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Co-designing Nature-based Solutions in Living Labs

Deliverable 2.3 on Workshop round 1 in Frontrunner Cities (Dortmund, Turin, and Zagreb)

Work package: 2

Dissemination level: Public

Lead partner: ICLEI

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Due date: April 30, 2019

Submission date: April 30, 2019 /

Resubmission date: July 28, 2020

Deliverable	Report on WS round 1 in FRC
Deliverable No.	2.3
Work Package	2
Dissemination Level	PU
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Date	30/04/2019 / Resubmission: 25/07/20
File Name	Revision D2.3_Report on WS round 1 in FRC_proGlgreg_ICLEI_28-07-20
Status	Re-submitted
Revision	28/07/20
Reviewed by (if applicable)	Rieke Hansen, Axel Timpe, Margot Olbertz (RWTH Aachen), Riccardo Saraco (COTO)
Information to be used for citations of this report	Wilk, B.; Anton, B.; Latinos, V.; Vuger, M.; Knappe, D.; Saraco, R. (2019): Co-designing Nature-based Solutions in Living Labs. Report on workshop round 1 in Frontrunner Cities, Deliverable No. 2.3, proGlgreg. Horizon 2020 Grant Agreement No 776528, European Commission, 38 pp.

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This work was financially supported by the National Key Research and Development Program of China (2017YFE0119000).

This document has been prepared in the framework of the European project proGlgreg.

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This project has received funding from the EU's Horizon 2020 research and innovation programme under grant agreement no. 776528.

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Document revision history

Version	Date	Modification reason	Modified by
0.2	25/07/20	D2.3 was rejected by the Commission: the executive summaries need to be adjusted to include more detail on the conclusions and lessons-learned. More emphasis could be placed on distilling transferable best practice lessons from all activities and to elaborate more clearly the implications of the work both for subsequent stages of the project and for practitioners attempting to replicate/upscale the urban LL approach being proposed.	Bettina Wilk (ICLEI)

Partner organisations

No.	Name	Short name	Country
1	RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN	RWTH	Germany
2	COMUNE DI TORINO	COTO	Italy
3	FONDAZIONE DELLA COMUNITA DI MIRAFIORI ONLUS	MIRAFIORI	Italy
4	PARCO SCIENTIFICO E TECNOLOGICO PER L'AMBIENTE - ENVIRONMENT PARK SPA	ENVIPARK	Italy
5	UNIVERSITA DEGLI STUDI DI TORINO	UNITO	Italy
6	POLITECNICO DI TORINO	POLITO	Italy
7	ASSOCIAZIONE ORTIALTI	OA	Italy
8	DUAL SRL	DUAL	Italy
9	STADT DORTMUND	DORTMUND	Germany

10	DIE URBANISTEN EV	URBA	Germany
11	HEI-TRO GMBH	HEITRO	Germany
12	LOHRBERG STADLANDSCHAFTSARCHITEKTUR PARTNERSCHAFT FREIER LANDSCHAFTSARCHITEKTEN MBH	LOHRBERG	Germany
13	FACHHOCHSCHULE SUDWESTFALEN	SWUAS	Germany
14	AQUAPONIK MANUFAKTUR GMBH	APM	Germany
15	GRAD ZAGREB	ZAGREB	Croatia
16	SVEUCILISTE U ZAGREBU ARHITEKTONSKI FAKULTET	AF ZAGREB	Croatia
17	ZAVOD ZA PROSTORNO UREDENJE GRADA ZAGREBA	ZZPUGZ	Croatia
18	KOMFOR KLIMA GRUPA DOO ZA PROIZVODNJU TRGOVINU I USLUGE	KKG	Croatia
19	UDRUGA ZELENE I PLAVE SESVETE	ZIPS	Croatia

Abbreviations

FRC: Frontrunner Cities (Dortmund (DE), Turin (IT), Zagreb (HR), Ningbo (CN))

LL: Living Lab

NBS: Nature-based solutions

proGlgreg: productive Green Infrastructure for post-industrial urban regeneration

RWL: Real-world laboratories

ULL: Urban Living Labs

WP: Work Package

Executive Summary

Co-design of Nature-based Solutions (NBS) lies at the core of the project proGlgreg. It means systematically involving all relevant stakeholders from the very start of the project and engaging them as equal co-creators of NBS in order to achieve mutually valued outcomes, a joint ownership of the NBS implemented as well as a good fit between the NBS and the local context. proGlgreg defines co-design as a process occurring in the Living Labs (LL) as the first stage of the co-creation concept, prior to the co-implementation of NBS (WP3). Co-creation includes the phases of co-design, co-implementation, co-maintenance / co-evaluation of NBS.

To establish and steer the co-design process in the Frontrunner Cities (FRC), ICLEI organizes three rounds of workshops (T2.2), bringing together and engaging relevant stakeholders in the local co-design process. The target audience in each FRC is composed of a core group of different local project partners involved in the design and implementation of the selected NBS, including representatives from academia /research institutions, local government (municipality), SMEs, and civil society (individual citizens and NGOs representing citizens). It also integrates additional key stakeholders considered relevant for the successful implementation of the respective NBS.

Prior to the first round of workshops, site visits to Dortmund, Turin and Zagreb served to enquire and consider particular needs and requirements of each FRC in the workshop programme. The three site visits revealed differing expectations towards the co-design process and varying levels of experience with participatory processes, which influenced how the workshops in each European FRC were conducted. Whilst the authors developed themes for each workshop round as common building blocks, variations were made based on needs and priorities.

This report summarizes and highlights key outcomes of the first round of co-design workshops, held in Dortmund, Turin and Zagreb at the end of 2018. The overarching theme of the first round of workshop was “mutual understanding” which aimed at bringing all participants onto the same page and align expectations towards the desired local transformation to be achieved by the LL.

The workshops – notably the first one - build on the spatial analysis of LL and city/metropolitan scale performed by all European FRC (T2.1). The spatial analysis outlines key local issues, challenges and contextual information in the FRC and Follower Cities (FC) to support the co-design activities (T2.2) as well as the subsequent NBS pilot implementation (WP3). First and second tier stakeholder lists per NBS compiled in T2.1 formed the basis for reassessing stakeholder roles to eliminate or add to the list where necessary. The maps, SWOT analysis and overview of pertinent policies and plans proved useful as contextual background information. However, the relatively coarse and macro scale data resolution had to be fine-tuned for the co-design process and workshops, e.g. a more micro-scale approach, such as an assessment of marginalised groups, who they are and where they live in the LL area, and of intermediary organisations might have been useful. Also, complementing

quantitative data with qualitative knowledge based on local residents' experiences about the place and its identity would be useful to kick-start the co-design process.

The first workshop round entailed three main building blocks, which were mostly identified based on the feedback received during the site visits: (1) introduction and discussion of co-design principles, (2) aligning long-term expectations for the LL, and (3) identifying stakeholders, roles and responsibilities.

Formulating six co-design principles guides planning and decision-making processes in the LL towards co-design: (1) be open & inclusive, (2) be diverse, (3) share goals and vision, (4) think long term, (5) be experimental and reflective, and (6) be flexible. Based on discussions in the workshop, an additional one was added, namely (7) be transparent. The three workshop rounds reflected on the co-design principles, supported by tools and exercises (see D2.10).

Co-design principles (3) share goals and vision, and (4) think long term defined the desired long-term transformation of the LL in each FRC by the diverse local project partners and their different agendas to jointly create and agree a common vision and develop a one-sentence mission statement. Creating a new identity that unites the industrial heritage with a green future vision as well as connections and accessibility both physical and beyond, including notions of social cohesion and common identity was a recurring theme across all FRC.

