CLEVER Cities guidance on co-creating nature-based solutions

PART II - Running CLEVER Action Labs in 16 Steps

Deliverable 1.1.6

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Contents

Executive Summary

This deliverable is composed of Parts I and II. The first part contains three main chapters, outlining the CLEVER Cities co-creation framework, the implementation of the co-creation pathway on nature-based solutions, the understanding of co-benefits of nature-based solutions and stakeholder engagement at all levels of implementation along the process. Each chapter provides a series of definitions of key terms, main concepts and approaches to implementation within the CLEVER Cities project.

This Part II of the guidance entails a series of steps and a toolkit for the implementation of the co-creation process. Specifically, 16 co-creation steps are envisioned in a complete co-creation pathway to support cities to achieve successful implementation of NBS. The guidance illustrates the co-creation steps through a series of practical sheets, tools and templates that cities can follow and easily adapt to their needs and specific context. In particular, each step is composed by one or more activities, which are marked as fundamental, recommended or optional.

Implementing original and innovate green measures is a big challenge in a complex context like a city; hence, the effective and fruitful collaboration of a multitude of stakeholders is required from the very beginning. In fact, we argue that only a shared commitment and engagement around nature-based solutions is the prerequisite for a truly inclusive urban regeneration. Therefore, the approach of this work is based on a comprehensive interpretation of the concept of co-creation, whereby collaborative design covers the whole process, from the engagement of stakeholders through the Urban Innovation Partnership, to the ideation (co-design) to the co-implementation and taking care of the solutions. Positive stories could even be promoted and replicated elsewhere by the proponents or Fellow Cities (co-development phase).

In this first version of the guidance, the contents and wording have been strictly tailored to CLEVER Front Runner Cities' needs, following the calendar of activities and deliverables defined by the project. Once the pathway has been tested in the pilot project sites, the guidance will be revised and translated into a more universally applicable language.

The CLEVER Cities Co-Creation pathway and stakeholder engagement methods in 16 Steps

A total of 16 steps are envisioned to support cities in successfully implementating NBS. Each step, as reported in **Figure 1**, is composed of one or more activities, which can be flexibly implemented by each city, depending on their local contexts (e.g. geography, geology, climate conditions; social, economic and cultural structures). . For each step, it is important to achieve an outcome.

PHASE 1 ESTABLISHING THE UIP	
1	Identify CLEVER Cities project within the city local context
2	Map and Engage Stakeholders
3	Launch the Urban Innovation Partnership
4	Design the Platform according to the local context

PHASE 2 CO-DESIGN	
5	Define the co-design kick-off and analyse the Status Quo
6	Design the CAL space internally
7	Launch the CAL at local level
8	Co-Design the Nature-based Solutions
9	Disseminate Co-Design activities
10	Co-Design and test alternative design scenarios

PHASE 3 CO-IMPLEMENTATION	
11	Co-Implement the joint project
12	Verify the CAL co-implemented action in place

PHASE 4 CO-MONITORING	
13	Co-Monitor and Map the progress of implemented NBS
14	Verification of Co-benefits of NBS

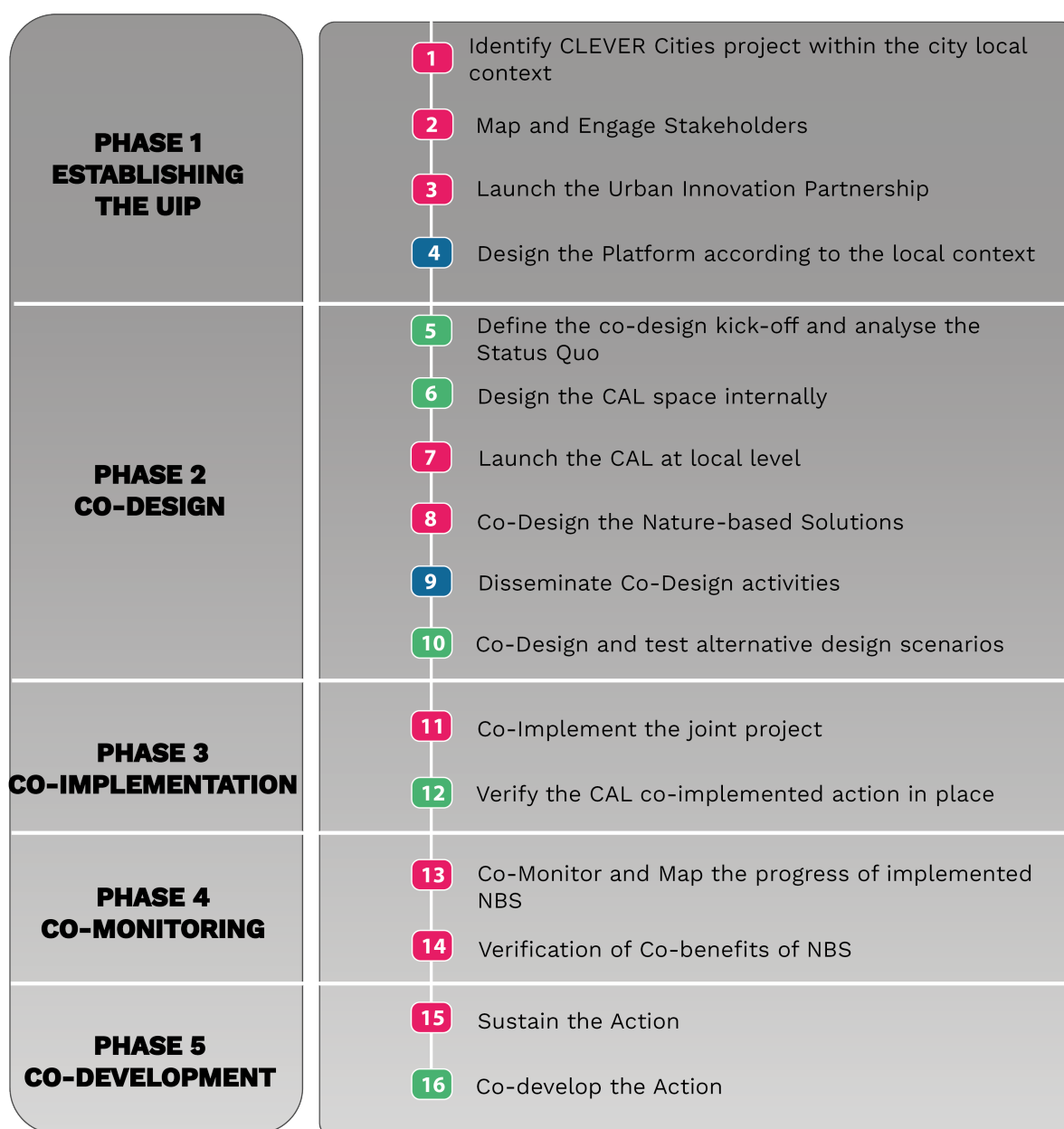| PHASE 5 CO-DEVELOPMENT	
15	Sustain the Action
16	Co-develop the Action

Figure 1: A detailed graphic illustration of the 16 steps envisioned for the co-creation Pathway.

A colour distinction among the compulsory steps and optional ones is provided in the form of flags next to each requirement. These are to keep the pathway flexible yet consistent across cities. The blue colour stands for an optional step/tool, green stands for recommended steps, and magenta stands for fundamental/mandatory steps.

Optional step/tool   Recommended step/tool   Fundamental step/tool

How are the steps illustrated?

For each step, a short **presentation** of the objective and content is introduced along with **logistical considerations**. This is to help understand the effort (in terms of time and resources) and type of activities required per step, as this varies greatly.

The second table describes the fundamental information of each step, namely:

- **Phase**: represents the corresponding WP task and the connected deliverable that the proposed activity of the step supports

- **Level of implementation**: the scale of action, varying from the city scale (where general strategies are assessed) to the CAL scale (where specific NBS projects take place); i n general, the first phase of the pathway has to be carried out at the city level, why the all the others require to act at the CAL level.

- **When**: defines when the activity has to be carried out according to the Grant Agreement; cities can adapt the dates, if required by local conditions (e.g. the implementation of the single NBS has a specific timeline). The timeline of the pathway is illustrated in **Figure 2**.

- **What**: summarizes the topic, the objective and the product of the step, which is always a synthetic **output report** where cities summarize the activity.

- **Why this activity**: reason why the specific modality envisioned for the activity was proposed is detailed here.

- **Who – With Whom**: specifies who is carrying out the step, depending on the scale of the activity (city level or CAL level) and the content (it might be more or less inclusive).

A series of **prerequisites and checks** are then outlined, as appropriate. These are to be considered as tips for those leading the step or facilitating it. Here, a list of preliminary actions and information are provided that may be necessary to collect in advance, before starting the step itself.

The next sheet is on **how** to carry out the respective step. **Expected outcomes** are explicitly listed and a series of **suggested activities and tools** are proposed. A series of hyperlinks redirect the reader to the specific tools and templates (see **Figure 3**).

Co-Creation Pathway

Establishing the UIP

URBAN INNOVATION PARTNERSHIP (UIP)

CLEVER ACTION LAB (CAL)

co-design

co-implementation

co-monitoring

co-development

M01
M06
M12
M18
M24
M30
M36
M42
M48
M54
M60

S 01 S 02
S 03
S 04
S 05
S 06
S 07
S 08
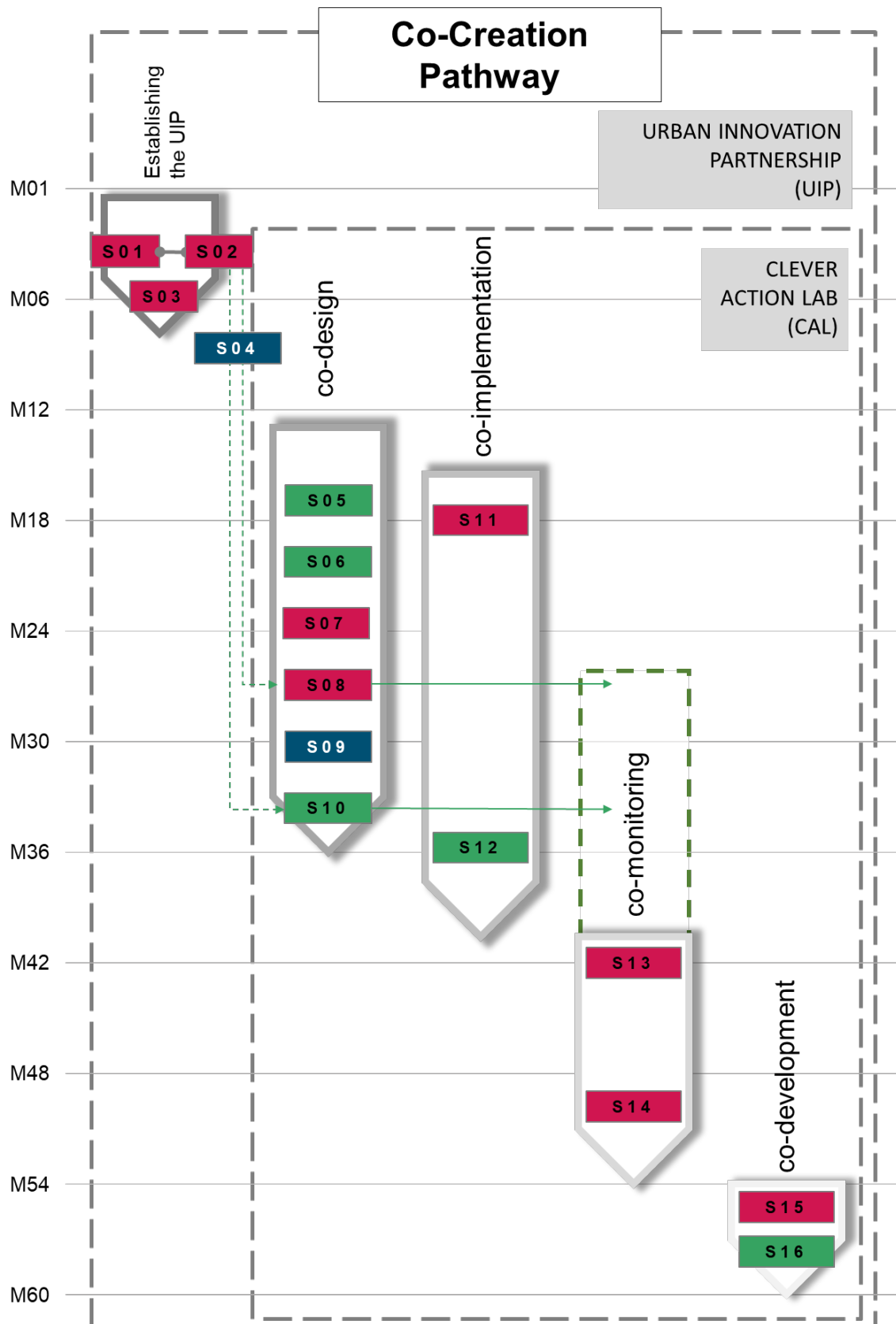S 09
S 10
S 11
S 12
S 13
S 14
S 15
S 16

Figure 2: A pathway developed along the 60 months of Clever Cites, according to the main tasks.

