form of community engagement. Collaboration of diverse stakeholders such as governments, NGOs, scientists, interest-groups, philanthropists and

charities are likely to enhance the social and environmental outcomes of NBS. Involving of the residents, business and other groups of society taking part in the development and implementation of your Renaturing Urban Plan can also greatly improve its chances of success. When citizens are engaged in shaping their public spaces, services, and there is a true culture of empowerment and co-creation between citizen and local authorities, then NBS are thought to be more effective in addressing societal challenges. Citizens are central stakeholders because they not only help to build the cities and the services to better focused their (users) interest, but also will automatically protect the environment once created. Collaboration of diverse stakeholders such as governments, NGOs, scientists, interest-groups, philanthropists and charities are likely to enhance the social and environmental outcomes of NBS.

As a first step, and once identified the key stakeholder groups and their aspirations, the different techniques for engaging these groups need to be considered. The choice of each method or technique should come from an examination of approaches that are likely to be beneficial for the stakeholders as well as supporting the desired decision or co-creation outcome.

The team involved in developing the RUP can then start to define the main targets for the city, and to translate them into the language of challenges, and select the ones that will most positively affect the city environment and its habitants. The process will allow the identification of the different nature-based solutions that are the best option to the city environmentally, socially, technically and economically.

Methodology to make re-naturing reality in cities

To support re-naturing journey of the cities, URBAN GreenUP developed a systematic strategy to reach high level of impacts through the use of NBS. It aims to provide an integrated methodology to support the Urban Planning of NBS at the local city level, as a powerful strategy to contribute to increase sustainability, addressing a range of societal challenges.

URBAN GreenUP introduces the concept of Renaturing Urban Planning, which incorporates NBS alongside the traditional urban planning aspects to generate a more sustainable approach to Urban Planning. In parallel to traditional planning processes, the methodology supports cities in the direct implementation of one or more NBS in a specific area or across the city to address specific societal challenges in a more effective and ecologically sustainable way.

The social aspects are considered one of the main key elements, and the economic issues complementing the environmental one, fostering the creation of good business cases to solve the general lack of budget of the public administration. To achieve good outcomes, a co-creation approach is adopted in the definition of the methodology, from the definition and design of the technical solutions to the final assessment. This ensures that NBS are adapted to the local context, that they address local priorities and needs of stakeholders, and work within the opportunities and constraints of the local context.

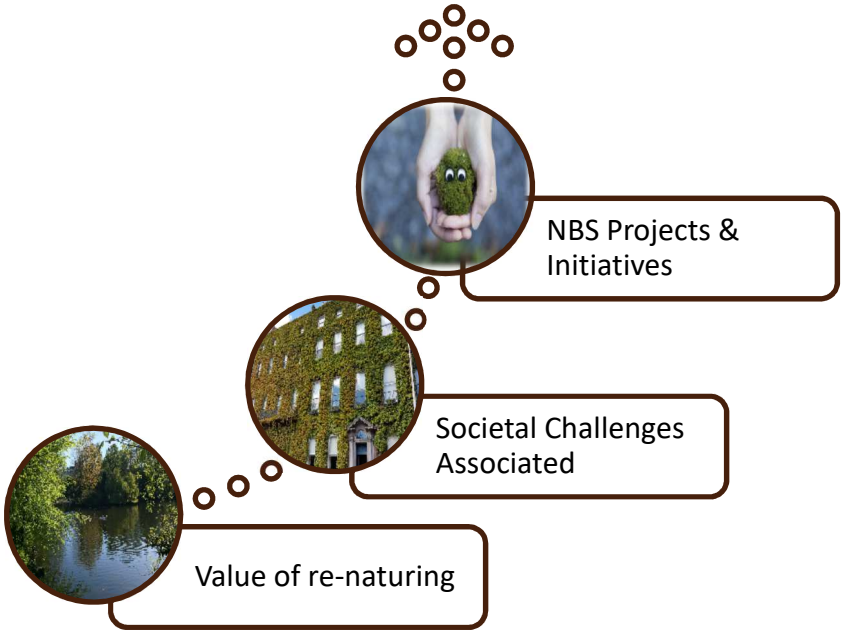

Figure 1. The RUP methodology key elements (Source: URBAN GreenUP)