Co-design principles (1) be open, inclusive, (2) be diverse, and (4) think long term refer to stakeholder mapping. Stakeholder mapping was conducted slightly differently in each FRC, identifying and assessing key stakeholders to be closely engaged in processes, unveiling the different management approaches applied in the FRC. For instance, in Dortmund, the core group is formed entirely by the local project partners who met for the first time during workshop round 1 and subsequently established regular exchanges on the NBS progress and issues where support is needed. A clear distinction is made in terms of leadership, responsibilities and ownership of the different NBS: renatured landfill sites and accessible river corridors (NBS 1 and 6) are led by the municipality of Dortmund, whilst urban farming, aquaponics and biodiversity initiatives (NBS 3, 4, and 8) are led by a local NGO in close collaboration with the university and the local SME. The stakeholder mapping was thus performed for each individual NBS, however, running the risk of losing sight of the overall objective of the LL and of fragmented stakeholder participation. In contrast, local project partners involved in the NBS collaborated early on in the project in Turin, partly even before as part of initiatives implemented during a large-scale transformation process of Mirafiori South. The core group around the different NBS is much larger, more complex and partly overlapping. The workshops thus aimed at improving cohesion and integration between the different actions scattered across the LL area by developing a common narrative for the LL and forming five activity clusters to combine the individual NBS as a result of discussions during Workshop 1. Common locations within the LL and/or the challenge they address structure the activity clusters.

To address (1) be open and inclusive, (2) be diverse and (7) be transparent, the workshop participants explored the preferred type and intensity of involvement of stakeholders

following the levels of the Public Participation Spectrum. The Stakeholder Participation Spectrum support decisions about the envisaged level of stakeholder involvement, clarify, or reconsider roles and responsibilities of the different stakeholders involved and set the ground for informed discussions and decision-making. It can also help define suited engagement formats and formulate engagement plans. Especially between project partners that have not collaborated before, this exercise can be useful for clarifying ambitions of the different partners and providing room for discussion, as well as making partners reflect on their own role and position within an initiative or reveal frictions between project partners. An impartial moderator taking on the role of a mediator during workshops is critical in such situations.

A high intensity of stakeholder engagement in co-design is neither possible for all NBS, nor is it necessarily envisaged by the initiating actor. Thus, there are gradients of co-design that need to be reconciled with the individual context and NBS. The intensity of stakeholder engagement seems to be dependent on i) the type of NBS (green roofs (NBS2) aquaponics (NBS 4) which require a high level of technical expertise in design and operation) vs. urban gardening (NBS 3), ii) the type and experience of the initiating actor with stakeholder engagement processes, and iii) the context of administrative structures and procedures that might not be conducive to empowering actors to take significant influence on the design of the NBS.

While the co-design principles form an integral part of the workshops' exercises and tools to become increasingly tangible for the core group, some workshop outputs will be revisited in the following rounds of co-design workshops such as each FRC/LL visions to reassess their validity and connect them to the reality, as well as the resources and activities needed to create the desired impact. The self-assessment questions regarding co-design will be further tested in workshop round 2, expanded and integrated as a tool in the guidelines (D2.10) to be used independently by practitioners. Also, the Public Participation Spectrum will be worked on further in workshop round 3 to determine suited engagement formats for each stakeholder/stakeholder group and formulate engagement plans. In response to greater exchange between FRC and FC, a dedicated city workshop to the 'All boards' meeting in Cluj-Napoca in May 2019 will address this issue raised.

Deliverable D2.10 "Guidelines for co-designing and co-implementing green infrastructure in urban regeneration processes" will distil the experiences and lessons learnt from the co-design processes in the European FRC and provide a roadmap for establishing stakeholder engagement with clear roles and responsibilities as well as suited organizational and management structures, thus supporting the FC in developing urban regeneration plans (T2.3). They will also support and direct FRC and other non-proGlgreg cities' replication processes of NBS (WP6) through the integration into a series of replication workshops.

1. Introduction

As part of Work Package (WP) 2, Task 2.2. of the proGlgreg project, namely “Co-design in Frontrunner Cities”, entails the development and application of a co-design methodology in the FRC. This is done through organizing three rounds of so-called co-design workshops in each of the FRC which bring together relevant stakeholders and engage them in the local co-design process (proGlgreg Grant Agreement). It is important to mention that while there are only three (European) FRC mentioned in this report, there is a fourth FRC, namely Ningbo in China. Due to a delay in the approval of funding, Ningbo did not participate in Workshop 1 but will join the described processes.

This report summarizes and highlights the most important results of the first round of co-design workshops, held in Dortmund, Turin and Zagreb at the end of 2018. At the beginning, the conceptual underpinnings of co-design within proGlgreg will be shortly explored, and its major characteristics and its relationship with the concept of LL will be identified. Also, the aim of the workshops and their target group will be described. Following, an overview of the preparatory site visits to Dortmund, Turin and Zagreb will be provided. The major part of this report focusses on the execution of the workshops in the three FRC. It will outline the content and most important exercises of the workshops, highlight key outcomes and identify commonalities across the three FRC.

1.1. Contextualising the co-design workshops in proGlgreg

Co-design of NBS lies at the core of the project proGlgreg. Its approach aims at systematically engaging citizens and multiple stakeholders in participatory and trans-disciplinary planning processes. This shall foster joint ownership of NBS implemented and safeguard a good fit between the NBS and local needs (proGlgreg Grant Agreement). But what does co-design imply and how can it be promoted?

1.1.1. Demarcating co-design as the initial phase of co-creation

For the co-design and co-implementation of the NBS in proGlgreg, so-called quad helix partnerships are created. These include representatives from academia and research institutions, from the local government (municipality), industry (SMEs and entrepreneurs), and civil society (including both individual citizens and NGOs from different levels representing citizens). These partnerships cut across the LL level as well as the NBS level. In the LL, a local consortium with all threads of the helix is formed, and additional stakeholders from outside are included through the co-processes. On NBS level, in some of the individual NBS, the quad helix partnership will develop and implement them, together with partners from outside the partnership (see Fig.1).



Figure 1: Visualization of quad helix approach in proGlgreg

A broad range of terms is used to describe collaborative relationships and processes, such as co-creation, co-production, involvement, participation, quadruple-helix model or co-governance (see Baccarne et al. 2014, Schuurman and De Marez 2012, Westerlund and Leminen 2011). In the context of proGlgreg, co-creation is used as an umbrella term for co-design and co-implementation which pertain to different consecutive phases in a project lifecycle, but all refer to the same concept. We specifically refer to the term co-design as a preparatory stage for the co-implementation of the envisaged NBS which will start in January 2020. What differentiates co-creation from more traditional forms of participation is the

intensity of involvement and the impact of societal actors in and on processes (Schaepeke et al., 2018; Voorberg, Bekkers, & Tummers, 2015). Following the Public Participation Spectrum, involvement can range from information provision, to consultation, cooperation, collaboration, and empowerment (see Fig.2) (International Organization for Public Participation, 2014).

Whilst we would assume that co-creation is always the level to strive for, in practice, there are limits to participation across co-design and co-implementation. Different contexts, determined for instance by the particular NBS chosen (technological expertise required with aquaponics (NBS 4) vs. urban gardening (NBS 3)) or the number of people involved, might require differing levels of participation. In other cases, the administrative structure and procedures might not be conducive to co-creation in the sense of empowerment. We therefore suggest to perceive the different levels of involvement as gradients, rather than a golden standard (see Fig.2) (Menny et al., 2018).