You can directly refer to the steps and required output report and can also make use of the suggested tools and templates, where desired.
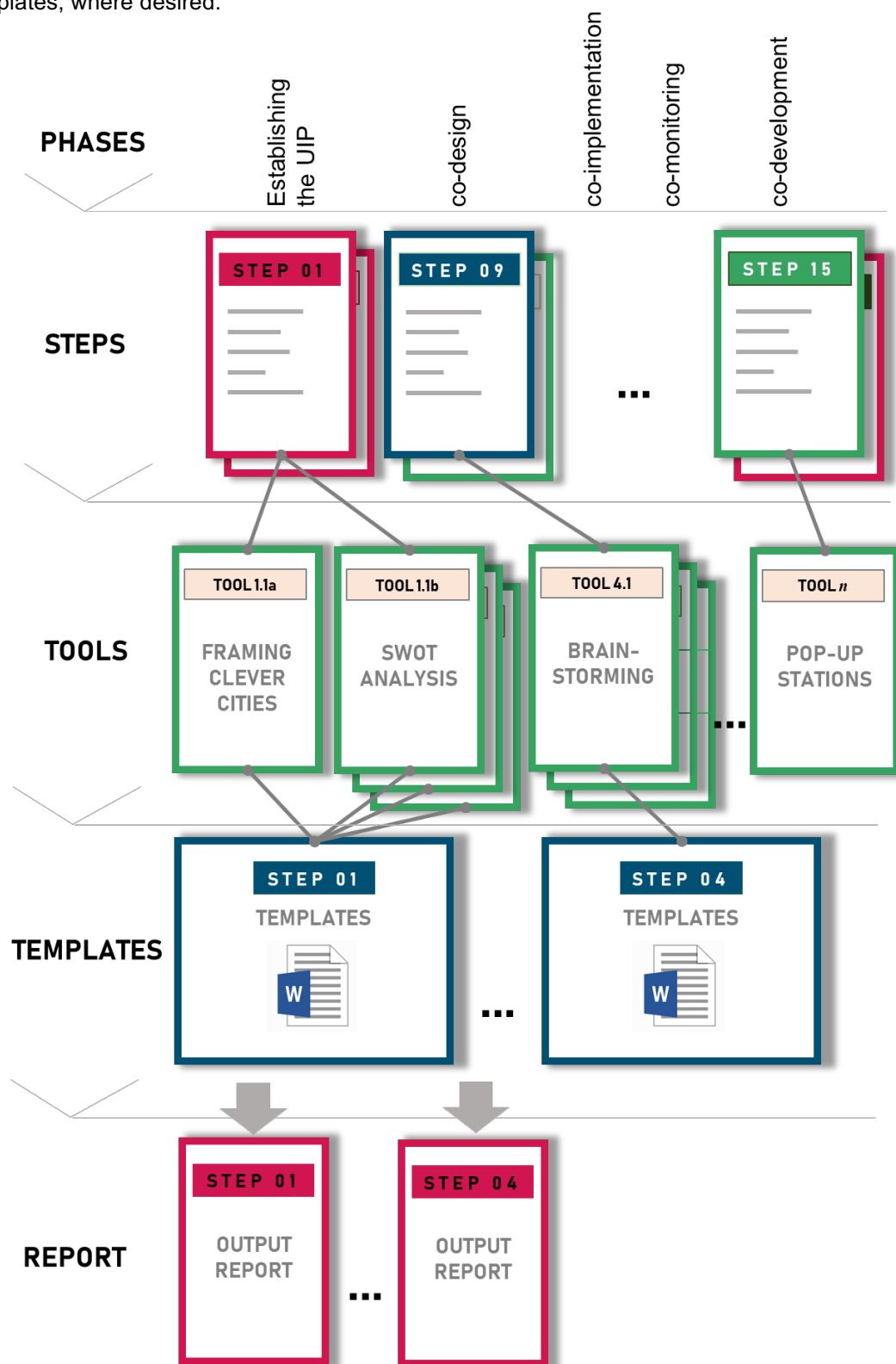

Figure 3: A Pathway organized in a series of practical materials and technical insights: steps, tools and templates.

Who carries out the activities?

Each city identifies the team that will carry out the co-creation activities. We highly recommend allocating the following roles in the pathway:

1. **The project manager** will run the co-creation process at city level: this role covers the organizing secretary and will be responsible for inviting partners and stakeholders to co-creation events.

2. **The co-creation facilitator** will be responsible for organizing and carrying out all the activities proposed. The facilitator will prepare the activities based on the steps suggested by this guidance, will select the tools best suited to achieve the desired outcomes, and adapt the templates provided in this guidance.

3. **The communication manager** will have the overview on the entire narration at the city level, follows the storytelling of the co-creation path, collects pictures and eventually records videos and interviews to catch important phases of the project; communicates the main messages and outcomes through local media and social media and to the CLEVER Cities communication work package team; this person will also be in charge of constantly updating the local website.

Optionally, depending on the availability of resources and the number of CALs activated at the local level, each city can decide to activate the same roles listed above at the CAL level as well.

> **REMEMBER:**
>
> **Urban Innovation Partnership (UIP)** is a "city-wide or district-focused informal alliance of local and city authorities, community (groups), businesses, academics to promote the NBS for regeneration or urban transformation, facilitate and drive the co-creation process. More specifically, each UIP supports one or more CLEVER Action Labs (CAL)".
>
> **CLEVER Action Labs (CAL)** will co-design, co-implement and co-manage NBS interventions in the deprived districts starting from specific place-based NBS technologies as impulses.
>
> Each UIP supports one or more CLEVER Action Labs (CAL) as alliances of locally involved actors specifically interested or relevant to realize place-based NBS interventions 'on site' with one specific CLEVER stimulus.

Who else should be involved beyond the Urban Innovation Partnership?

Co-creation does not limit its area of influence to the local level and CLEVER Cities WP2 partners only. The real challenge for the local team is to include other work packages (WP) to get involved in the co-creation process. We want to find synergies among different tasks and converge all the efforts to the same aim, namely to spread successful stories of NBS implementations in cities. Win-win situations can emerge from an anticipated collaboration with CLEVER Cities work packages to optimize the distribution of work load and avoid duplications.

This requires a holistic view whereby the more expertise you involve and the more audience you can reach out to, the more possibilities you have to achieve a tangible and successful solution.

Table 1 illustrates the main collaborations you can explore and possibly activate along the co-creation steps. Potential synergies of the co-creation pathway to other WPs will be recalled at each step description later in the guidance. Nevertheless, Table 1 give back potential collaborations at a glance, so that project managers can immediately establish a connection to local WP responsible persons.

Table 1: WPs you might want to involve along the co-creation process.

16 Co-Creation Steps		in synergy with				
		WP3	WP4	WP5	WP6	WP7
1	Identify CLEVER Cities project within the city local context		X			X
2	Map and engage stakeholders					X
3	Launch the Urban Innovation Partnership					X
4	Design the platform according to the local context		X			X
5	Define the co-design kick-off and analyse the Status Quo					
6	Design the CAL space internally					X
7	Launch the CAL at local level	X				X
8	Co-design the Nature-Based Solutions	X				
9	Disseminate co-design activities		X			X
10	Co-design and test alternative design scenarios					
11	Co-implement the joint project	X		X	X	X
12	Verify the CAL co-implemented action in place			X	X	
13	Co-monitor and map the progress of implemented NBS	X	X	X	X	
14	Verification of co-benefits of NBS	X	X			
15	Sustain the action	X		X	X	X

| 16 | Co-develop the action | | X | | X | X | X |

Establishing the Urban Innovation Partnership

The aim of the first phase is to provide instructions on how to achieve a successful Urban Innovation Partnership (UIP) at an early stage of co-creation in Front Runner Cities.

This phase of the co-creation pathway envisions four steps to be taken according to each city's resources and scale of implementation. Firstly, place CLEVER Cities project within the city context and agree with the local cluster partners on the project focus; secondly, map the stakeholders you would like to have on board and explore how to engage them effectively; thirdly, launch the UIP through a public event. Lastly, as an optional activity to be carried out at the city level, the internal co-creation of the local platform for diffusing and mapping the progress of NBS implementation is proposed.

1. Identify CLEVER Cities project within the city local context
2. Map and Engage Stakeholders
3. Launch the Urban Innovation Partnership
4. Design the Platform according to the local context

PHASE	STEP	WHAT	HOW		CLEVER deliverables	
		Topic	Specific outcomes			
Establishing the UIP	1	**Identify CLEVER Cities project within the city local context**	1. Identify the role of CLEVER Cities within the overall city strategy and vision to implement NBSs 2. Agree on a shared and unique CLEVER Cities Focus, clearly defining: 1. Vision, 2. Mission, 3. Objectives 4. Values 3. Envision possible types and places for NBS interventions on Action Planning Maps 4. Enrich the CLEVER Cities focus including specific sectorial policies framework and planning instruments in relation to NBSs 5. Identify the general roadmap of local CALs		• Report including the identification of CLEVER Cities focus and role in the overall city strategy; the content will inform local communication, support stakeholders' engagement for UIP, platform and CAL set-up activities	▶ **STEP 01 Output Report Template**
	2	**Map and Engage Stakeholders**	1. Accessible and appropriate methodologies for engaging stakeholders 2. Monitoring and evaluation of stakeholder mapping and engagement		• A comprehensive map of the key stakeholders in the CLEVER Cities linked to the NBS • A UIP consisting of key stakeholders in this area • A map of potential candidates for the CALs	▶ **STEP 02 Output Report Template**
	3	**Launch the UIP**	1. Select the modality for the UIP launch 2. Design the launch 3. Evaluate the launch		• The launch of the FR city UIP	▶ **STEP 03 Output Report Template**
	4	**Design the platform and the local context for NBS**	1. Take a decision on the local platform 2. Enquiry and collect useful data 3. Co-design the local platform		• The requirements' report of city platform type aims, main features and functionalities expected	▶ **STEP 04 Output Report Template**

Step 01: Identify CLEVER Cities project within the city local context

This is a fundamental step to be carried out by the cities; the output report will be incorporated in D2.1.
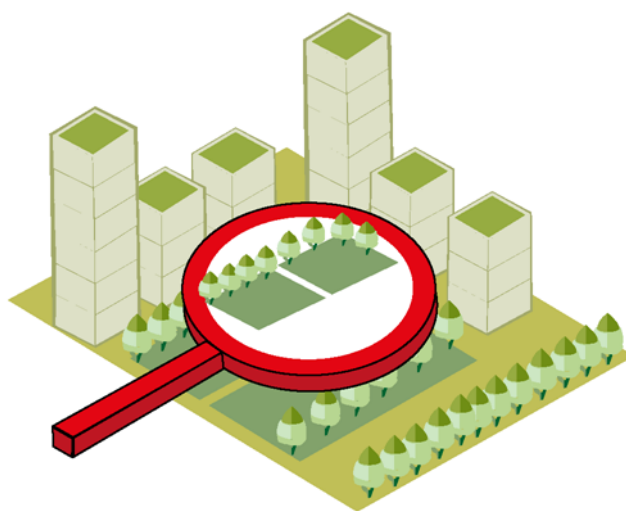
Presentation	Before mapping stakeholders, CLEVER Cities partners are asked to create the first alignment on the general objectives of CLEVER Cities, including the preliminary road mapping of CALs. This step will help the FR Cities to clarify the overall role of CLEVER Cities within the city strategy and communicate a sound message to all, i.e. citizens and potential stakeholders to be involved in the UIP.
Logistical considerations	This step contains a variety of tools and activities that could be organized simultaneously in 2-3 days long workshops depending on each city's available time and resources. The overall planning takes 10 working hours in total.