There are a number of other questions that are addressed, i.e.:

- What is the purpose? – Development of the local (RUP) Renaturing Urban Plan answering the city challenges established.
- What is new? – The focus on NBS, projects and initiatives, as an integral part of the plan and a solution to local city barriers and functions.
- How to focus your actions? – Linked to the current city strategy and planning, in specific city environment, traditions, local character.
- What should be the process? – Cities develops the RUP plan being supported by easy to follow step-by step procedures and tools.
- Who should be involved? – City re-naturing key partners including citizens.
- How far should be considered? – This is an iterative process starting with assessment, and adjusting responses based on the lessons learnt. Proper monitoring, evaluation, and appropriate timing should be established in the planning process.

The method produces a RUP, which should be fully integrated in the city's urban planning and land use planning processes. The method also enables cities to specify a set of NBS to mitigate one or several societal challenges, ready to the tendering process.

This holistic approach to the methodology builds in part on the experience of the cities involved in Urban GreenUP. This includes both successes and problems encountered in the 'real world', and lessons learned through the process of implementing NBS in the 'leading' cities of Liverpool (UK), Izmir (Turkey), Valladolid (Spain), and simultaneously validated in 'follower' cities of Mantova (Italy), Ludwigsburg (Germany), Medellin (Colombia), Changdu (China), and Quy Nhon (Vietnam).

How to use the guide to re-naturing and who is it for?

The Public Authorities of the local municipality can initially take the role of a leader and coordinate all of the re-naturing actions, in parallel linking them to the local goals established, identifying the team, its communication channels, and taking care about the proper dissemination and evaluation of all the results. The guide is created with this audience in mind. The residents, business and other groups of society, involved directly or indirectly into the development and implementation of city Renaturing Urban Plan, can also take advantage of this guide, as NBS developers and integrators.

Urban GreenUP methodology is developed as a modular procedure in order to achieve a clear, easy to follow method, a step-by-step procedure for re-naturing urban areas. The methodology was described by actions corresponding to each methodology phase and step. There are also identified all important methodology components to have in mind, like specific outputs to be achieved with every action.