INCREASING IMPACT ON THE DECISION					
	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

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Figure 2: Public Participation Spectrum

Source: International Organization for Public Participation, 2014

1.1.2. Integrating co-design and Living Labs

The idea of developing and implementing locally adapted NBS in LL in the four FRC is central in proGlgreg. Therefore, the concept of LLs and how they are understood in the project deserve a closer look. We understand LL as “geographically embedded spaces that facilitate explicit experimentation and learning based on participation and user involvement” (Voytenko et al., 2016, p. 4). In that sense, they are both, an area in terms of a geographically or institutionally bound spaces within actual economic, institutional, environmental and socio-cultural conditions, as well as an approach for intentional collaboration and experimentation (Breuer et al., 2017; Kobzeva & Knickel, 2018; Voytenko et al., 2016).

Out of a variety of concepts with slightly different characteristics of LLs that scholars differentiate, we consider **real-world laboratories (RWLs)** and **Urban Living Labs (ULLs)** and their aim to produce urban sustainability transitions as most applicable to proGlgreg (Menny et al., 2018; Voytenko et al., 2016).

- A central element of RWLs is **real-world experimenting** in terms of an intended stream of transformative action with the ambition to change (natural and/or social) world conditions. The city as the context for transformative experimentation provides the spaces that serve as incubators for local and regional change (Meyer-Soylu, Parodi, & Trenks, 2016; Parodi et al., 2018; Schaepke et al., 2018). Similarly, ULLs exhibit **experimental (urban) governance** in which stakeholders jointly develop and test new technologies, services and ways of living to produce innovative solutions to urban challenges with city governments as partners (Voytenko et al. 2016).
- Another common theme is the prospect of **transformation** as a long-term result of the LL. Transformation implies long-term and large-scale societal change from joint learning processes, such as changed daily routines and everyday cultures. In the context of the proGlgreg LLs, the uptake of the developed solutions in the long run beyond its duration could be such a change. To initiate it, LLs need to go beyond producing application-oriented knowledge about transformation. Transformation originates in the framework of the LL and is then taken further by members of civil society and other stakeholders (e.g. local administration) involved in the LL acting as change catalysts (Frantzeskaki & Kabisch, 2016; Menny et al., 2018; Parodi et al., 2018; Schaepke et al., 2018).
- Whereas the LL is related to the physical (safe) space, **co-design** is one of the central processes happening in the LL and a key ingredient for successfully addressing urban sustainability challenges (see Juujärvi and Pessa 2013, Voytenko et al. 2016). Involving all relevant stakeholders (as mentioned in the quadruple helix approach) from the very start of the project and engaging them as equal contributors and co-creators is crucial for achieving mutually valued outcomes (Breuer et al., 2017; Voorberg et al., 2015). This can build ground for trust, responsibility, and ownership of the NBS, which, in turn, enhance the chance of NBS being maintained and up-scaled even after the termination of the project.

1.2 Preparation of the first co-design workshop round

With co-design as the starting point, it was proGlgreg's ambition to also design the workshop programme in a co-creative manner, considering and integrating the particular needs and requirements of the different FRC. Therefore, the team organized preparatory visits to Dortmund (in Sept. 2018 during the Kick-off Conference), Turin (Oct. 2018) and Zagreb (Oct. 2018) prior to the first round of workshops. During these site visits, the team in charge of Task 2.2 could familiarise itself with the local actors, (future) sites of NBS implementation and the current status and plans of each FRC regarding the chosen NBS.

Main objectives of these site visit were:

1. Aligning mutual expectations regarding roles and responsibilities, both of the local project partners as well as of ICLEI in charge of facilitating the co-design process
2. Identifying a so-called core group of key stakeholders that will take a leading role in the co-design at local level
3. Agreeing on the broad lines of the stakeholder engagement/ co-design process during 2019 (incl. a rough time plan for workshops)

The three site visits unravelled differing expectations towards the co-design process and varying levels of experience with participatory processes. The City of Dortmund, active in participation processes for a long time, planned to organize participation according to NBS themes, such as improving connectivity and access to green space between the former Hansa coking plant and the district of Huckarde. Stated expectations were advice for a participation strategy tailored to the different processes along with participation tools. Similar to that, project partners from Zagreb expected guidance on stakeholder mapping and engagement to identify organized and non-organized key groups and individuals (including also marginalized groups and communities). Contrastingly, the core group in Turin where the LL area, Mirafiori South, had already been subject to large transformation processes in the 1990s, wished to derive best practices from existing actions and improve connections between different actions scattered across the LL area. Better integration shall be achieved by developing a common narrative for the LL as a cornerstone of its identity.

To address the long-term character of the co-design process, the authors developed themes for each of the three co-design workshop rounds. The overarching theme of Workshop 1 was understanding. The overall objective was to bring all participants on the same page with regards to the special characteristics of the LL and align expectations towards the desired local transformation to be achieved. Workshop 2 (scheduled for April/May 2019) was planned to be dedicated to innovation and transformation. Proposed objectives were to clarify the link between innovation and transformation, reach a consensus in the core group on what kind of technical, social and economic innovation should be achieved and define the role of actors in related processes. Workshop 3 (scheduled for Oct./Nov. 2019) was termed commitment, with the aim to achieve agreement on some kind of formal or informal commitment from the core group for the (co-)implementation of the NBS.

1.3 Aim of the first workshop and target audience

The co-design workshops are designed, organized and moderated by ICLEI in three consecutive rounds from November 2018 to December 2019. In each round, the municipal project partner in the FRC hosts a workshop in a location of their choice. The overall purpose of the co-design workshops is to establish and steer the co-design process in the four FRC. The aim is to initiate, facilitate and maintain feasible collaboration among the project partners and additional key stakeholders identified by the latter. After completion of the three workshop rounds, each FRC and its consolidated core group should be able to smoothly transition to the next phase of the project, namely NBS (co-)implementation (starting in January 2019 as part of WP 3).

During these workshops, the team also develops a co-design methodology which will result in co-design guidelines (Deliverable 2.10) at the end of 2019. This co-design methodology is both an input in, as well as a product of the workshops, that is shaped and adjusted accordingly based on the experiences gathered in the FRC. Easy-to-use co-design principles and their application based on the practices observed in FRC form the base of this co-design methodology. The result will be a practical guidance or handbook targeting the proGReg Fellow Cities and supporting them in setting up a co-design (working) structure, as well as organizing co-design processes. Also, other cities aiming at organizing collaborative design processes for NBS will be a target group.

The target audience of the workshops is the core group in each FRC which is composed of the different local project partners involved in the design and implementation of the selected NBS and additional key stakeholders. In each FRC, the selection of the local project partners in proGReg follows the idea of the quadruple helix approach (see chapter 1.1.1). Additional key stakeholders acting in the LL area and/or considered relevant for the successful implementation of the respective NBS were identified by the core group and invited to join Workshop 1. These include representatives from other municipal departments involved in local urban regeneration projects, multipliers, such as civil society organisations active in the area, district council representatives, local associations, schools or museums. Also, owners of land which will be leased during proGReg, such as the Foundation for the Preservation of Industrial Monuments in Dortmund.

The team developed agenda building blocks for Workshop 1: Understanding, each of which was set out to achieve parts of the overall objective. For Workshop 1, we elaborated five such building blocks:

1. Introduce the co-design principles to further their integration in LL and NBS activities (chapter 2.2)
2. Elicit long-term expectations of the LL (2023 and beyond) among the participants to align (possibly differing) perspectives on the envisaged transformation of the LL area (chapter 2.3)

3. Cluster NBS activities, map actors and stakeholders, and define their type of engagement to inventory and structure activities around the different NBS and stakeholder engagement (chapter 2.4)
4. Establish a management structure and define roles and responsibilities to facilitate a feasible working mode for team and cluster leaders (chapter 2.5)
5. Create a work and time plan for 2019 to define and structure the next steps

Following the idea of co-creating the workshop agenda in each of the FRC, the building blocks were sent out to each FRC core group for review and comments prior to defining the agenda. This resulted in slight variations of the workshop agenda in each of the FRC (see Annex).