Phase		Task 2.1 Establish and sustain Urban Innovation Partnerships for stakeholder co-creation and co-design
Level of implementation		City scale – Establishing the UIP
When		M1 – M6 Possibly in parallel with STEP 02
What	**Topic**	Placing the CLEVER Cities project within the city local context
	Objective	- To identify current and future challenges in the city context - To envision possible solutions in relation to NBSs opportunities - To understand operational technical skills to design the main solutions to be implemented - To clarify the role and mission of UIP, in accordance to the Grant Agreement - To achieve a sound vision of the CLEVER Cities project.
	Product	Report including the identification of CLEVER Cities focus and role in the overall city strategy; the content will inform local communication, support stakeholders' engagement for UIP, platform and CAL set-up activities ► **STEP 01 Output Report Template**
Why this activity		To establish a sound vision and common understanding of the CLEVER Cities project and the alignment of partners at the city scale
Who – With Whom		CLEVER Cities FR partners; this first step involves only internal local working team and sporadically experts and decision-making board from public authorities.

Check - Prerequisites	✓ Make sure to invite all stakeholders and you share a common baseline with them through a series of alignment activities. ✓ Make sure to provide all needed materials and lists for brainstorming, mind mapping and action planning, SWOT analysis activities (printed maps, mind mapping templates, action planning timesheets, etc.). ✓ Make sure you coordinate with WP4 and WP7.

How	
Expected Specific Outcomes	**Suggested Activities and Tools**
1. **Identify the role of CLEVER Cities within the overall city strategy and vision to implement NBSs**	Construct the mind map and reframe where CLEVER Cities project finds its place among the concurrent projects and strategies at the city level. A collaborative activity on a large board involving partners with relevant decision makers from public authorities is suggested. ► **Tool 1.1a Framing CLEVER Cities Board** ► **Tool 1.1b SWOT Analysis**
2. **Agree on a shared and unique CLEVER Cities focus, clearly defining: 1. Vision, 2. Mission, 3. Objectives 4. Values**	Create alignment on the general focus of CLEVER Cities; even if it might appear assumed, it is important that all the partners achieve here one sound voice, in order to clarify communication and engagement strategies. Recall CLEVER Cities proposal text and define vision, mission, objectives and values of the project. ► **Tool 1.2 Strategizing and Scoping Activity**
3. **Envision possible types and places for NBS interventions on action planning maps**	A brainstorming activity where local partners discuss definitions and possible taxonomies of NBSs and identify how NBS could support local needs and regeneration challenges, thus offering multiple co-benefits. Starting from the location of the established CALs, additional areas of possible intervention are highlighted on a city map, in order to give back a comprehensive vision for the green city future. ► **Tool 1.3a Action Planning Mapping** ► **Tool 1.3b Mapping NBSs in Place**
4. **Enrich the project focus including specific sectorial policies framework and planning tools in relation to NBSs**	Having achieved the outcomes 1, 2 and 3, link the CLEVER Cities scopes and projects to local policies and planning tools. Collect insights (e.g. through interviews) from experts and relevant decision makers from public authorities, aiming at improving the effectiveness of CLEVER Cities solutions. ► **Tool 1.4 Expert Interviews**
5. **Identify the general roadmap of local CALs**	CLEVER Cities FR partners should define the baseline of each CAL, defining the preliminary roadmap, i.e. the framework of action and a draft facilitation plan (expected timeline, aims and steps, organization practicalities, project limitations and risk); this will be revised once the CAL stakeholders will be engaged (see STEP 8). ► **Tool 1.5 Road-Mapping**

Step 02: Map and Engage Stakeholders

This is a fundamental step to be carried out by; the output report will be incorporated into D2.1.

|	
Presentation	CLEVER Cities city partners are asked to identify and map the stakeholders that will be involved in the UIP. This process will consist of four parts: identification, analysis, mapping and prioritisation of stakeholders. This an important process to ensure that the UIP, and potentially the CALs, has a diverse and inclusive membership, and include all stakeholders with an interest in the work, including those who traditionally may not be involved in such activities.
Logistical considerations	This step encompasses six tools and activities that could be organized simultaneously or in 2-3 days long workshops depending on each city's available time and resources.

Phase		Task 2.1 Establish and sustain Urban Innovation Partnerships for stakeholder co-creation and co-design
Level of implementation		City scale – Establishing the UIP
When		M1 – M6 Possibly in parallel with STEP 01
What	Topic	Identification and mapping of stakeholders for UIP and potentially CALs
	Objective	• To identify the key experts and influencers that should be involved in your UIP and other stakeholder-based activities that can best support the development, implementation and sustainability of your NBS
	Product	• A comprehensive map of the key stakeholders in the CLEVER Cities linked to the NBS • A UIP consisting of key stakeholders in this area • A map of potential candidates for the CALs **► STEP 02 Output Report Template**
Why this activity		To identify and engage those who will be affected by the NBS and/ or have influence over if and how the NBS can be implemented, to help the NBS reach the best possible outcome.
Who – With Whom		CLEVER Cities FR partners will run this step. Based on the mapping exercise, cities will be able to identify who will be in the UIP and how.

Check - Prerequisites	✓ It is important to understand your local population and stakeholders at all levels from individuals to groups and to make sure that your stakeholder list includes a diversity of expertise, geography, and characteristics that represents your stakeholders across the city. ✓ It is important to understand how the different stakeholders you have identified would like to be engaged. ✓ Have a good understanding of what you are trying to achieve.

How	
Expected Specific Outcomes	**Suggested Activities and Tools**
1. **Identify a list of stakeholders**	Brainstorm and list all the potential stakeholders who should be engaged in the NBS. They can range from individuals and communities to policy decision-makers. ► **Tool 2.1 Six key questions of Stakeholder Identification**
2. **Analyse the list of stakeholders**	Once a comprehensive list of stakeholders has been developed, the next step is to analyse each stakeholder (or group of stakeholders) to understand who the stakeholders are, what their interests are, their needs, views and perspectives. ► **Tool 2.2 Stakeholder Engagement Table**
3. **Map stakeholders**	With the analysis complete, the next step is to map the stakeholders. This is done visually, on a two-dimensional matrix to identify the extent of their influence vs. the level of expertise/experience they have or will have with the NBS. ► **Tool 2.3 Stakeholder Quadrant**
4. **Prioritise UIP members**	Create and implement a system of prioritisation, to identify which stakeholders should be involved in the UIP and how. At this stage you may want to also prioritise who can be involved in the CALs too. ► **Tool 2.4 Stakeholder Engagement Planner**
5. **Ensure accessible and appropriate methodologies for engaging stakeholders**	Invite stakeholders to UIP and using your system of prioritisation, identify and establish the methods by which to engage them and ensure that they are culturally and gender appropriate, as well as accessible to the needs of participants. ► **Tool 2.5 Inclusivity Index**
6. **Monitor and evaluate stakeholder mapping and engagement**	It is important from the outset, to put an evaluative framework in place to monitor your progress, evaluate your impact and whether you are meeting your intended outcomes and objectives. When considering your methods look at the appropriate levels of participation for each stakeholder, what methods are most appropriate and effective at measuring your goals for the UIPs, CALs and NBS and their intended outcomes, and, what is a reasonable level of resource to dedicate to this. ► **Tool 2.6 Stakeholder engagement monitoring framework**

Step 03: Launch the Urban Innovation Partnership

This is a fundamental step to be carried out by cities; the output report will be incorporated into D2.1.
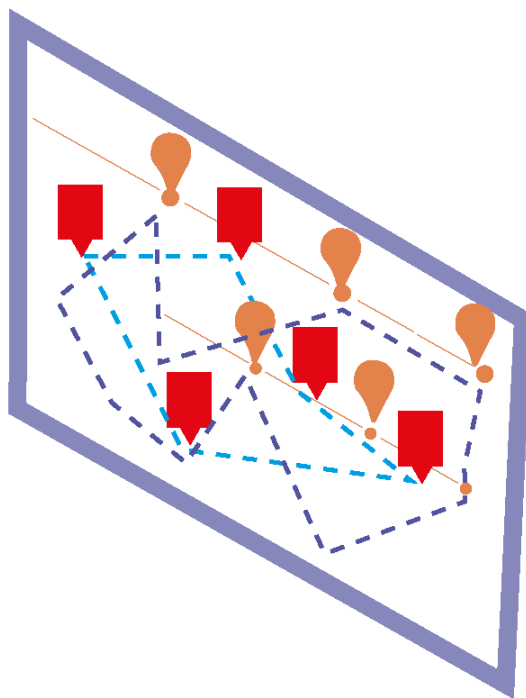
Presentation	Once stakeholders have been mapped and engaged, you can officially launch the UIP with a public event. The scope of this step is to disseminate CLEVER Cities at the local context and to engage more citizens and stakeholders. Cities should identify which are the best options for accomplishing this step, taking into account the local context.
Logistical considerations	This step contains three main tools and activities that could be organized depending on each city's available time and resources. However, we advise executing tool 3.1 and 3.2 on the same day (collective time of 2-3 hours) then establish the launching event with a follow-up meeting as tool 3.3.

Phase		Task 2.1 Establish and sustain Urban Innovation Partnerships for stakeholder co-creation and co-design
Level of implementation		City scale – Establishing the UIP
When		M1 – M6 right after STEP01 and STEP02
What	Topic	Once the UIP and the CALs have been fully established, a public launch of the partnership should take place. Defining the best modality and the timing for the launch of the UIP is part of the activities of Step 03.
	Objective	• To officially present the UIP to the city • To contextually increase CLEVER Cities' visibility. • To get more stakeholders on board.
	Product	• The launch of the FR city UIP. **► STEP 03 Output Report Template**
Why this activity		To identify and engage those who will be affected by the NBS and/ or have influence over if and how the NBS can be implemented, to help reach the best possible outcome with the NBS.
Who – With Whom		Because of the mapping exercise, the cities will be able to identify who will be in the UIP and how.

Check - Prerequisites	✓ The UIP and the relevant city departments have been informed and possibly invited to take part in this activity. ✓ The communication strategy of CLEVER Cities and the FR communication/press office have previously met and agreed on the overall CLEVER Cities communication strategy, also in accordance with Step 01 outcomes.

How	
Expected Specific Outcomes	**Suggested Activities and Tools**
1. **Select the modality for the UIP launch**	Taking into account a series of launch modalities, based on resources and assets available to the UIP, cities should agree on the most efficient way to reach-out to the public. ► **Tool 3.1 UIP Launch Brainstorming Activity**
2. **Design the launch**	Once the modality has been selected, design and organize all the details for the event, under the leadership of the communication manager. ► **Tool 3.2 Design the Launch**
3. **Evaluate the launch**	As a follow-up activity, seriously evaluate and report the outcomes of the launch. The communication manager collects all the materials and reports those to the UIP in a follow-up meeting. ► **Tool 3.3 Launch Follow-up Evaluation**

Step 04: Design the platform according to the local context

This is an optional step to be carried out by cities; the output report to be incorporated in D2.1 is optional.