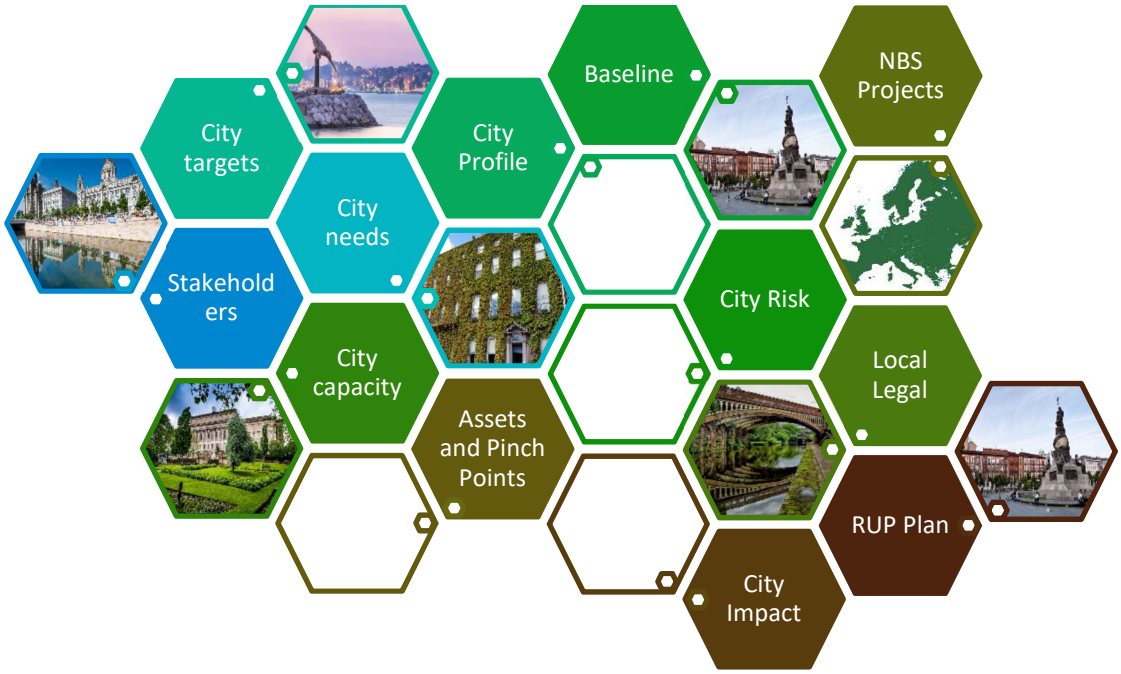

Figure 2. Components of URBAN GreenUP methodology (Source: URBAN GreenUP)

6. RESULTS ACHIEVED

Diagram summarizing the methodology

The URBAN GreenUP methodology process is referring to the strategic planning framework of the city, with the aim to introduce the re-naturing concept by means of NBS, towards the EU sustainable politics. It enables the city administration to perform an effective step-by-step urban action plan.

The methodology is divided into phases and steps and leads to the creation of the "Renaturing Urban Plan" (RUP) of the city

Table 1. Graph to the methodology main components by phases, steps, actions and RUP chapters (Source: URBAN GreenUP).

How to start?	1st. Understand your present	2nd. Choose your future aspirations	3rd. Integrate RUP and keep	"Renaturing Urban Plan"
A. Engage and Co-create	Action 1A. Identify and involve stakeholders	Action 2A. Prepare for co-delivery		Chapter I. Introduction to Re-naturing
B. Explore	Action 1B. Understand your "city" needs	Action 2B. Choose your "city" targets	Action 3B. Prepare RUP Plan integration into the Urban Plans of Local Municipality	Chapter II. City Targets
C. Diagnose	Action1C. Understand your "city" capacity	Action 2C. Evaluate NBS Scenarios and select one	Action 3C. Define list of NBS Projects and Actions	Chapter III. City NBS Adopted Scenarios
D. Visualize	Action 1D. Map challenges	Action 2D. Set spatial priorities for NBS	Action 3D. Prepare assessment of the Impact and Risk	Chapter IV. City Impact
E. Plan	Action 1E. Establish Baselines	Action 2E. Choose how success will be monitored	Action 3E. Prepare the Up-scale Plan	Chapter V. Monitoring Program and Action Plan
F. Inform	Action 1F. Promote the initiative	Action 2F. Publish the RUP	Action 3F. Define budget, roles and responsibilities	Chapter VI. Roles and Responsibilities
A. Engage and Co-create	Action 3A. Assess lessons learnt and validate the strategy			Chapter VII. Processes and reforms

How to follow the systematic process

The methodology consists of 18 actions, organized in phases (1- 3), and strategic steps (A- F). The phases deal with the maturity of the objective of the re-naturing in time (from present to future), while the steps develops the specific technical components of the methodology process (from engagement to plan).

Table 2. Graph to the methodology main components and simplified (Source: URBAN GreenUP).

Actions organized at horizontal axis by phases:	Actions organized at vertical axis by steps:
i. **Understand your present** ii. **Choose your future aspirations** iii. **Integrate RUP and keep**	A. Engage and Co-create B. Explore C. Diagnose D. Visualize E. Plan F. Inform

Depending on the current status of each municipality, the point of departure can vary as some methodological steps might have been previously completed as part of other planning processes. In addition, the way of following of the methodology by different re-naturing team may vary. They may choose to follow it vertically or mainly in horizontal order. One of the important analysis consist in evaluation of the current situation regarding this process.