2. Implementing the co-design workshops in Dortmund, Turin, Zagreb

Zagreb was the first city to host the co-design workshop (Dec. 3 and 4, 2018), followed by Dortmund (Dec. 7, 2018) and Turin (Dec. 18 and 19, 2018). Despite the similar building blocks, the workshop in the FRC differed in length, ranging from 1 day in Dortmund, to 1.5 days in Turin and Zagreb.

Irrespective of the differing duration, Workshop 1 was composed of two main parts in each of the FRCs. In the first part, a larger group of stakeholders came together to share information and discuss a number of key issues for the further development of the LL. The second part was reserved for a limited number of representatives from the core team that is formed by the local proGlgreg partners for managing the overall process.

2.1. Participants

Apart from the core group consisting of the local project partners, the number and type of additional participants differed in each FRC.

In Dortmund, next to the project partners (the Urbanisten (URBA), the Department for Urban Renewal of the City of Dortmund (DORTMUND), the University of Applied Sciences South-Rhine-Westphalia (SWUAS), the HEI-TRO GmbH (HEITRO) and the Aquaponik Manufaktur (APM)), four additional stakeholders participated in the workshop: a representative from the interest group of citizen associations in Huckarde, one from the Foundation for Preservation of Industrial Monuments, a district leader from Huckarde and a local artist.

A large number of additional and diverse stakeholders was invited in Zagreb, with around 30 participants in the first part of the workshop. Next to the project partners (the city of Zagreb (ZAGREB), the Bureau for Physical Planning of the city of Zagreb (ZZPUGZ), the SME Komfor Klima Group (KKG), the NGO Green and Blue Sesevete (ZIPS) and the University of Zagreb (AF ZAGREB)), participants included the NGO ISKRA which represents vulnerable groups and has a valid interest in the therapy garden which will be implemented as part of the extension of urban farming activities in the district of Sesevete. Also amongst the participants, were representatives from Sesevete High School, the director of a local music school and the director of the Sesevete Museum. Further participants were representatives of the Sesevete District Council and of the community of Bosnian Roma.

Also in Turin there was a large number of participants, with up to forty in the first part of the workshop. Approximately half of the participants came from various departments of the municipality, including the ones for urbanisation; environment; public buildings; information services; innovation, European funds and the smart city. Additionally, a number of local NGOs were present, among them Planet Idea and Coefficiente Clorofilla. On the second day the smaller core group was invited with about 15 representatives from local proGlgreg partners, including the municipality of Turin (COTO), the Politecnico di Torino (POLITO), the

University of Turin (UNITO), the NGOs Mirafiori Foundation (MIRAFIORI) and OrtiAlti (OA), and the SME 'Parco Scientifico e tecnologico per l'ambiente' (ENVIPARK).

2.2. Co-design principles

As the cornerstone and starting point for developing a co-design methodology, the authors developed six clear and easy-to-use co-design principles. These principles are the result of a comprehensive literature review including co-design and LL guidance documents and relevant outputs of related research projects, such as GREEN SURGE (greensurge.eu) or NATURVATION (naturvation.eu).

In order to keep the process as flexible and adaptable as possible to the different contexts of the FRC, a decision against using a step-wise approach and instead for formulating principles was made. These principles are meant to guide planning and decision-making processes in the LL towards co-design. Six such principles were formulated: (1) be open & inclusive, (2) be diverse, (3) share goals and vision, (4) think long term, (5) be experimental and reflective, and (6) be flexible. A checklist consisting of questions for each principle was also created. Based on this, it can be assessed whether these principles are considered in current and future processes. A poster including all this information was created (see Fig.3), and distributed to all the workshop delegates for take-away. This poster is intended to make stakeholders aware of the co-design principles and make them use these regularly to check processes for their integration.

In Workshop 1: Understanding the participants were introduced to the poster and its intended use and asked for their feedback. Based on the discussions, the descriptions of some principles were slightly refined and an additional one added: transparency for citizens and future users of the NBS. The idea is to be transparent, honest and realistic about the desired outcome of the LL, scope of action and limits of stakeholder participation regarding their influence on design in planning and implementation at all times. This will help manage expectations, maintain commitment and promote the uptake of solutions.

1 BE OPEN & INCLUSIVE

Active & inclusive involvement of all relevant stakeholders in decision-making processes from the early stages of the Living Labs (LL), and equal consideration of their interests to build trust, legitimacy and ownership for solutions. Nature-based solutions have a higher chance of being used and/or maintained when they match with citizens' needs, expectations and preferences.

2 BE DIVERSE

Jointly producing innovative solutions to real-world problems applicable for society, policy and practice requires the collaboration of researchers, businesses, (public) service providers, civil society organizations and citizens, as well as a mix of scientific and experience-based, tacit knowledge of local communities.

3 BE TRANSPARENT

Be transparent, honest and realistic about the desired outcome of the LL, scope of action and limits of citizen participation regarding their influence on design, planning & implementation at all times. This will help manage expectations, maintain commitment and promote the uptake of solutions.

Co-creation towards urban transformation

4 SHARE GOALS & VISION

Develop a jointly agreed, common vision and goals to foster effective, mutually valued outcomes with high acceptance among different stakeholders.

5 THINK LONG-TERM

Look to a long-term planning horizon for all services and solutions to be produced. This implies developing a clear vision of what should be achieved by the end of the LL and beyond. From there, derive actions that promote the uptake of the solutions in the long run.

6 BE EXPERIMENTAL & REFLECTIVE

Actively foster learning and innovation. Learning environments should allow stakeholders to create and test new technologies, services and products in safe, real-life environments. A continuous feedback cycle of evaluating results and adjusting actions helps get to the best results. Acceptance of unfinished products and states is crucial

7 BE FLEXIBLE

Allow for flexibility in processes and plans. Give room for adjusting strategies in response to changing actors' needs, insights and circumstances, and for changing the ways and rules of collaboration.

Checklist

Informal and low threshold gatherings open to new participants and contributions?

Safe environment for exchange of ideas and creative thinking?

Stakeholders involved with direct access to marginalized groups for their early involvement?

Different scientific, professional and experiential perspectives involved?

Measures taken to safeguard contributions from a diversity of stakeholders throughout the project?

Infrastructure in place for continuous mutual exchange and sharing expectations where all voices are equally heard?

Mutually agreed long-term vision of the LL and its desired outcomes beyond termination of the project?

(Self-)reflective formats that facilitate exchange between scientists and practitioners, such as interdisciplinary working groups?

Strategies to monitor, assess and evaluate processes, developments and outcomes generated in the Living Labs?

Stakeholders enabled to interact in informal and "unplanned" ways?

Stakeholders able to influence the type and course of activities according to their views and priorities?



This project has received funding from the EU's Horizon 2020 research and innovation programme under grant agreement no. 776528. The sole responsibility for the content of this publication lies with the authors. It does not necessarily represent the opinion of the European Union. Neither the EASME nor the European Commission are responsible for any use that may be made of the information contained therein.