Presentation	Cities should implement a sound concept to envision a local platform for a capillary reach-out of the project scopes to support the diffusion of NBSs all over the city. An internal co-creation activity within the CLEVER Cities FR city partnership is welcome, in order to identify and prioritize the scope of the platform, map available resources and constraints at the city level, synergies with existing platforms.
Logistical considerations	This step contains three tools and activities that could be organized depending on each city's available time and resources. Meanwhile, it depends mainly on the city willingness to create an outreach platform to which extend detailed and dense.

Phase		Task 2.1 Establish and sustain Urban Innovation Partnerships for stakeholder co-creation and co-design
Level of implementation		City scale – Establishing the UIP
When		M1 – M12 This activity should happen after Steps 1 and 2
What	Topic	Delivery of the concept design and requirements for the local platform based on a participatory process within the public administration and the CLEVER Cities partnership.
	Objective	• To decide whether the city wants to launch a dedicated local platform for disseminating NBS and CLEVER Cities or not. • If the answer is yes, identify your requirements and chose the type of platform that best fits your needs. • To map available resources: data and human resources to build and keep the platform alive. • To start discussing the legacy of CLEVER Cities at city level; for instance, implementing the platform could be a way to root NBSs as a social practice and long-term alliance.
	Product	• The requirements' report of the city platform type, aims, data available and main features and functionalities expected • Optional: The development of the platform ► STEP 04 Output Report Template
Why this activity		The scopes are multiple, and each city should prioritize on some or include them all; among others, the platform should aim to: • Support the dissemination of NBSs reaching out to citizens and private stakeholders, showing best practices, events and providing technical knowledge, tools and rewarding strategies. The platform as a collector for all the NBS initiatives at the city level (optional). • Communicate CLEVER Cities achievements and demonstrate NBS progress to the public (optional). • Monitor the progress as an internal assessment tool, through a monitoring dashboard (required by the project).
Who – With Whom		The local CLEVER Cities partnership. Cities in particular should take the lead and involve internal expertise.
Check - Prerequisites		✔ It is fundamental to involve all the relevant actors from the very beginning of the process of the design of the platform: the platform is not a CLEVER Cities ownership; on the contrary, it

belongs to everyone and this is the only way it could be successful. The more people are engaged in its creation, the more probable the result will be durable and successful.

✔ Hence, gain commitment on this challenge, especially from public administration officers, and break silos among the different division through a sound common and civic goal (as identified in Step 01); at the top city level find modalities to recognize credits to those who contribute to this task and give them visibility.

✔ The potential NBS data providers at city level have been informed and involved in the process (possibly as part of Step 02); they will be asked about possible data they own and can share.

✔ Work in synergy with co-monitoring work package and avoid replication of activities.

How	
Expected Specific Outcomes	**Suggested Activities and Tools**
1. **Take a decision on the local platform**	A meeting at the city level to decide whether the city wants to launch a dedicated local platform for disseminating NBS and CLEVER Cities or not. Pro and cons have to be put on the table. Resources to be activated, maintenance and legacy of the platform have to be introduced. ► **Tool 4.1 Urban Platform Brainstorming**
2. **Enquiry and collect useful data**	Investigate in synergy to Task 4.1 data available at city level to be used for monitoring and co-monitoring Clever Cities progress. ► **Tool 4.2 Data Collection Survey**
3. **Co-design the local platform**	Based on outcome of Tool 4.1 above, and possibly with the list of available data and resources at hand from Tool 4.2, organize a co-design workshop to envision the proper and most efficient platform type to meet your scopes. At the same time, specify the main platform requirements. ► **Tool 4.3 Platform Co-design Workshop**

Co-design activities in the CLEVER Action Labs

This phase is the core activity for the action labs and refers to the co-design of the Nature Based Solutions in place. This is the activity that mostly involves local stakeholders and citizens, hence requires a highly inclusive approach and communication effort. The steps suggested in this phase must be applied to each CLEVER Action Laboratory. Co-design involves the collaborative design of urban regeneration interventions – CLEVER Stimuli. Novel smart technologies will be applied in this phase with the aim of improving the overall involvement of citizens in the process.

5   Define the co-design kick-off and analyse the Status Quo

6   Design the CAL space internally

7   Launch the CAL at local level

8   Co-Design the Nature-based Solutions

9   Disseminate Co-Design activities

10   Co-Design and test alternative design scenarios

PHASE	STEP	WHAT	HOW	CLEVER deliverables	
		Topic	Specific outcomes		
Co-Design	5	Define the co-design kick-off and analyse the status quo	1. Bring together all the partners in the CAL 2. SWOT analysis 3. Enquiry and collect useful data	• Detailed description of the site and envisioned NBS project for each CAL • Roles (alignment) • The CAL ID, the identity kit • The CAL BOX, containing useful materials for co-design activities.	► STEP 05 Output Report Template
	6	Design the CAL space internally	1. Confirm the CAL focus and facilitation plan 2. Identify co-creation potential for the CAL	• The CAL ID, the identity kit that accompanies the process, updated with the detailed description of the CAL space.	► STEP 06 Output Report Template
	7	Launch the CAL at local level	1. Select the modality for the CALs launch 2. Design the CALs launch 3. Evaluate the CALs launch	• The CAL launch event report.	► STEP 07 Output Report Template
	8	Co-design the NBS	1. Share and update the CAL focus through citizens' contribution 2. Co-design CAL specific NBS alternative scenarios	• The CAL focuses • The CAL co-design project proposal	► STEP 08 Output Report Template
	9	Disseminate co-design activities	1. Share and update the CAL focus through citizens' contribution 2. Co-design CAL specific NBS alternative scenarios 3. Evaluate the CAL dissemination	• The CAL dissemination plan • The report about the CAL dissemination event or chosen modality	► STEP 09 Output Report Template
	10	Co-design and test alternative design scenarios	1. Assess and test the final design scheme	• The CAL final design proposal,	► STEP 10 Output Report Template

Before starting with the proposed steps of phase two, some general tips concerning the co-design set-up and carrying out of the activities are listed below.

| Tips: The co-design venue	✓ Identify a suitable venue for organizing the events. The place should be easy to access and visible, recognizable and representative of a public institution or a civic association.
	✓ The atmosphere should be always informal and relaxed: attendees should feel they are contributing to civic progress with no pressure. Provide a quick coffee break or light buffet.
	✓ The venue should be the same for all the events in a row. Changing place could disorient habits and generate the loss of participants.
	✓ The ideal situation would be a fulltime dedicated space for hosting the CAL, where designers and experts directly work on the project in a transparent way, open to public; they report the progress of the design schemes and people can freely interact with experts.
Tips: The co-design timing	✓ Co-design activities should be held with some constant schedule. These should be organized at the same day of the week, possible in the evening after work hours to guarantee a wider spectrum of participants. The choice depends of course on the local context.
	✓ The intervals between meetings should be established taking into account that meetings cannot be too frequent (risk of overload) or too loose (risk of disaffection).
	✓ While the proposed co-design activities should offer some degree of flexibility and review, a well-defined agenda of steps, targets and expected outcomes should be given from the very beginning of activities. People require to understand the path they are involved in and envision a product of their effort.
	✓ Seriously consider activating forms of e-participation, i.e. continuous collection of feedbacks through online tools. Offering a parallel co-design track online is a good way to increment the reach-out of the co-design activities and to involve people that would like to take part to the discussion but cannot physically attend the meetings. Hence, make sure that all the advancements and materials are reported online very fast; even live streaming and recording of co-design activities

	could be an option for making citizens feel part of a transparent process.
Tips: **The co-design participants**	✓ Make sure you include a variety of people that best represents the local context; respect gender equality, avoid discrimination. Cover different ages and professional skills. The richer the composition, the higher will the success of the activity be. ✓ Build loyalty to the challenge and make sure people come back; small rewarding strategies and personal recalls can help. It is crucial to get the same people during all the events in order to consolidate the narrative of the whole process and create civic ambassadors of CLEVER Cities. Of course, you can increment the number of attendees, but avoid replacements! ✓ Seriously consider e-participants in the same way as physical participants; give them feedback and invite them to join to all the events and activities of CLEVER Cites. The online dimension is not less important than the material one!

Step 05: Define the co-design kick-off and analyse the status quo

This step is highly recommended to be carried out by cities, but the output report to be incorporated in Deliverable 2.2 is optional.
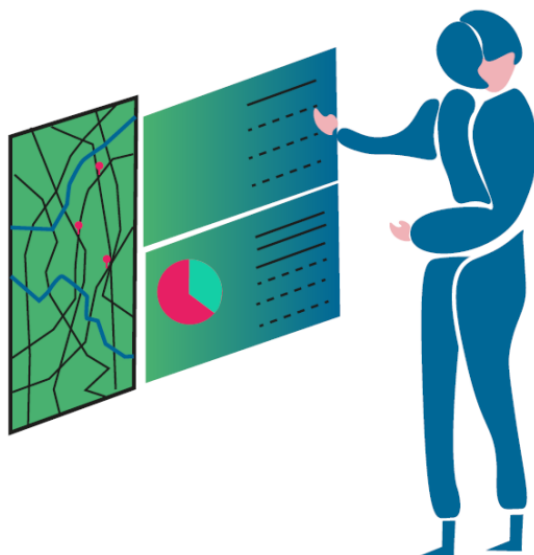
Presentation	The city is asked to recall the CLEVER Action Laboratories as described in the grant agreement, collect useful material, and confirm the baseline before starting with co-design activities. This activity is highly recommended if conditions (actors, places, resources) have changed since the launch of the CLEVER Cities project, which happened twelve months earlier. In case no significant changes occurred during the first year, and all material is already available to the FR City partnership, the city can decide to skip this step.
Logistical considerations	This step should be carried out by the FR City partnership for each CAL; the city can also run a unique activity to establish a common kick-off modality in case there is no overlapping among stakeholders. In particular, one meeting for recalling the useful materials and data on each CAL and one meeting for collecting and reporting the status quo could be sufficient as a co-design baseline.

Phase	Task 2.2 Co-creating solutions for urban regeneration in CALs	
Level of implementation	CAL scale – Co-design	
When	M13 – M36 (suggested at M13 or M14 at latest) Step 01 through the Tool 1.5 has tentatively established a first road-map for each CAL project.	
What	**Topic**	Before starting opening the CAL to the vast public, reconstruct the current status quo of the local context where the NBS is going to take place; new conditions might have emerged since the starting of the project. This is the step that inaugurates the CAL specific team work.
	Objective	• To identify the status quo of the CAL specific context (the site), the envisioned CAL project advancement; this is a data gathering activity leading to an alignment at the CAL scale • To establish data and material availability and acquisition among the partners • To align and update the CAL internal partnership after one year of activities.
	Product	• Detailed description of the site and envisioned NBS project for each CAL with updated data and information • Who we are, what we want to do - roles (alignment) • The CAL ID, the identity kit that accompanies the process, in its first version • The CAL BOX, i.e. the physical box containing useful materials (drawings, reports, data) to be used during the co-design activities. **► STEP 05 Output Report Template**
Why this activity	• To start the CAL co-design with sufficient preparation and alignment among partners. • To make sure the overall focus and objective of the CAL is valid and sufficient data is available.	
Who – With Whom	This is a CLEVER Cities internal activity. The local Front Runner City partnership together with those members of the local Urban Innovation Partnership that will take part to the specific CAL.	