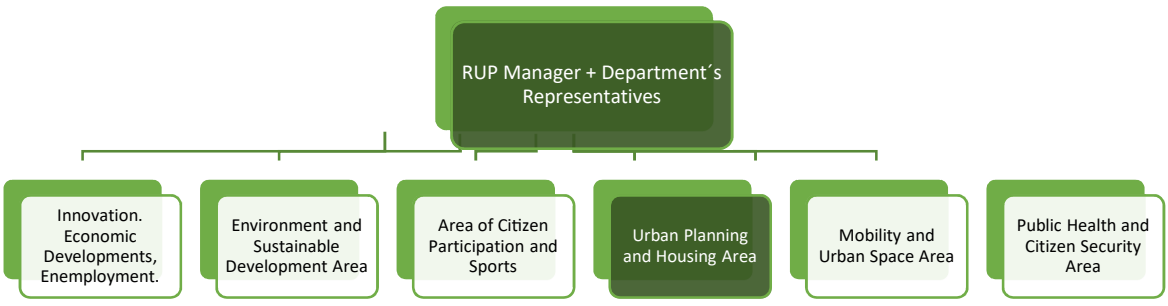

Figure 3. Example to the Municipality Departments co-related to RUP

The re-naturing process followed in a particular city will depend on a number of factors. For example, it will vary depending on the specific structure of the municipality, e.g. the execution of the re-naturing plan, and its different phases, steps and actions, can be associated to different departments of municipality, or selected multidisciplinary groups, supported by key experts or a team leader (RUP coordinator). In addition, the interactive and co-creation activities between them established will support the coherence between all the actions, its outputs and inputs needed.

The plan to Renaturing Urban Plan (RUP) should contain a written document, kind of the local re-naturing roadmap or action plan, where all the re-naturing actions are agreed between all

parties. The same, it should be a result of a collaborative work between the different actors, identified at the beginning of the process.

The outputs by phases and steps

The methodology proposes the outputs (phase and step linked) to be delivered once you have completed the specific action. The supporting tools, in preparation of the outputs of the step B. Explore, step C. Diagnose, Step D. Visualize, are listed.

Table 3. The main outputs of actions taken by phases and steps. (Source: URBAN GreenUP).

How to start?	1st. Understand your present	2nd. Choose your future aspirations	3rd. Integrate RUP and keep	"Renaturing Urban Plan" Contents
A. Engage and Co-create	• List of key stakeholders groups. • List of capabilities, interests, relationships for each group.	• Co-creation plan.		**Chapter I.** Introduction to Re-naturing
B. Explore	• The city re-naturing goal.	• The city challenges and sub-challenges and why they're prioritised.	• The legal constrains. • The public procurement processes. • The funding opportunities. • The outline to the integration of the RUP methodology into the Municipality Planning	**Chapter II.** City Targets
C. Diagnose	• City profile definition.	• NBS scenario. Use the URBAN	• NBS Scenario Report	**Chapter III.** City NBS Adopted Scenarios
D. Visualize	• Key focus areas for NBS	• List of green assets and pinch points	• NBS Risk Assessment	**Chapter IV.** City Impact
E. Plan	• Plan for collecting baseline data across a defined set of indicators	• KPIs prioritization for NBS	• The up-scale plan	**Chapter V.** Monitoring Program and Action Plan
F. Inform	• Internal stakeholders, external groups and community groups. • Promotion of the initiative among the stakeholders. • The early list of NBS for consideration.	•Plan to Urban Renaturing (RUP)	• The organizational structure of the Municipality for the implementation of the RUP. • Local Communication and Dissemination plan. • Define the financial plan.	**Chapter VI.** Roles and Responsibilities
A. Engage and Co-create	•Assess lessons learnt and validate the strategy.			**Chapter VII.** Processes and reforms

The process supporting the outputs development

The URBAN GreenUP project includes the tools and guides that supporting the methodology process, and help in the development of the outputs in actions 1B, 2B, 1C, 2C, 3C, 3D, 3A.

Table 4. Supporting tools and guides by phases and steps. (Source: URBAN GreenUP).