Figure 3: Co-design principles poster and checklist | Bettina Wilk, ICLEI

2.3. Identifying and aligning long-term expectations for the LL

The local project partners are mostly diverse and bring different perspectives to the LL. To shed light on these different, possibly diverging perspectives, Workshop 1 included an exercise on the desired long-term transformation of the LL area after the termination of proGReg. On the one hand, this exercise was intended to elicit the different perceptions and expectations of the participants towards the LL, on the other hand to align them in a jointly created vision for the LL in each of the FRC (due to the large number of participants, we had several break out groups per FRC, and thus several visions). This exercise was further informed by two co-design principles: developing a jointly agreed vision to foster mutually valued outcomes with a high acceptance of the different stakeholders; thinking long-term concerning what is to be achieved by the LL.

Workshop participants were asked to envision the LL area after termination of proGReg in 2030 in a scenario: how do things look like in the area, what activities are going on, are the different NBS implemented during proGReg still maintained and used and what would inhabitants report about the changes in the area. They were then asked to note down these features and briefly explain them to the entire group. These features were then clustered in so-called thematic highlights of the LL by the moderator. Based on these thematic highlights, the participants were then asked to develop a one-sentence mission statement/ slogan that best captured what has been discussed (see Table 1 for results).

Table 1. Results Scenario 2030 in each FRC

City / Group	Highlights	Mission Statement / Slogan
Zagreb / Group 1	Connectivity within Sesvete and to Zagreb (bypass); Development of social, cultural, touristic, athletic activities; Entrepreneurial hub, innovation and technology centre (promote local SME); Accessible green spaces and urban agriculture development; Awareness raising among citizens	Attractive, pleasant district, especially for children and youth, with touristic activities with local identity, parks and green spaces, locally produced food and limited transport
Zagreb / Group 2	Develop entrepreneurial spirit of the youth with smart technologies (creation of Hub); Building the green future for Sesvete (renewable resources, energy efficiency, green spaces, NBS); Create a new urban centre with needed public facilities and spaces; Create a new identity of Sesvete as a role model for the city (past and future go together)	A smart and sustainable centre for Zagreb and the region

Dortmund / Group 1	<p>Creating links (accessibility to inner city) and room for innovation (entrepreneurship, green economy);</p> <p>Attractive place to live;</p> <p>Linking industrial culture with future identity (topic of identity);</p> <p>Creating partnerships (with inhabitants);</p> <p>Role model in sustainability (circular economy, sustainable production and consumption, self-sufficiency);</p> <p>Creating a place for learning</p>	Industrial culture – sustainable transfer into the future of Huckarde
Dortmund / Group 2	<p>Triangle human beings – nature – economy;</p> <p>Accessibility (eliminate social and construction barriers);</p> <p>Inhabitants identify themselves with the district;</p> <p>Space for experimenting and participating;</p> <p>Attractive space for multiple citizens' uses</p>	Trustworthiness, sustainability through participation
Turin / Group 1	<p>Beyond concepts of start-ups: Mirafiori as a centre of the green economy (rethink FIAT heritage);</p> <p>District for people and relationships between people, less for (industrial) production;</p> <p>Green and sustainable public transport;</p> <p>Re-qualification of production; wider range of job opportunities brings people;</p>	Open, sustainable (efficient transport), resilient (need to adapt to climate change etc.), productive (new working opportunities, green jobs), innovative, international and recreative
Turin / Group 2	<p>Re-inhabiting Mirafiori (improved public services, build opportunities for young inhabitants, facilitate social cohesion);</p> <p>A place for leisure and sports (integrate green areas with sports facilities, shared spaces for social action and community practice);</p> <p>A permeable and cohesive neighbourhood</p>	Mirafiori Green Unit: an enduring, young and green engine for the city of Turin
Turin / Group 3	<p>Green and alternative mobility;</p> <p>Demographic behavioural change (attract young people, better connect old and young people);</p> <p>Accessible, green neighbourhood;</p> <p>Learning city: social and environmental sustainability of the LL Mirafiori, integrating sustainability and outputs of LL in education;</p> <p>Collaborative system</p>	Attraction and integration of young residents towards a collaborative, green and connected neighbourhood

These slogans turned out quite different in each of the FRC but several common lines can be derived from the results. One reoccurring theme was that of **creating a new identity that unites the industrial heritage with a green future vision**. It is built on the industrial past of the respective district and integrates its heritage, but at the same time is oriented towards a sustainable, “green” future development. For instance, this is well captured by the vision created in Dortmund: “*industrial culture – sustainable transfer into the future of Huckarde*”. It refers to the historical importance of the coking plant Hansa on which a future identity is to be based. At the same time it emphasizes the group’s ambition of becoming a role model in sustainability with a green economy at its core, developed through innovative entrepreneurship which facilitates energetic self-sufficiency, circular economy, sustainable production and consumption in the district (see Highlights in Table 1). Similar notions came from Zagreb where one vision referred to developing Sesvete into “*a smart and sustainable centre of Zagreb*” with a new identity that combines its industrial past with a green future. The entrepreneurial spirit of the youth is emphasized as a major driver for a smart economy which is built on promoting renewable energy, green spaces and clean traffic. Similar lines of thought were echoed in Turin as well, where the district of Mirafiori is envisioned as a “*young and green engine*” for the city of Turin, referring to its industrial past and the FIAT production plant. “*A centre of the green economy*” which is “*open*”, “*sustainable*” and “*productive*” in terms of producing new (green) job opportunities for its young inhabitants.

Another reoccurring theme across all three FRC was that of **connections and accessibility both in a physical terms as well as beyond, including notions of common identity and social cohesion**. In Turin, one of the major outputs across all three working groups was that urban regeneration needs to take into account that new connections have to be built at various levels: within the community, between East and West Mirafiori and between Mirafiori and the rest of Turin. Also in Dortmund, better connectivity of the district of Huckarde was discussed in two ways. On the one hand, in the sense of improving accessibility between the district and the rest of Dortmund. On the other hand in terms of breaking down social and structural barriers in Huckarde in the long run. In Zagreb, the aspect of improved connectivity of the district of Sesvete with the rest of Zagreb and better accessibility of green spaces through cycling paths were discussed.

2.4. Defining stakeholders, roles and responsibilities

2.4.1. Stakeholder Mapping

The stakeholder mapping process is the starting point for a successful stakeholder engagement process. It was done slightly different in each of the FRC, depending on the different requirements and levels of experience in the FRC.

Zagreb had requested a stakeholder mapping exercise for identifying and preparing the engagement of key actors ahead of the workshop. Therefore in Workshop 1 we started with a general stakeholder mapping for the whole LL. The stakeholders in the room were first



Figure 5: Stakeholder mapping in Dortmund | Bettina Wilk

In Turin, the stakeholder groups around the different NBS are much larger, more complex and largely overlapping. Collaboration among the local project partners involved in NBS implementation had started early on in the project. So-called activity clusters had been formed ahead of Workshop 1 to manage the complexity of the stakeholders and perform meetings in relevant stakeholder sub-groups. Activity clusters are structured along common locations of activities in the LL and/or the challenge they address. The local project partners had undertaken a first attempt to combine the individual NBS into a smaller number of five such activity clusters:

- School gardens and educational activities in schools
- Green roofs (on Casa nel Parco and public buildings)
- New soil and green division (including green walls, aquaponics and the pollinator garden)
- Social gardens and disadvantaged people (gardens in social housing buildings, pollinator-friendly garden, Castello di Mirafiori ruins recovery, new planting gardens in Cascina Piemonte)
- Green corridors

These were used as a starting point for the stakeholder mapping (see Fig. 6).