Check - Prerequisites	✓ Recall the CAL outlined in the Grant Agreement. ✓ Check Step 01, Tool 1.5 on road-mapping, if available. ✓ Collect all the materials and data already available to the city, to be used to describe the status quo.

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✔ It is fundamental to involve all the relevant actors from the very beginning of the CAL establishment. The more people are engaged in this initial stage, the more probable the result will be durable and successful.

✔ For the data collection, work in synergy with co-monitoring work package and avoid replication of activities.
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How

Expected Specific Outcomes	Suggested Activities and Tools
1. **Achieve an alignment among the involved partners in the CAL**	A meeting at the city level to generate alignment among CAL partners. First, check the current condition of the CAL with the CAL ID table and ask yourself if something has changed since the beginning of the project; a site survey activity conducted by the project assistant or by the whole team is an option to refresh our knowledge on the CAL. Second, define together who is doing what and what information is providing. Role playing gaming might help to simulate potential stakeholders' interests in the CAL and anticipate conflicts during co-design activities (see Step 08, Step 10). ► **Tool 5.1 Alignment on CAL ID** ► **Tool 5.2 Site visit** ► **Tool 5.3 Role Playing as Stakeholders**
2. **SWOT analysis**	At the table, bring a large printout of the design area and start an immersion exercise to identify peculiarities of the CAL; as an alternative method you can draft a spatial SWOT analysis to highlight opportunities and threats insisting on the site. Based on those potential positive and negative aspects, you will be asked to provide information to validate initial hypotheses. ► **Tool 5.4 Immersion** ► **Tool 5.5 SWOT Analysis**
3. **Enquiry and collect useful data**	During the same meeting, once roles have been clearly identified and the opportunities and threats have been recalled, activate partners in the data collection to verify the status quo of the CAL: Present and past pictures of the site, cartography, GIS maps and quantifications are all useful information to fill the CAL Box, i.e. the physical and digital repository for running co-design activities. A template for organizing data collection will be provided. ► **Tool 5.6 Data Profiling**

Step 06: Design the CAL space internally

This step is highly recommended to be carried out by cities, but the output report to be incorporated in Deliverable 2.2 is optional.

Presentation	This is a highly suggested step to be done before opening the CAL to the public. It is a strategizing activity, where the CAL team is asked to come up with a realistic proposal for co-creation activities, taking into account all the limitations of the proposed NBS intervention. In fact, not all the CALs offer the same co-creation possibilities: some cover all the spectrum of participation, some can only deal with limited engagement, due to specific constraints. We want the team to make those constraints explicit and design the 'CAL space', i.e. the boundaries and degrees of freedom for action, accordingly. A good design of the CAL space is fundamental to launch a realistic co-creation process and to meet people expectations. The partner responsible for the implementation of NBS intervention at the CAL level should take the lead and require this step to be carried out before opening co-creation activities.
Logistical considerations	This step should be carried out by the FR City partnership for each CAL; the city can also run a unique activity to establish a common kick-off modality in case there is no overlapping among stakeholders. In particular, one meeting for designing the CAL space is sufficient.

Phase	Task 2.2 Co-creating solutions for urban regeneration in CALs
Level of implementation	CAL scale – Co-Design
When	M13 – M36 (suggested at M13 or M14 at latest) Possibly after Step 05 is completed.

What	**Topic**	This is a highly strategizing activity. Before starting opening the CAL to the vast public, the organization and definition of the CAL entity has to be established. We call this the 'CAL Space', i.e. the understanding of what we want to get in and what has to stay outside the boundaries of the proposed activities; how we can benefit from people's participation and how they can benefit from this process. Here you can establish the CAL requirements in detail.
	Objective	- To identify how to effectively involve citizens in co-creation: where, when and how they can offer substantial contribution to the process and how they can benefit from it. - To define the CAL Space in detail, in particular: - The limitations of people to get involved in the activities: space and resources are limited, and a fairly representative mix is needed. - The degrees of freedom of the activities, considering limits of resources, design and normative restrictions, and set the level of people involvement in co-creation - The spectrum of co-creation activities proposed at the CAL level: not all the projects can cover all the phases. - The fine-tuning between the temporal framework of design interventions and associated co-creation activities, according to the already established road-mapping (Step 01, Tool 1.5).
	Product	The CAL ID, the identity kit that accompanies the process, updated with the detailed description of the CAL space. **► STEP 06 Output Report Template**

Why this activity	To start the CAL co-design with a realistic proposal for co-creation activities, taking into account all the limitations of the proposed NBS intervention and all the benefits of getting people involved. Avoid co-creation which is not built upon primary data!
Who – With Whom	This is a CLEVER Cities internal activity. The local Front Runner City partnership together with those members of the local Urban Innovation Partnership that will take part to the specific CAL.

Check - Prerequisites	✓ Check Step 01, Tool 1.5 on road-mapping, if available.
	✓ The reality check of the CAL (you might just have carried out Step05) is completed, and enough details and warranties about the NBS intervention are given.
	✓ In particular, partners directly responsible for the implementation of the NBS in place, should bring all the available information at the table and outline all the limits and risks associated to the proposed intervention.
	✓ It is fundamental to involve all the relevant actors from the very beginning of the CAL establishment. The more people are engaged in this initial stage, the more probable the result will be durable and successful.
	✓ Follow-up this step with step 08.

How	
Expected Specific Outcomes	**Suggested Activities and Tools**
1. **Confirm the CAL focus and facilitation plan**	As a kick-off, quickly recall the CAL Focus. Confirm or re-discuss the NBS project informed by Step 05 outcomes and Step 01 (Tool 1.5 Road-Mapping). It is important to refine: the tentative project intervention outline, the timeline for construction, the spatial boundaries, assets and constraints, flexibility and potential improvements of the current design proposal, if any; define the co-design steps you want to carry out and the activities and their specific objectives. ► **Tool 6.1 CAL ID Focus**
2. **Identify co-creation potential for the CAL**	Once the CAL Focus is clear to all attendees, identify co-creation potential. The partner responsible for NBS implementation should lead the activity and list all the degrees of flexibility of the NBS hypothesis and the potential improvements of the current design proposal, at the same time taking into account all the constraints (risk assessment: resources, law, safety, and so on). Ask yourselves how and in which phases of co-creation people can get involved in the process. Try to be realistic and recognize the added value of people participation: how can be benefit from people's contribution to the CAL implementation? As an option, you can propose a role-playing exercise to simulate citizens' perspective. ► **Tool 6.2 CAL co-creation matrix** ► **Tool 6.3 Role Playing as Citizens**
3. **Define the CAL space**	Once, constraints and degrees of freedom are drafted on the table, the last activity of the workshop refers to the design the CAL space; among others: temporal framework for co-creation activities in terms of frequency and duration, participation boundaries, physical boundaries of the region of interest for action. ► **Tool 6.3 CAL ID Space**

Step 07: Launch the CAL at local level

This step is fundamental; the output report is required and will be incorporated into Deliverable 2.2.

|	
Presentation	This step inaugurates the public launch of the CALs. It has to be considered as a co-design activity because it is not only a way to communicate the existence and progress of the labs, but it has to be intended as an engagement activity whereby a number of tools can be proposed to the vast public. The scope is to communicate the CAL in correspondence to WP7.
Logistical considerations	This step should be carried out through two coordination meetings promoted by the FR City partnership and involving the whole UIP, bringing together the single CALs' preliminary activities at this stage. The first meeting aims at selecting the modality and organizing the details for the public event. The second meeting is a follow-up evaluation of the outcomes, which is useful for the monitoring phase.

Phase		Task 2.2 Co-creating solutions for urban regeneration in CALs
Level of implementation		City or CAL scale – Co-Design
When		M13 – M36 (suggested at M13 or M14 at latest) Possibly after Step 05 and Step 06 are completed.
What	Topic	This is an engagement and communication activity at the same time and refers to officially launch of the CAL activities at the city level.
	Objective	• To communicate the CAL activities at the city level, diffuse the CLEVER Cities commitment and first tangible actions by the Urban Innovation Partnership (UIP), after its launch, which happened some months earlier. • To engage more citizens to take action and get involved in the co-creation activities. • To support the communication of CLEVER Cities with a coherent and constant storytelling of activities. • To make an alignment of the CALs progress and share the CALs baselines at the city level.
	Product	• The CAL Launch event report. **► STEP 07 Output Report Template**
Why this activity		To find and agree on the best modality for launching the CALs at the city level. Different ways can be envisioned, and decisions should be taken on the basis of a clear scope (defining the relevance among communication and engagement purposes) and resources available to the city.
Who – With Whom		This is a CLEVER Cities internal activity. The local FR City partnership together with the UIP and CAL specific members should be involved.

Check - Prerequisites	✓ Involve the CLEVER Cities communication team and find synergies with communication tasks of the project. This might help allocating resources for the public launch. ✓ Check preliminary work carried out by the communication team; in particular, if personas for target audience have been already identified.

✔ Specifically, the local communication manager should lead this step, together with the CALs communication responsible persons.

✔ Contextually publish the CALs baselines on local media, project website and social media, in order to create sufficient interest at the city level.

✔ Eventually involve the monitoring working group and check the performance indicators that have been established in relation to the social outreach and acceptance of the projects' activities.

How

Expected Specific Outcomes	Suggested Activities and Tools
1. **Select the modality for the CALs launch**	Having defined the main scopes of the event, and taking into account a series of launch modalities, based on resources and assets available to the UIP, cities should agree on the most efficient way to reach-out the public, both for dissemination and engagement purposes. ► **Tool 7.1 CALs Launch Brainstorming Activity** ► **Tool 7.2 Define Target Audience Personas**
2. **Design the CALs launch**	Once the modality has been selected, design and organize all the details for the event, under the leadership of the communication manager. ► **Tool 7.3 Design the CALs Launch**
3. **Evaluate the CALs launch**	As a follow-up activity, seriously evaluate and report the outcomes of the launch. The communication manager collects all the materials and reports those to the UIP in a follow-up meeting, possibly referring to the performance indicators suggested by the monitoring team. ► **Tool 7.4 CALs Launch Follow-up Evaluation**

Step 08: Co-Design the Nature-Based Solutions

This step is fundamental; the output report is required and will be incorporated into Deliverable 2.2.
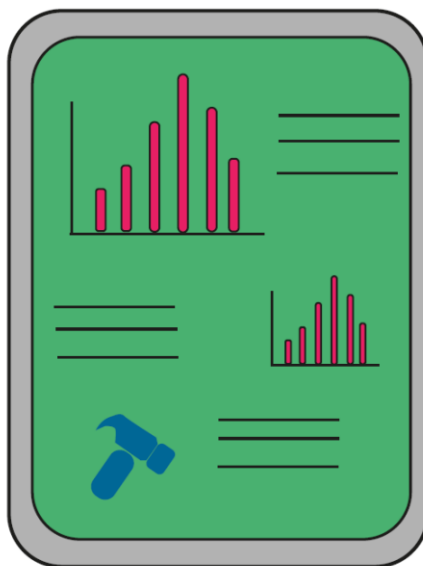
Presentation	This step is the core activity of the co-design process. It is probably the step at which we can define the success of the overall CLEVER Cities project in terms of civic participation and where social co-benefits of NBS can really be determined. Co-designing solutions will require an inclusive, transparent and flexible approach to the activities established by this step; partners should be open to integrate the outcomes in the design and discuss solutions once again before moving to the implementation of the interventions.
Logistical considerations	Step 08 and Step 10 together are the most demanding activities of the co-creation process and are also the longest, covering up to two years, depending on the specific CAL timeline. A series of co-design workshops have to be defined for each CAL; a flexible schedule is possible, in terms of frequency and quantity of activities, also depending on the needs of each project. A minimum of three workshops is required; but depending on the complexity of the design, more frequent activities can be held. Each CAL leader is responsible for defining the plan; this should possibly happen already at Step 06.

| Phase	Task 2.2 Co-creating solutions for urban regeneration in CALs	
Level of implementation	CAL scale – Co-Design	
When	M13 – M36 (flexible timing; suggested between M14 and M32) Possibly after Step 05 and Step 06 are completed.	
What	**Topic**	This is the main co-design activity.
	Objective	• To achieve shared NBSs at the CAL level, whereby citizens and local stakeholders are fully committed to the co-creation of the project. • To disseminate a participatory approach to urban regeneration based on NBS, thus increasing democracy at the city level. • To increase public awareness on the multiple co-benefits of NBS; co-design is also an occasion for education on urban sustainability and resilience.
	Product	• The CAL Focus including the expected co-benefits and co-monitoring indicators. • The CAL co-design project proposal. This can be organized in more than one scenario, to be tested during Step 10 and later during the next phases of co-creation. **► STEP 08 Output Report Template**
Why this activity	To fulfilment of the co-design step is crucial for a successful social acceptance of the NBS interventions proposed by the project and for achieving a complete co-creation process in the following phases.	
Who – With Whom	This is the first public activity open to citizens and local stakeholders at the CAL level. Participants have to be carefully selected according to specific criteria, possibly established during Step 06. UIP members can join CALs.	