How to start?	1st. Understand your present	2nd. Choose your future aspirations	3rd. Integrate RUP and keep	"Renaturing Urban Plan" Contents
A. Engage and Co-create		**Action 2A.** • **Co-creation plan.** *(Source UGU D1.11)* *! Supporting all the actions!*		**Chapter I.** Introduction to Re-naturing
B. Explore	**Action 1B.** • The city re-naturing goal. **Supported by:** • **1st Kick-off Workshop of the City** *(Source UGU D1.3)*	**Action 2B.** • The city challenges and sub-challenges and why they're prioritised. **Supported by:** • **URBAN GreenUP Societal Challenges Catalogue** *(Source UGU D1.2)*		**Chapter II.** City Targets
C. Diagnose	**Action 1C.** • City profile definition. **Supported by:** • **2nd Workshop of the City** *(Source UGU D1.3)*	**Action 2C.** • NBS scenario. Use the URBAN **Supported by:** • **URBAN GreenUP NBS Scenario Tool** *(Source UGU D1.7)*	**Action 3C.** • NBS Scenario Report **Supported by:** • **URBAN GreenUP NBS Catalogue** *(Source UGU D1.1)*	**Chapter III.** City NBS Adopted Scenarios
D. Visualize			**Action 3D.** • NBS Risk Assessment **Supported by:** • **URBAN GreenUP NBS Selection Tool** (Source UGU WP6 Tool, D1.11)	**Chapter IV.** City Impact
E. Plan		**Action 2E.** • **KPIs prioritization for NBS** **Supported by:** • **URBAN GreenUP NBS Scenario Tool** *(Source UGU D1.7)*		**Chapter V.** Monitoring Program and Action Plan
F. Inform	**Action 1F.** • **Promotion of the initiative among the stakeholders.** **Supported by:** • **URBAN GreenUP Info Channel** *(Source UGU D1.11)*			**Chapter VI.** Roles and Responsibilities
A. Engage and Co-create				**Chapter VII.** Processes and reforms

Helping Tools: workshops, webilogs (webinars + dialogues with experts: urban developers, economists, environment experts, doctors-healthy cities). Workhsops (pass to practical study cases): co-creation. As in case of the RUP re-naturing process to diagnosis and scenarios definition, the tool may be applied to the scaling up objectives.

- Description: address local needs.
- Engineering (infrastructures needed, timing, phasing, and costs).
- Finance: cost-benefit analysis, involved institutions, social benefits.
- Governance: structure of the city and possible evolution.

Master Scenario selected after setting up the previous visions, where the strategic objectives of the plan will be created. Following its objectives, several main axes and strategic lines will propose sectorial groups of actions, to fulfil the city vision chosen (indicating the timeframe), which is intended to be achieved by the identification of specific projects under each of those strategic lines. Each of those projects will present an estimation of budget, a description, key responsible of development.

The establishment of the baseline condition in the locations where the interventions will be implemented, e.g. within a region, city, or neighborhood is a base action. This action must therefore include the development of key performance indicators (KPIs) for monitoring this baseline condition, to allow for direct comparison before and after the interventions. It must also link to the diagnosis process and provides clear links between the identification of key needs, opportunities and barriers to investment in NBS.

Impact assessment. KPIs adapted to each scale. A characterization report template has been prepared to enable cities to characterize their specific contexts, in terms of important variables like climate, organizational traits and built form. The replication methodology is developed from the analysis framework drawing from cluster analysis of the best suitable NBS for certain characterizations of urban pressures and its indicators. The characterization reports from participating cities (front runners and followers) will be cluster with common driving pressure, social and natural conditions that entail the implementation of NBS to address the driving pressures. Together with the situational institutional conditions of each cluster the analysis framework will produce recommendations of the proper NBS implementation and replication in other cities with similar condition. An analysis framework for the cluster of driving pressures mapping with corresponding NBS under the enabling conditions will be produced and documented with certain key indicators for the proper replication of the demonstrated NBS or NBS catalogue developed under this project.

Table 5. Logic to the scaling up of KPIs proposal (Sources: URBANGreenUP).