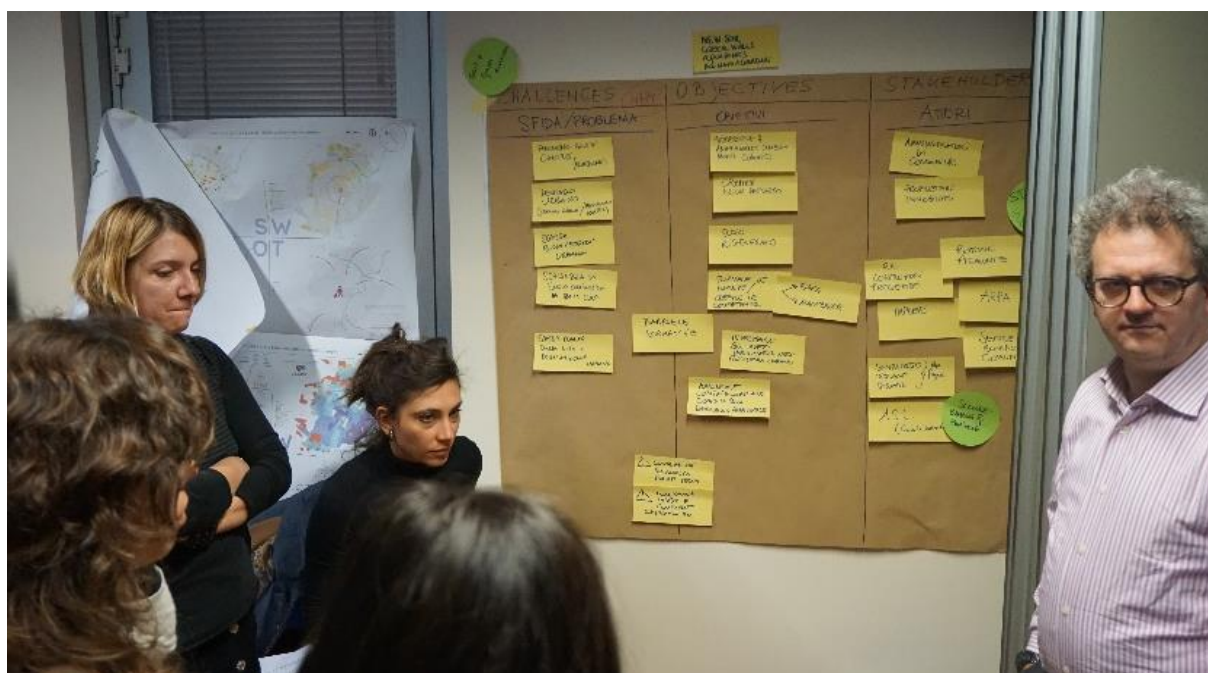


Figure 6: Stakeholder mapping in Turin | Bettina Wilk, ICLEI

2.4.2. Determining type and intensity of engagement of stakeholders

As already touched on in chapter 1.1.1, it is important to acknowledge that there are different levels and thus gradients of co-design. These are ‘inform’ (one-way communication), ‘consult’, ‘involve’, ‘partner’ (or ‘collaborate’) and ‘empower’. Towards the level of empowerment, influence of other stakeholders (non-municipal) on the products and services created in the LL increases (in our case the concrete NBS, such as urban community gardens or aquaponics). At the same time, the role of its initiators decreases from a leading (for instance, when stakeholders are only informed and have no means of shaping decisions) to an enabling one (for instance, gradually transferring ownership over an NBS to a stakeholder group, followed by respective management schemes). Depending on the context, such as number of stakeholders or the type of NBS and activities planned, different degrees of stakeholder involvement might be required and boundaries are often blurred. Thus, the highest level of involvement, namely empowerment is not always required and/or desired. The stakeholder and public participation spectrum (see Table 2) is a good way to make decisions regarding the preferred level of stakeholder involvement explicit. This can clarify the roles and responsibilities of the different actors involved and set the ground for an informed discussion and decision-making. Also, it can help formulate respective stakeholder engagement plans and define the right format for involvement (i.e. questionnaire, workshop etc.).

Therefore, in a second step, the workshops participants explored the preferred type and intensity of involvement of each stakeholder (group). After being introduced to the spectrum and its different gradients, they were requested to first locate their own organization in terms of where they see themselves and the NBS within their responsibility best represented concerning their aspirations of involving the local population. Second, they were supposed to locate the identified stakeholders, one by one, in the spectrum from 'inform' to 'empower' (see Table 2).

In almost all FRC, this exercise sparked discussions about the ambitions of the different project partners and sometimes even about their own role and position in the project. In Dortmund, it became obvious that options for and intensity of envisaged citizen participation differ between the two NBS leads DORTMUND and URBA (collaborating with SWUAS, HEITRO and APM). In Zagreb, some project partners first placed themselves at lower levels and in the ensuing joint discussion then reconsidered their role and placed themselves higher up the spectrum.

Another interesting outcome was how the role the municipal project partners envisioned for themselves differed between the different FRC. For instance, ZAGREB positioned itself between "partner" and "empower". Whilst they have authority over the budget, they do not want to act as if they were the only lead in the project since one of their major ambitions is to invite all stakeholders into the process. Most of the other stakeholders positioned themselves between "involve" and "partner": ZIPS active in local citizen engagement in Sesvete, KKG responsible for the technical installation of several NBS, TVZ, the NGO ISKRA (vulnerable groups) and the museum of Sesvete. AF ZAGREB and a small NGO in the area of New Jelkovic, a new housing district in the LL with public amenities, positioned themselves in "consult". AF ZAGREB aims at a deeper, and more intense professional involvement as well as at a regular exchange in working groups. The music school which placed itself in "inform", considers itself a beneficiary of the project.

Contrastingly, DORTMUND positioned itself at the level of "involve", stating that their NBS envisioned for this area do not go beyond involving citizens and that there are additional requirements from the International Garden Exhibition that limit their leeway. On the other hand, URBA and SWUAS as the lead of the three NBS aquaponics, urban farming and gardening (including a food forest and permaculture), and pollinator diversity placed themselves between "partner" and "empower". Relying on the local population to take ownership and maintain the planned greenhouse with an aquaponics installation as well as the food forest, it is their ambition to work closely with the local population and engage it in their activities as co-owners. However, they are also realistic in admitting that true empowerment might be difficult to achieve.

Similarly, for the activity cluster “green roofs” TURIN positioned itself at the level of “involvement” since they administrate the processes. Other project partners, such as the OA were placed in “empower” since they are allocated the major share of the budget for the technical installations and have the design capability (see Table 2 for further results). Thus, they are in the position to decide when and how to involve citizens with whom they work collaboratively to create solutions for many different users. The objective behind this is to make the final users take care of the place and take ownership of the solutions implemented. Citizens were placed between “consult” and “involve”. UNITO, POLITO and apiculturists responsible for monitoring the green roofs and its impact on pollinators were allocated to the “partner” level.