Check - Prerequisites	✓ The CAL BOX is on the table, both physical and digital.
	✓ The CAL ID should be ready.
	✓ Interact with WP4 monitoring work team on the co-monitoring indicators. WP4 can give relevant suggestions and might already have established a list of sound indicators to monitor the success of the CAL initiative.
	✓ The CAL description has been released online on the official project webpage.
	✓ The CAL facilitator has been nominated and has all the relevant instructions and proxies to fully operate workshops with the assistance of the city project.
	✓ Fundamental: this activity requires a forth and back interaction with the designers of the solutions; while co-design workshops discuss and establish alternative NBS scenarios, technical experts and designers should implement those design schemes along the process. At each workshop a design advancement should be given to proof the willingness to achieve consensus on the final solution!

How	
Expected Specific Outcomes	**Suggested Activities and Tools**
1. **Share and update the CAL focus through citizens' contribution**	As a kick-off activity, share, confirm or revise the CAL focus (scope, values and mission), as previously established by the project team (Step 01, Step 05, Step 06). This activity applies to all the CALs, even those that will not implement co-design activities, but only co-implementation or co-monitoring ones. Expected co-benefits and co-monitoring indicators to assess the success or failure of the whole initiative have to be clearly identified as an outcome. People can provide original insights and unexpected feedback; hence, be prepared to include new issues and make changes to the envisioned CAL path. ► **Tool 8.1 CAL Focus brainstorming** ► **Tool 8.2 CAL Co-Benefits and Co-Monitoring Matrix**
2. **Co-design CAL specific NBS alternative scenarios**	In this second meeting, we finally enter the core co-design activity. This activity only involves CALs that will go through co-design. Participants are asked to envision alternative scenarios (2 or 3 are enough), in order to screen and become aware about the different possibilities that can be implemented in place. The facilitators can direct the design of scenarios, asking to cover from business as usual (BAU) projects with the implementation of typical NBSs, to scenarios that implement best available technologies (BAT). Carefully control expectations and make sure that everybody understands the financial and technical constraints of solutions. Cards illustrating the different characteristics of NBSs might help taking decisions and selecting the most appropriate technology. ► **Tool 8.3 Co-Design NBS cards** ► **Tool 8.4 Co-Design Scenarios Board**
3. **Evaluate the co-designed CAL scenarios and converge on one solution**	As a follow-up activity, facilitators together with NBS experts and designers directly involved in the design implementation come back to the lab with two or three alternative design schemes, that have been deepened with costs and technical detail, on the basis of the first co-design workshop. Attendees are asked to evaluate those alternative schemes and possibly converge on one solution. The solution could be one of the proposed schemes or the compromise among some of the proposed solutions. This final design will be further detailed and tested during Step 09. ► **Tool 8.5 CAL Final Design Scheme Board**

Step 09: Disseminate Co-Design activities

This step is optional; the output report to be incorporated in Deliverable 2.2 is not required.
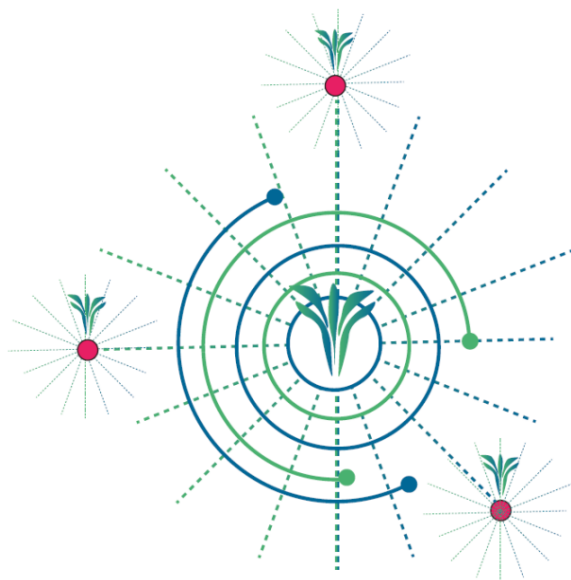
Presentation	This step presents the ongoing progress of the CAL activities to the general public through an open event and/or e-participation modalities. This step is conceived as a support to better disseminate the progress of the CAL activities, aiming at including a higher number of people in the discussion, thus increasing democracy in the decision making at the city level. Opening the design advancements to the wide public might be a way to get useful insights by people that REALLY care about the intervention but do not have time and possibility to join the co-creation workshops. A public presentation of the CAL activities can be also intended as a milestone in the co-design process to help the local team to consolidate ongoing outcomes and possibly speed up the process.
Logistical considerations	Step 09 requires the organization of a meeting to define the dissemination modalities, the identification of the responsible person (usually the CAL manager with the support of the local communication manager – WP4) to carry out the management of the dissemination itself.
	Dissemination can happen at the single CAL level or, eventually, coordinated at the city level for all the CALs at the same time, in case the progress of CAL activities is well-balanced.

A post event meeting held by the FR city communication manager for analysing the follow-up is also suggested in order to collect relevant tips and lesson learned for future events.

Phase	Task 2.2 Co-creating solutions for urban regeneration in CALs
Level of implementation	CAL scale – Co-Design
When	M13 – M36 (flexible timing; suggested in the middle of the co-design timeline foreseen for the specific CAL); after Step 08 is completed.

What		
	Topic	Dissemination of co-design work in progress during the process.
	Objective	• To inform about the progress of co-design activities during the envisioning process and not after the completion of design. As a general objective, to increase democracy in regeneration processes through citizens' participation.
	Product	• The CAL dissemination plan. • The report about the CAL dissemination event or chosen modality. **► STEP 09 Output Report Template**

Why this activity	To make sure that the wider audience gets effectively informed and involved in the process.
Who – With Whom	This is the first public dissemination activity at the CAL level. The more people are informed and involved, the better. Inform all the FR city partners and the UIP. Consult media partners and a vast number of stakeholders identified in Step 02.

Check - Prerequisites	✓ This activity requires the involvement of the communication work package WP7 and the local communication manager. ✓ Possibly make synergy with existing events at the city or neighbourhood level that might attract citizens and the right audience on urban greenery action; interact with WP4 for this. ✓ Be sure the activities of the CAL are mature enough to get public visibility. Co-design activities should have produced

some relevant material that can enrich the local website and provide materials that can be easily communicated to the wide public.

✓ At the city level, check and coordinate the progress of the different CALs and define the best time to have a public milestone event.

How

Expected Specific Outcomes	Suggested Activities and Tools
1. Share and update the CAL focus through citizens' contribution	Organize a meeting to define the modalities and resources to activate for advertising the progress of the CAL activities at the local and city level. This can happen through a public event (an open day of the CAL), a pop-up station, an exhibition and so on. ► **Tool 9.1 Define the Co-design Dissemination Plan**
2. Co-design CAL specific NBS alternative scenarios	In parallel, be inclusive and do not underestimate e-participation and the role of online publication of the advancements of co-design activities. It is warmly recommended to constantly update and enrich the local CAL page and social media channels. Evaluate the possibility to open the co-design for online discussion: do not fear of going on public debate and accept criticism! Take into account the role of a moderator and web-manager in synergy with local communication manager and WP7. Online participation will be used along the whole process until co-development and will produce relevant material for co-monitoring the progress of social involvement. ► **Tool 9.2 Define the Online Dissemination of CAL Activities**
3. Evaluate the CAL dissemination	Together with the communication team, evaluate the progress of dissemination and eventually consider redirecting your action in case the programmed modalities are not successful. Hence, it is important to report the experience and the lesson learned to avoid recurrent mistakes in the future. Report this activity to the CLEVER Cities WP7 communication team. ► **Tool 9.3 CAL Dissemination Report**

Step 10: Co-design and test alternative design scenarios

This step is recommended; the output report to be incorporated in Deliverable 2.2 is not required, but is nevertheless still suggested.

Presentation	This step represents a deepening of the co-design activities carried out in Step 08 and possibly widely disseminated through Step 09 (optional). Here, an additional co-design activity for fine-tuning the co-designed solutions are proposed to the CAL in order to validate the design via photo-realistic, possibly immersive design schemes. In particular, after the responsible CAL leading partners having enough time to further elaborate on the Step 08 outcomes, alternative final scenarios of the co-designed solutions have been prepared and are ready to be discussed at the CAL level through a series of workshops.
Logistical considerations	Step 10 requires the organization of a series of co-design activities, possibly two: the first to present the final design scenarios based on Step 08 outcomes and further elaborated by design specialists responsible for the CAL implementation; the second meeting is a final validation that incorporates the first meetings' suggestions by people. Depending on the type of design path, public bid or light design intervention, the modalities for public disclosure of design schemes and the possibility to intervene on the final proposal substantially changes. Be sure you are still in a phase of final validation before going to the public bid or construction.

Phase		Task 2.2 Co-creating solutions for urban regeneration in CALs
Level of implementation		CAL scale – Co-Design
When		M13 – M36; after Step 08 and Step 09 (optional) are completed.
What	Topic	Fine-tuning of the final design through a final co-design activity
	Objective	• To fine-tune and consolidate the very final design scheme thanks to a more engaging verification modality based on detailed drawings, renderings, immersive simulations that the vast public can easily grasp. • To make sure there will not be misunderstanding, surprise and hence conflicts on the implemented solution. • Effective visuals with a tangible idea about the final outcomes of the design solution, will both gratify CAL attendees' work and at the same time allow to better engage the local community to take part to the future co-creation phases.
	Product	• The CAL Final Design proposal, to be given back through drawings, simulations, final description, requirements expressed by the CAL, reports and so on. **► STEP 10 Output Report Template**
Why this activity		A final activity discussing the preview of the co-designed solution will allow concluding this phase with a final shared validation step and to avoid mismatch between the final design discussed publicly and the construction that will follow.
Who – With Whom		This step requires the involvement of all the CAL participants you involved in Step 08. E-participants that follow the local website can also be asked to react to the final scheme, if possible. Inform the FR City partners and the UIP about the conclusion of the co-design phase.

Check - Prerequisites	✓ This activity requires the involvement of all the people that have been involved in the co-design phase: Be sure you do not miss anyone in the invitation!
	✓ The CAL manager should check if the responsible actor of the design solution has fully incorporated all the emergent topics and tips into the final design scheme emerged through Step 08 and Step 09 co-design activities; if not possible, explanations must be provided to the CAL.
	✓ Be sure you have solid and as much as possible photo-realistic visual material to present to the vast public.