NBS Challenge (EKLIPSE Source)	Indicators	Current Impact	Expected Impact
Ch1-…	KPIs LIST	Base level	Proposed level

Monitoring Process assessment. Procedures definition to the evaluation and in the way of data collection. One or more analytical tools will be prepared to facilitate testing of capabilities and matching of NBS to desired impacts. The tool(s) will help cities understand their strengths and weaknesses, and recommend NBS that align with their needs and organisational capabilities. The viability of the scaling up, will be identified according to how, "Credible, Relevant, with relative advantage over existing practices , Easy to adopt, Compatible and Able to be tested" the methodology is.

Lessons learnt from cities of reference: The guideline to the scaling up plan is alimented with URBAN GreenUP learns from lighthouse cities initiatives, and the results of the implementation process for city of Valladolid (Spain), Izmir (Turkey), Liverpool (UK) and continuously networking with the follower cities according their specific needs, barriers, objectives and difficulties found in RUP plan definition process.

7. DISCUSSION

How to maintain the methodology over time

Selecting the right NBS for a city is a very important part of a RUP. There are big differences between cities in Europe, and around the world. An NBS that is very successful in one city may completely fail into another.

The analysis should start with identification of the objective depending on the specific city character, targets proposed, and it's scaling up dimensions. It is not the same to treat with the Smart City neighborhood units, or rather, testbed micro infrastructures, we are focusing on Intelligent traffic systems, or potential the resource management systems and participation platforms.

NBS is a part of the continuous system (natural environment) in interaction to other components like:

- Transport
- Places of work
- Residential spaces
- Institutional buildings
- Social facilities (schools, etc.)
- Public spaces with identity of the place.

Understanding how a city may replicate NBS that have been successful in other cities requires a good grasp of the factors that make NBS suitable for different contexts. The key suitability criteria for replication are conceptualized:

- Cities have different organizational strengths and weaknesses, and different NBS place different demands on those NBS. Important factors like political support, legislation and organizational integration are vital determinants of what NBS are suitable.

- Cities also have different challenges that they are facing. A city facing heat island effects and flooding may require very different NBS to a city that is seeking to deliver urban renewal and improve the health and wellbeing of its residents.
- Finally, each city will have different abilities to pay for the construction and maintenance of new NBS.

This step-by-step methodology is not conceived as linear process, but as circular one. The step A (Engage and co-create step) is considered at the beginning and at the end of vertical actions.

The Action 3A "Assess lessons learnt and validate the strategy" give continuity to repeat the process in time and guarantee "scaling up", "replication" and City Green Goal maintenance.

Drivers supporting the re-naturing success

The supporting actions as listed below:

- **European and regional politics NBS based, supporting the local growth,** promoting sustainable city grow, energy efficiency and air quality, and guiding the environmental, social, economic aspects of the city
- **NBS as a driver to overcome the city emergent problems, in reference to the city barriers associated to zones** Political barriers; Technical barriers; Legal / Organizational barriers/ Administrative; Social / Cultural barriers; Financial/ Economical barriers (conflictive zones, bleak, deserted, low-economic, low air quality…between the others more specific).
- **Local NBS initiatives lunched by the local network in link to the challenges adopted by city** URBAN GreenUP approach. Climate mitigation and adaptation; Water management; Coastal resilience; Urban green space management (including enhancing/conserving urban biodiversity); Air/ambient quality; Urban regeneration; Participatory planning and governance; Social justice and social cohesion; Public health and well - being and Potential for new economic opportunities and green jobs.

8. CONCLUSIONS

Vision, People, Process

"Three important factors for successful Smart Cities and the deployment of solutions: a clear vision; the involvement of citizens, representatives and local businesses; and efficient processes" (Source: Mapping Smart Cities in the EU, European Parliament's Committee on Industry, Research and Energy, 2014). Where, the **successful initiatives** are defines as: observable indicators through the life cycle of the initiative: attracting wide support, having clear objectives aligned to policy goals and current problems, producing concrete outcomes and impacts, being imitated or scaled. The **successful cities** concluded as: having meaningful objectives (aligned with Europe 2020 and actual outcomes) covering a mix of policy targets and characteristics; having a balanced portfolio of initiatives; attaining maturity (on our scale); actively joining in Smart City networks.