Table 2. Results Stakeholder Participation Spectrum in each FRC

Government actor role	<div> <div>Leading</div> <div>→</div> <div>Enabling</div> </div>				None/regulatory
	Inform	Consult	Involve	Partner	
Form of Stakeholder & public participation					
Description	Provide stakeholders with balanced, objective information about NBS projects and plans, support them in understanding the problem /solutions; no active citizen engagement	Stakeholders are consulted and can provide feedback on analysis, alternatives and decisions as part of decision-making; however, inputs do not have to be taken into account	Working directly with stakeholders & public to ensure that their concerns are understood and considered throughout the processes	True partnering between public authorities and stakeholders in each step of the decision-making as much as possible; shared roles & responsibilities around planning & management of NBS	Place the final decision in the hands of the public/stakeholders, implement what they decide (e.g. management agreements, leasing or purchasing of public and private land)
DORTMUND			DORTMUND: Leisure activities and clean energy on former landfill (NBS 1) Accessible green corridors (NBS 6)	URBA/SWUAS/ HEITRO/APM: Urban Farming & Gardening (NBS 3) Aquaponic (NBS 4)	URBA / SWUAS: Biodiversity (NBS 8)
TURIN School		Higher levels of public administration (ministries to		Citizens involved in organizations and initiatives (take care of school gardens,	

gardens and educational activities in schools		support and contribute to activities)			involvement in building gardens); Scholastic body; Private and re-search institutions as sponsors (seeds, technical sponsors etc.)	
TURIN Green roofs					UNITO POLITO (scientific support); Apiculturists (monitoring NBS and polinator impact)	OA citizens
TURIN New soil and green division	Building managers (info on NBS-based technology they can suggest to owners)			Inhabitants and schools	Public institutions; Private enterprises; MIRAFIORI	Local associations (future management of NBS)
TURIN Social gardens and disadvantaged people	Gardeners in the area (expertise and knowledge transfer)				Inhabitants of social housing complexes; NGOs working in the district	Mental disease centre (will manage activity)
TURIN Green corridors	Citizens (web platforms, such as wegov.org) Local associations active in the district (first involve, later partner)				Private operators; City departments (from initial involvement to promoters of activities)	
ZAGREB		Local music school	AF ZAGREB; New Jelkovic NGO	NGO ISKRA; Museum Sesvete	ZIPS KKG ZZPUGZ; University of Applied Sciences (TVZ)	ZAGREB

Source Template: Mattijssen, T., et al., The 'green' and 'self' in green self-governance – a study of 264 green space initiatives by citizens. Journal of Environmental Policy & Planning, 2017.

2.5. Management structure for the LL

In most of the cities except Turin, the initially planned item of establishing a management structure for the LL could not be addressed in Workshop 1 and was postponed to the second round.

In Turin, a major part of the core group meeting (second part of the workshop) was dedicated to defining the share of responsibilities among its members. Below, the agreed division of responsibilities is illustrated.

POLITO:

- External communication with COTO
- Co-design process locally, if partners need support to involve citizens (with UNITO)
- Research on the involvement of umbrella organization (aspects Sara mentioned in the morning: disadvantaged people)
- Peri-urban aspect of agriculture – using nature in a productive way
- Formal role in spatial analysis (led by URBASOFIA)
- Systemic design / connect NBS (design workshop week in March 2019: work with students on one particular topic, could be used for the project: choose a cluster and work on it)

UNITO:

- Co-design with POLITO
- Formal role in monitoring / assessment (lead by CNR)
- Socio-economic analysis (with POLITO) - action research
- Technical contribution for specific NBS
- Policy level reflection – overall direction that “sustains” the project and problematize that

MIRAFIORI:

- School gardens
- Educational activities in schools related to sustainable agriculture
- Community gardens near social housing
- Cross-sector responsibilities: communication with local communities, connecting proGlgreg actions with other actions taking place in the district
- Citizen participation in planning, maintenance of NBS

OA:

- Implementation: pollinator garden, green roof where most budget is
- Cross-activities: spatial analysis, co-design related to the implementation activities of pollinator garden and green roof (focus on exchanging models & methodologies)

ENVIPARK:

- Contact point for new soil implementation
- Future: educational part regarding professional training in new soil and innovation in agriculture (new plant exploitation, biological compound in new soil, biochemical extraction)
- Development of technological barrier analysis

3. Conclusion and outlook

It was observed that the participants were actively engaging with the workshop content and satisfied with the outcomes. The majority agreed that a good level of interaction had been stimulated through the set-up of the workshop and a good momentum been achieved on which the further development of the LL can build. For Dortmund for instance, the workshop was the first moment for all project partners to gather around one table and thus perceived as a crucial impetus for starting and manifesting a collaboration among the project partners. On the other hand, Turin had already established a solid collaboration among the local project partners and additional key stakeholders since the proposal writing stage. Zagreb saw a great value in forming a core group that should stay involved in the forthcoming workshops and identifying additional crucial stakeholders who will be contacted as a follow-up. Thus, the FRC have differing starting points with regards to stakeholder participation which need to be considered for tailored design and content of the forthcoming co-design workshops. Overall, there is a clear intention of continuing and intensifying the work in the respective core groups in the future.

Since the idea is to inform the co-design methodology with these workshops, some of the workshop content will build on each other. For instance, the co-design principles and the checklist (see Fig. 3), introduced in Workshop 1: understanding, will be revisited in Workshop 2. Having familiarized themselves with the questions, participants will be asked to assess the status of their local co-design process based on these questions. Another item that will be taken up again is the stakeholder and public participation spectrum (see results in Table 2). At a later stage of the project, it will be feasible to reassess the positioning of the different stakeholders and explore whether their position has changed during the co-design process. In most of the cities except Turin, the initially planned item of establishing a management structure for the LL could not be addressed in the first workshop and was postponed to the second round. In Turin, there was a call for the need to further develop the management structure and include internal and external communication mechanisms, reporting rules and implementation progress tools.

Furthermore, several cities, identified open issues requiring follow-up that will be revisited in forthcoming workshops. Among these are the development of an overarching narrative for the LL that is owned by the local population. Another point of discussion that came up in all FRC was the option for an exchange with other FRC. This point has been addressed by adding a dedicated city workshop at the city board meeting in Cluj-Napoca in May 2019 that will foster exchange among FRCs as well as Follower Cities.

References

- Breuer, J., Carter, D., Ståhlbröst, A., Evans, P., Schuurman, D., Berghe, C. (2017). *Living Lab Methodology Handbook*. (K. Malmberg & I. Vaitinen, Eds.). <https://doi.org/10.5281/zenodo.1146321>
- Frantzeskaki, N., & Kabisch, N. (2016). Designing a knowledge co-production operating space for urban environmental governance - Lessons from Rotterdam, Netherlands and Berlin, Germany. *Environmental Science and Policy*, 62, 90–98. <https://doi.org/10.1016/j.envsci.2016.01.010>
- International Organization for Public Participation. (2014). IAP2's Public Participation Spectrum. Retrieved September 12, 2018, from https://cdn.ymaws.com/www.iap2.org/resource/resmgr/foundations_course/IAP2_P2_Spectrum_FINAL.pdf
- Kobzeva, M., & Knickel, K. (2018). Instead of just talking we are actually doing it! Initial insights into the use of Living Labs in the EU-funded ROBUST project. Retrieved from <http://rural-urban.eu/news/instead-just-talking-we-are-actually-doing-it-living-labs-robust>
- Menny, M., Voytenko Palgan, Y., & McCormick, K. (2018). Urban living labs and the role of users in co-creation. *Gaia*, 27, 68–77. <https://doi.org/10.14512/gaia.27.S1.14>
- Meyer-Soylu, S., Parodi, O., & Trenks, H. (2016). Das Reallabor als Partizipationskontinuum. Erfahrungen aus dem Quartier Zukunft und Reallabor 131 in Karlsruhe. *Technikfolgenabschätzung – Theorie Und Praxis*, 25(3), 31–40. <https://doi.org/10.1007/s12523-009-0021-6>
- Parodi, O., Waitz, C., Bachinger, M., Kuhn, R., Meyer-Soylu, S., Alcàntara, S., & Rhodius, R. (2018). Insights into and recommendations from three real-world laboratories: An experience-based comparison. *Gaia*, 27, 52–59. <https://doi.org/10.14512/gaia.27.S1.12>
- Schaepke, N., Stelzer, F., Caniglia, G., Bergmann, M., Wanner, M., Singer-Brodowski, M., Loorbach, D., Olsson, P. & Lang, D. J. (2018). Jointly Experimenting for Transformation? Shaping Real-World Laboratories by Comparing Them. *GAIA - Ecological Perspectives for Science and Society*, 27, 85–96.
- Voorberg, W. H., Bekkers, V. J. J. M., & Tummers, L. G. (2015). A Systematic Review of Co-Creation and Co-Production: Embarking on the social innovation journey. *Public Management Review*, 17(9), 1333–1357. <https://doi.org/10.1080/14719037.2014.930505>
- Voytenko, Y., McCormick, K., Evans, J., & Schliwa, G. (2016). Urban living labs for sustainability and low carbon cities in Europe: Towards a research agenda. *Journal of Cleaner Production*, 123, 45–54. <https://doi.org/10.1016/j.jclepro.2015.08.053>