How	
Expected Specific Outcomes	**Suggested Activities and Tools**
1. **Assess and test the final design scheme**	A workshop where the very final solution is presented by the designers responsible for the technical part. CAL attendees will assess the compliance of the design scheme to the expressed requirements. It is important to provide photo-realistic visual material that can give back the idea of the NBS in place, with a communication modality that can be universally understandable by citizens; we suggest making use of immersive simulations, renderings, photo collages, videos. A final report to validate the design and list requirements and potential risks of the implementation will be required.
	► Tool 10. 1 CAL Final Design Assessment

Co-implement nature-based solutions in PLACE

Co-implementation is working with PEOPLE and partners to put the solution into action; the tangible interventions serve as a 'test' environment to make NBS marketable and sustainable.

Co-implementing the solutions means involving people and stakeholders, especially local ones, in the provision and construction of the co-designed solution. Sponsors, suppliers, single citizens might will to contribute to this phase, depending on the possibilities that the construction offers. Feeling to be part of the implementation phase is fundamental in order to initiate the following taking care of the solution in place.

11 Co-Implement the joint project

12 Verify the CAL co-implemented action in place

PHASE	STEP	WHAT	HOW	CLEVER deliverables	
		Topic	Specific outcomes		
Co-Implement	11	Co-implement the joint project	1. Explore co-implementation schemes	• The dedicated CAL co-implementation scheme	► STEP 11 Output Report Template
	12	Verify the CAL co-implemented action in place	1. Explore and establish innovative co-implementation partnerships	• The revised and improved CAL co-implementation scheme	► STEP 12 Output Report Template

Step 11: Co-implement the joint project

This step is fundamental; the output report is required and will be incorporated into Deliverable 2.2.

Presentation	Step 11 is a crucial activity for assessing the scopes of the CAL and test ambitious public-private-people partnerships and social innovation solutions. The best suitable alternative design project selected in the previous co-design phase (Step 08 and Step 10) is ready for construction and looking for partners to prototype the NBS or directly realize it. Hence, it is fundamental to involve local business and companies that can deliver the solutions, also with original sponsorship schemes. For instance, during the technical implementation phase, some new topics might emerge and have to be taken into account by the CAL responsible person. In this step, a final reality check of the solution is required.
Logistical considerations	Step 11 could be based on a series of meetings held at the CAL or city level, strongly involving the UIP and private partners to collaborate in the construction of the design project; public officers that will guarantee the correct compliance with the city procedures; a prototyped solution in place or an information stand point illustrating the project could also be put in place as tools for collecting additional information and test the mock-up solution.

Phase		Task 2.4. Co-implementing solutions for urban regeneration
Level of implementation		CAL scale – with partial City and UIP involvement
When		M15 – M40 (flexible timing depending on the CAL design and construction pathway); suggested between M15 and M20
What	**Topic**	This is the main co-implementation activity to involve stakeholders in the prototyping and realization of the co-designed solution.
	Objective	• To gain consensus on the co-designed solution by including stakeholders and citizens in the construction of the proposal
	Product	• The dedicated CAL co-implementation scheme ► **STEP 11 Output Report Template**
Why this activity		To enable co-implementation to become true in practice through a series of enabling activities. Without a serious preparation work for establishing the game rules, co-implementation becomes very difficult.
Who – With Whom		This phase is very ambitious and possibly the most difficult to achieve; the fulfilment of a co-implementation of NBS requires the direct involvement of FR cities partners, the UIP and the single CALs with different tasks: • The City will define the rules, protocols and procedures to make the co-implementation possible in the local context: this activity is crucial to break barriers, but requires a long process for adapting rules and finding the most suitable modality for a successful public-private-people partnership • The UIP will activate all the stakeholders and potential providers of solutions to get involved in the construction of the solution • The CAL will involve local citizens and stakeholders to contribute to the implementation of the solution.

Check – Prerequisites	✓ Check all the protocols, agreements, guidelines, experiences that the city has already in place to enable co-implementation projects. Try to capitalize on existing public-private-people partnerships.
	✓ Before starting the activities, inform and eventually interact with WP5 and WP6. They might bring in interesting insights and methods and involve relevant stakeholders.
	✓ Eventually involve the communication team of WP7 at the local level to spread out calls for contributions, bids, contests, crowdsourcing campaigns in order to reach out the largest number of people as possible.

How

Expected Specific Outcomes	Suggested Activities and Tools
1. **Explore co-implementation schemes**	A UIP internal meeting exploring all the CALs projects is suggested. First, assess the potential co-implementation modalities for each CAL; then, find out possible schemes to make it happen. You can pick up from several modalities and solutions to be tailored on the local context. ► **Tool 11. 1 CAL Co-implementation Scheme**

Step 12: Verify the CAL co-implemented action in place

This step is recommended; the output report does not have to be incorporated in Deliverable 2.3.

Presentation	The NBS is finally in place and everybody can notice it. Our NBS gains visibility and this is the time where new opportunities might arise spontaneously. Step 12 wants to assess the construction outcomes and eventually adjust it or strengthen it according to the feedback of people and stakeholders. The intervention is hence reinforced in place right before and immediately after being operational. For instance, more stakeholders and local business might want to join or improve the solution adding their original contribution.
Logistical considerations	Step 12 modalities are flexible; a local meeting or within the CAL team could be enough, or live observations about people feedback on the solution could be collected in place or online. In a CAL internal meeting, a series of adjustments, improvements, opportunities to implement the solution could be discussed.

Phase		Task 2.4. Co-implementing solutions for urban regeneration
Level of implementation		CAL scale – with partial UIP involvement
When		M15 – M40; after Step 11 has been completed, and right after construction is in place and operational.
What	**Topic**	Improving the solution through additional co-implementation activities proposed by stakeholders and people right after the NBS is in place.
	Objective	• To find out innovative and effective modalities increase the number of stakeholders involved in the specific CAL solution. • To sustain the take-off of the solutions in place through innovative co-implementation schemes.
	Product	• The revised and improved CAL co-implementation scheme. **► STEP 12 Output Report Template**
Why this activity		To effectively anticipate unexpected opportunities that will emerge once the NBS will be visible in place during and right after construction.
Who – With Whom		This phase is mainly directed to the UIP members. With their expertise and guidance can direct CALs to scale-up the consensus and direct involvement in the solution, once the construction is completed. WP5 could be involved in suggesting specific tools for further stakeholders' engagement.

Check – Prerequisites	✓ Check all the protocols, agreements, guidelines, experiences that the city has already in place to enable co-implementation projects. Try to capitalize on existing public-private-people partnerships. ✓ Before starting the activities, inform and eventually interact with WP5 and WP6. They might bring in interesting insights and methods and involve relevant stakeholders. ✓ Eventually involve the communication team of WP7 at the local level to spread out the inauguration of the CAL NBS in place.

How	
Expected Specific Outcomes	**Suggested Activities and Tools**
1. **Explore and establish innovative co-implementation partnerships**	A UIP internal meeting where all the CALs are invited to discuss novel partnership opportunities that emerged right after the NBS is in place. In fact, the construction of the solution might have activated unexpected interest around the project and this is the time where the UIP and the whole FR City partnership has to provide support the take-off of the NBS. First, assess the potential co-implementation modalities for each CAL; then, find out possible schemes and identify partners, in order to make new forms of collaboration happen. You can pick up from several modalities and solutions (learn from Step 11), to be tailored on the local context. Finalize partnerships! ► **Tool 12. 1 CAL Co-implementation Partnerships**

Co-monitor & co-manage implemented NBS

Co-monitoring is essential to CLEVER Cities Project to evaluate the NBS implemented and monitor the durability and quality of the interventions. The UIP, CALs and further residents will contribute to assess the impact of the interventions and success or failure of processes. Local smart urban platforms will be used to collect data to evaluate the implementation progress from a city-wide NBS development perspective.
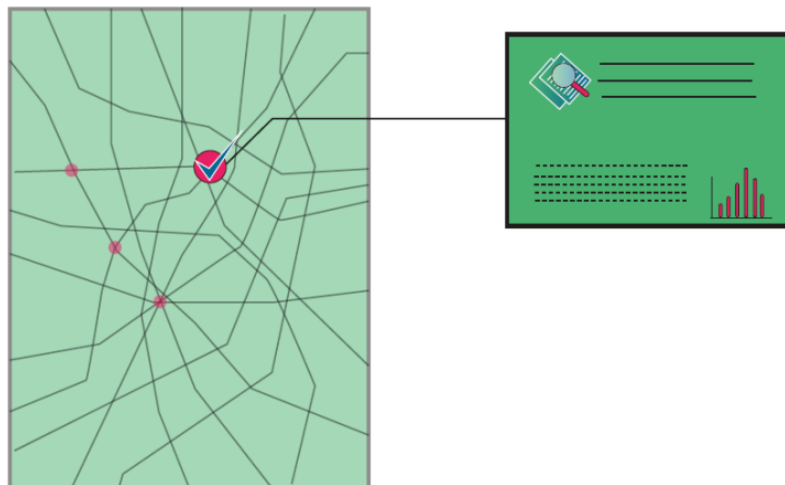
Co-monitoring and co-managing the NBS in place are the next phase. This phase must be considered as a co-creation activity in all effects because it requires a strong involvement of stakeholders and here is where you measure the success of all the process. A crucial moment of the pathway, indeed, where a strong effort to sustain all the process is required. This step requires original solutions, cohesion and constancy.

13 Co-Monitor and Map the progress of implemented NBS

14 Verification of Co-benefits of NBS

PHASE	STEP	WHAT	HOW	CLEVER deliverables	
		Topic	Specific outcomes		
Co-Monitor & Co-Manage	13	**Co-Monitor and Map the Progress of implemented NBS**	1. Explore innovative co-management schemes 2. Apply innovative co-monitoring solutions	• The CAL co-monitoring procedure, in a revised form from previous steps • The CAL co-management report	► **STEP 13 Output Report Template**
	14	**Verification of Co-benefits of NBS**	1. Assess the achieved co-benefits at the CAL level	• The Generated Co-benefits Assessment Report	► **STEP 14 Output Report Template**

Step 13: Co-Monitor and Map the progress of implemented NBS

This step is fundamental; the output report is required and will be incorporated into Deliverable 2.4.

Presentation	Step 13 is crucial to establish successful co-monitoring and co-management schemes for the NBS in place. All eyes of the CLEVER Cities partnership are on us now! WP4, WP5 and WP6 are eager to validate NBS in place. Moreover, people have to be fully involved in this activity in order to improve their engagement and sense of belonging to the adapted solution.
Logistical considerations	Step 13 requires a local meeting within the CAL team; a follow-up activity with relevant city officers could be a good idea for envisioning new policies and strategies for improving co-management schemes of public goods and spaces. WP4, WP5 and WP6 could give important insights and must be involved in this whole co-monitoring phase.

Phase	Task 2.3. Establishing local (co-monitoring) infrastructure	
Level of implementation	CAL scale – with partial UIP involvement	
When	M40 – M54 (start co-monitoring in advance; if you monitor before construction, you will better appreciate before and after change)	
What	**Topic**	Taking care of the solution: co-managing and co-monitoring the progress of the NBS in fully operation.
	Objective	• To explore and apply suitable and possibly innovative procedures for co-monitoring the running NBS in place • To find suitable and possibly innovative procedures for co-management of the running NBS in place.
	Product	• The CAL co-monitoring procedure, in a revised form from previous steps. • The CAL co-management report. ► **STEP 13 Output Report Template**
Why this activity	To coordinate and make co-monitoring and co-management into effective practices at the CAL level.	
Who – With Whom	This phase is mainly directed to the CAL members but requires a strong UIP coordination and sharing of best practices. With their expertise and guidance can direct CALs to scale-up the consensus and direct involvement in the solution, once the construction is completed. This is also the step that mostly interacts to CLEVER Cities global partnership: WP4, WP5 and WP6 could be interested in knowing more about the outcomes of NBS and could be potentially involved in suggesting specific tools for further stakeholders' engagement methods, management plans and monitoring solutions.	