Table 6. Factors for successful Smart Cities adopted in URBANGreenUP methodology (Source based: Mapping Smart Cities in the EU, European Parliament's Committee on Industry, Research and Energy, 2014).

Factors for success	Description
Vision	*"The study makes clear that inclusion and participation are important targets for successful Smart City programmes to avoid the polarization between the urban elite and low income areas." (Source: Mapping Smart Cities in the EU, IR&E)* The objective of URBANGreenUP is to deliver trans-disciplinary and community-based stakeholder engagement strategy including the social sciences and humanities best practices in the co-design, co-development and co-implementation of the city´s NBS projects. The engagement-oriented program focuses on the social benefits of engaging with nature, biodiversity and green spaces in cities.
People	*"The case studies highlight the inspiring leaders ('city champions') behind many successful initiatives. Citizens should be empowered through active participation to create a sense of ownership and commitment, and it is important to foster participative environments that facilitate and stimulate business, the public sector and citizens to contribute." (Source: Mapping Smart Cities in the EU, IR&E)* Local people and experts can hold highly relevant knowledge for the management of NBS, ranging from cultural history to geomorphology. Involving a range of stakeholders can offer much needed trans-disciplinary approaches to tackle complex modern problems. Collaboration of diverse stakeholders such as governments, NGOs, scientists, interest-groups, philanthropists and charities are likely to enhance the social and environmental outcomes of NBS. Once identified, this list of stakeholders becomes a central part of your project, as many of these groups will be involved in the development and implementation of the RUP at some level. It is important to identify these parties early and plan to involve them appropriately in your project.
Process	"*The creation of a central office that acts as go-between for Smart City ideas and initiatives, drawing in diverse stakeholders, is of vital importance and allows coordination of ideas, projects, stakeholders and beneficiaries. Local level coordination can also be important for uptake, to ensure the integration of solutions across the portfolio of initiatives." (Source: Mapping Smart Cities in the EU, IR&E)* The URBANGreenUP guide to the methodology helps in definition of all the outputs needed, following the step by step action process to city re-naturing plan. The RUP informing channels for the RUP promoting initiative at the municipality level and from the early beginning developed. In addition, the information and discussion channels will be performed, to gather the feedback and propositions from different stakeholder groups, and to assess the NBS scenario adopted. The currently identified legal aspects, tendering process, but also the technical constrains, specified with the roles and responsibilities, and articulated the different stakeholders that will take part in it, allowing the correct implementation and maintenance of the RUP.

URBAN GreenUP introduces the concept of Renaturing Urban Planning, which incorporates NBS alongside the traditional urban planning aspects to generate a more sustainable approach to Urban Planning. In parallel to traditional planning processes, the methodology supports cities in the direct implementation of one or more NBS in a specific area or across the city to address specific societal challenges in a more effective and ecologically sustainable way.

The social aspects are considered one of the main key elements, and the economic issues complementing the environmental one, fostering the creation of good business cases to solve the general lack of budget of the public administration. To achieve good outcomes, a co-creation approach is adopted in the definition of the methodology, from the definition and design of the technical solutions to the final assessment. This ensures that NBS are adapted to the local context, that they address local priorities and needs of stakeholders, and work within the opportunities and constraints of the local context.

9. BIBLIOGRAPHY

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This publication has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 730426 (URBAN GreenUP)

Catalogues

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- **Societal Challenge Catalogue *(URBAN GreenUP D1.2) , Source: URBAN GreenUP, July 2018***, https://www.urbangreenup.eu/resources/deliverables/
- **Diagnosis procedure Guide *(URBAN GreenUP D1.3), Source: URBAN GreenUP, September 2020***, https://www.urbangreenup.eu/resources/deliverables/
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- **Barriers and Boundaries Guide *(URBAN GreenUP D1.5), Source: URBAN GreenUP, July 2018***, https://www.urbangreenup.eu/resources/deliverables/
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Tools

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