Check – Prerequisites	✓ Each CAL is a different world in terms of ownership, involvement levels and so on: Carefully evaluate the correct declination of co-monitoring for each CAL before starting with this step! In any case, co-monitoring can apply to all NBS, even if with peculiar rules. ✓ Check all the protocols, agreements, guidelines, experiences that the city has already in place to enable co-implementation projects. Try to capitalize on existing public-private-people partnerships. ✓ Before starting the activities, inform and eventually interact with WP4, WP5 and WP6. They might bring in interesting insights and methods and involve relevant stakeholders. ✓ Step 01, Step 08 already expressed Key Performance Indicators and expected co-benefits that the NBS should have brought at the local scale: start from that relevant material in order not to disregard people expectations. ✓ Get the list of monitoring indicators established by WP4.

| How	
Expected Specific Outcomes	**Suggested Activities and Tools**
1. **Explore innovative co-management schemes**	Propose a shared management of the solution: enable people participation in the taking care. An activity at the CAL level could explore available solutions and best practices and define the rules for a successful stewardship of NBS. Invite experts from WP5 to provide useful insights to refine your plan. ► **Tool 13. 1 CAL Co-management Plan**
2. **Apply innovative co-monitoring solutions**	Starting from the rich work carried out by WP4 in identifying monitoring indicators, and during the co-creation pathway (Step 02 and Step 08) on co-monitoring indicators, the CAL is invited to apply those and follow a shared CO-monitoring procedure. This should happen ► **Tool 13. 2 CAL Co-monitoring Procedure**

Step 14: Verification of Co-benefits of NBS

This step is fundamental; the output report is required and will be incorporated into Deliverable 2.4.
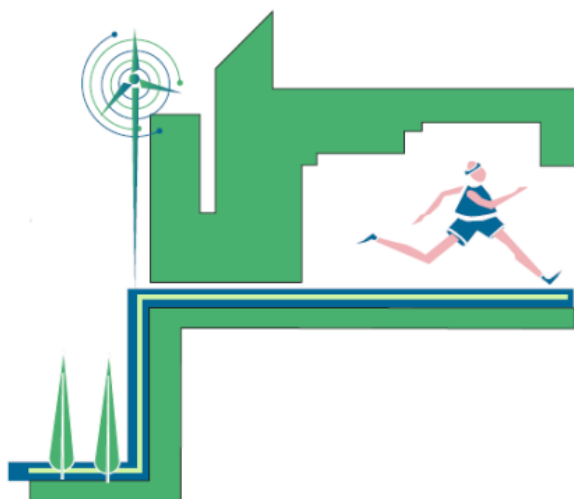
Presentation	This step aims at assessing the generated co-benefits according to the Key Performance Indicators (KPI) established both by co-design activities (Step 08 and Step 10) and the WP4 team. Most of the assessment refers to social and economic co-benefits generated, but do not underestimate environmental ones.
Logistical considerations	Step 14 requires a local meeting within the CAL team; a follow-up activity with relevant city officers and the UIP could be a good idea for evaluating the outcomes of co-design and co-implementation activities.

Phase		Task 2.3. Establishing local (co-monitoring) infrastructure
Level of implementation		CAL scale – with partial UIP involvement
When		M40 – M54 (eventually in parallel to Step 13)
What	Topic	Validating the outcomes of the NBS through the generated co-benefits.
	Objective	• To assess the success or failure of the CAL experience through the identified KPI.
	Product	• The Generated Co-benefits Assessment Report ► **STEP 14 Output Report Template**
Why this activity		To coordinate and make co-monitoring and co-management into effective practices at the CAL level.
Who – With Whom		This phase is mainly directed to the CAL members but requires a strong UIP coordination and sharing of best practices. With their expertise and guidance can direct CALs to scale-up the consensus and direct involvement in the solution, once the construction is completed. This is also the step that mostly interacts to CLEVER Cities global partnership: WP4, WP5 and WP6 could be interested in knowing more about the outcomes of NBS and could be potentially involved in suggesting specific tools for further stakeholders' engagement methods, management plans and monitoring solutions.

Check – Prerequisites	✓ Each CAL is a different world in terms of ownership, involvement levels and so on: Carefully evaluate the correct declination of co-monitoring for each CAL before starting with this step! In any case, co-monitoring can apply to all NBS, even if with peculiar rules.
	✓ Before starting the activities, inform and eventually interact with WP4. They might also want to collect the feedback emerging from the co-creation activity and report this into the overall monitoring deliverable. Ask them if they need specific information or data out if this activity and agree on a common template to avoid replication of tasks.
	✓ Get the list of monitoring indicators established by WP4.
	✓ Make us of the Co-monitoring assessment procedure resulting from Step 13.
	✓ Step 01, Step 08 already expressed Key Performance Indicators (KPI) and expected co-benefits that the NBS should have brought at the local scale: start from that relevant material in order not to disregard people expectations.

How	
Expected Specific Outcomes	**Suggested Activities and Tools**
1. **Assess the achieved co-benefits at the CAL level**	Organize an activity within the CAL to evaluate the achieved co-benefits. CALs can make use of surveys and online tools for evaluating the performance of the NBS. Report the outcomes of the activity to the FR city partnership. Refer to the co-monitoring. ► **Tool 14. 1 The Co-benefits Assessment Exercise** ► **Tool 14. 2 The CAL Co-benefits Survey** ► **Tool 14. 3 The Generated Co-benefits Assessment Report**

Co-develop and replicate solutions

Co-development sets the scene to grow, test and develop the proposed solution by looking at details, and the local context to create a viable intervention; co-development requires pooling resources, skills, structures and relationships in order for the solution to thrive. Co-development refers to exploring and finding solutions for replicating successful stories on NBS. Involved stakeholders should be the promoters for replication and further development of the implemented solutions. Solutions are both tangible products and innovative procedures to diffuse the application of NBS in cities. CLEVER Cities will be the megaphone to spread out globally the best practices through the Transition Academy.

15 Sustain the Action

16 Co-develop the Action

PHASE	STEP	WHAT	HOW	CLEVER deliverables	
		Topic	Specific outcomes		
Co-Develop	15	**Sustain the action**	1. Assess the potential for NBS replication	• The replicability potential report	► **STEP 15 Output Report Template**
	16	**Co-develop the action**	1. Develop a business plan for your NBS	• The Scaling-Up plan complete with a sound business model	► **STEP 16 Output Report Template**

Step 15: Sustain the action

This step is fundamental; the output report is required and will be incorporated into Deliverable 2.5.
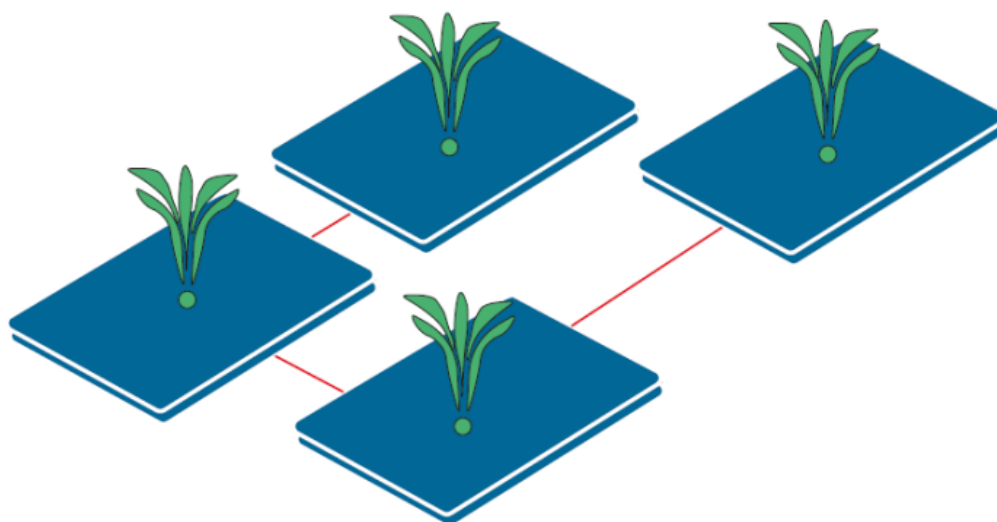
Presentation	This step is crucial for the legacy of the project: replicability and sustainability of the NBS in place and the whole co-creation process have to be assessed based on performance indicators, including social feedback. Each CAL has to check procurements, procedures, schedules and constraints, in short, the lesson learned from the whole path. This step is the wrap-up of the co-creation activities. Based on this critical assessment, partners and stakeholders have to explore modalities to sustain successful stories on NBS in cities in Step 16.
Logistical considerations	Step 15 requires a series of meetings where the CAL presents the outcomes to the UIP and the city representatives and consolidates the lesson learned for the legacy of the project.

Phase	Task 2.5 Upscaling and inner city replication roadmaps	
Level of implementation	CAL scale – with partial UIP involvement	
When	M54 – M60	
What	Topic	Lesson learned from the CAL outcomes and evaluation for further up-scaling action of successful stories.
	Objective	• To assess the success or failure of the CAL experience, find out the replicability potential and report the lesson learned.
	Product	• The Replicability Potential Report ► **STEP 15 Output Report Template**
Why this activity	To support cities to reveal potential replicability opportunities of the co-created NBS.	
Who – With Whom	This phase is mainly directed to the FR city partnership, picking up the CAL experiences. members but requires a strong UIP coordination and sharing of best practices. WP3, WP5 and WP6 are warmly encouraged to take part to this step.	

Check – Prerequisites	✓ Before starting the activities, inform and try to get the involvement of WP3, WP5 and WP6. They can provide their expertise in assessing the replicability opportunities of solutions. ✓ Involve UIP partners that can help turning pilot projects into market products or public procurements.

How	
Expected Specific Outcomes	**Suggested Activities and Tools**
1. **Assess the potential for NBS replication**	Organize a workshop with experts (start-up incubators) and potential investors and/or policy innovators to make a first assessment of the implemented solutions. Try to establish if these have the potential to be replicated and scaled-up at the local context and beyond. ► **Tool 15. 1 The NBS Replication Matrix** ► **Tool 15. 2 The NBS Replicability Potential Report**

Step 16: Co-develop the action

This step is recommended; the output report does not have to be incorporated in the Deliverable D2.5.

Presentation	This step puts in action the replicability of the NBS: CAL Partners are encouraged to present the implemented solution to UIP and widely to the public and look for replication possibilities in the local context and at EU level through the Transition Academy, especially to the involved CLEVER follower cities.
Logistical considerations	The carrying out of Step 16 is flexibly recommended and is responsibility of the UIP how to best valorise the success of results. An overall CLEVER Cities strategy together with WP3, WP5, WP6 and WP7 could be explored in order to help CALs to gain visibility and generate a positive loop.

Phase	Task 2.5 Upscaling and inner-city replication roadmaps	
Level of implementation	CAL scale – with partial UIP involvement	
When	M54 – M60 (After Step 15)	
What	**Topic**	Co-develop and promote the solution at the European level
	Objective	• To better co-develop the solution with experts through the Transition Academy. • To diffuse the solutions at the European level and beyond and gain more visibility to attract potential investors • In the long term, to turn pilot NBS projects into diffused action.
	Product	• The Scaling-Up plan complete with a sound business model ► **STEP 16 Output Report Template**
Why this activity	To support NBS promoters to achieve marketability of projects.	
Who – With Whom	This phase is mainly directed by the Transition Academy, who will invite interested and interesting actors to promote and develop their business models.	

Check – Prerequisites	✓ You have completed Step 15. ✓ The selected NBS solutions have achieved all the co-creation steps and reached desired generated co-benefits.

How	

Expected Specific Outcomes	Suggested Activities and Tools
1. **Develop a business plan for your NBS**	Interested actors take part to a workshop with experts at the Transition Academy (or equivalent start-up incubators) and involve potential investors and/or policy innovators to co-develop a marketable product. ► **Tool 16. 1 The NBS Business Plan**