Annexes

Agenda Zagreb

Dec. 3, 2018	Activity
09.00 – 09.10	Welcome and introduction to the activities of the day Vasileios Latinos, Bettina Wilk (ICLEI Local Governments for Sustainability)
09.10– 09.20	Presentation of the proGlgreg project and the Sesvete Living Lab Matija Vuger, Iva Bedenko, Nina Cikes (City of Zagreb)
09.20 – 10.00	5 Short presentations per NBS ZIPS; KomforKlima; University of Zagreb; City of Zagreb, Planning Department
10.00 – 10.15	Participants' self-introduction and expectations All
10.15 – 11.30	INTERACTIVE EXERCISE 1: Vision 2023 – How will the Sesvete Living Lab and the district look in 2023? ICLEI with support from the City of Zagreb and ZIPS (working mode in breakout groups)
11.30 – 11.40	Reporting back from breakout groups All
11.40 – 12.00	BREAK
12.00 – 13.00	INTERACTIVE EXERCISE 2: Stakeholder Mapping for NBS Clusters – PART I ICLEI with support from the City of Zagreb and ZIPS (working mode in breakout groups)
13.00 – 14.30	LUNCH BREAK
14.30 – 16.00	INTERACTIVE EXERCISE 2: Stakeholder Mapping for NBS Clusters – PART II ICLEI with support from the City of Zagreb and ZIPS (working mode in breakout groups)

16.00 – 16.15	COFFEE BREAK
16.15 – 17.00	ROLES AND RESPONSIBILITIES IN THE CO-CREATION PROCESS – DISCUSSION ICLEI
17.00 – 17.30	CO-DESIGN PRINCIPLES – DISCUSSION ICLEI
17.30	Wrap-up

Dec. 4, 2018	Activity
09.30 – 09.35	Welcome and introduction to the activities of the day Vasileios Latinos, Bettina Wilk (ICLEI Local Governments for Sustainability)
09.35 – 10.00	Round of feedback from Day 1 All (Core group)
10.00 – 11.30	Discussion – Management structure, definition of roles and responsibilities All (Core group)
11.30 – 11.45	BREAK
11.45 – 12.45	Work and time plan for 2019 All (Core group)
12.45	Wrap-up

Agenda Dortmund

Dec. 7, 2018	Activity
08.30 – 08.40	Introduction Susanne Linnebach (Stadt Dortmund) Introduction Agenda Bettina Wilk (ICLEI)
08.40 – 08.50	Introduction round participants
08.50 – 09.30	Overview activities
08.50 – 09.10	Overview proGlgreg (Dagmar Knappe & Susanne Linnebach, City of Dortmund) Short presentation ICLEI
09.10 – 09.30	5 Presentations about NBS and planned activities in the LL: NBS 1: Deusenberg: Leisure activities and clean energy (DORTMUND) NBS 3: Permaculture garden (SWUAS) NBS 4: Aquaponic (URBA) NBS 6: Linking Huckarde-Deusenberg (DORTMUND) NBS 8: Biodiversity (SWUAS)
09.30 – 10.20	<i>Get the participants' perspective on the long-term direction for the transformation of the Living Lab area</i> Interactive Part I Expectations Huckarde 2030 Moderated forecasting exercise, scenario development for LL Huckarde in 2030
10.20 – 10.30	Coffee break
10.30 – 12.20	<i>Identify stakeholders to be involved in LL processes and NBS implementation</i> Interactive Part II Stakeholder Mapping based on NBS, identification of challenges

12.20 – 12.30	
12.30 – 13.20	<p><i>Learn from the principles for co-creation/stakeholder engagement that are proposed for the co-design process in the proGlgreg Living Labs</i></p> <p>Interactive Part III</p> <p>Co-design Principles</p>
13.20 – 14.40	Lunch break
14.40 – 16.00	<p><i>Find a working structure for the different NBS and clarify roles and responsibilities</i></p> <p>Discussion</p> <p>Define management structure, roles and responsibilities</p>
16.00 – 17.00	<p><i>Define and structure next steps until Workshop 2</i></p> <p>Discussion</p> <p>Work and time plan for 2019: Overview of activities until Workshop 2</p>
17.00 – 17.30	<p><i>Feedback of workshop participants, agreement on next steps, outlook next workshop</i></p> <p>Summary & Outlook</p>

Agenda Turin

Day 1

Time	Duration	Objectives Agenda items
09:00	20'	<i>Elena Deambrogio, COTO (tbc)</i> Welcome <i>Barbara Anton, ICLEI</i> Introduction of agenda and participants
09:20	10'	<i>Get all participants on same page</i> <i>Elena Deambrogio, COTO</i> Recap of overall proGReg project
09:30	30'	<i>Confirm list of different activities foreseen in the Living Lab</i> <i>Riccardo Saraco, COTO</i> Recap/update of complete list of NBS and related activities foreseen in the Turin Living Lab
10:00	20'	<i>Identify links of Living Lab process with official policies and plans</i> <i>Mirko Greco, POLITO</i> Recap/update of existing policies and plans relevant for implementing all activities
10:20	30'	Coffee break
10:50	90'	<i>Get the participants' perspective on the long-term direction for the transformation of the Living Lab area</i> <i>Barbara Anton and Bettina Wilk, ICLEI</i> Mirafiori-Sud in 2023 and beyond: the core team's expectations for the future transformation of the Living Lab area
12:20	20'	<i>Learn from the principles for co-creation/stakeholder engagement that are proposed for the co-design process in the proGReg Living Labs</i> <i>Bettina Wilk, ICLEI</i> The principles of co-creation for urban transformation in proGReg

Time	Duration	Objectives Agenda items
12:40	60'	Lunch
13:40	30'	<p><i>Explore potential synergies with WeGov, a major project on public participation/social innovation/new forms of governance that is currently implemented in Turin</i></p> <p><i>Fabrizio Barbiero, COTO (tbc)</i></p> <p>WeGovNow: Towards #WeGovernment - Collective and participative approaches for addressing local policy challenges</p>
14:10	95'	<p><i>Get ready for putting the co-creation process into practice</i></p> <p><i>Moderated by Barbara Anton and Bettina Wilk, ICLEI</i></p> <p>Activity clusters and stakeholder arrangements</p>
15:45	15'	Coffee break
16:00	45'	<p><i>Identify the links between the single activity clusters and create a comprehensive narrative</i></p> <p><i>Moderated by Barbara Anton</i></p> <p>Connecting the dots: Towards an overall narrative of the Turin Living Lab</p>
16:45	15'	<p><i>Close the day of the programme and inform those not participating on Day 2 about next steps</i></p> <p><i>Barbara Anton, ICLEI and Riccardo Saraco, COTO (tbc)</i></p> <p>Wrapping up</p>
17:00		End of workshop – Day 1

Day 2

Time	Duration	Items
09:00	05'	Introduction to the programme of the morning
09:05	15'	<i>Learn from each other's observations and impressions</i> De-briefing on Day 1
09:20	60'	<i>Advance the establishment of an effective management structure for all activities in the Living Lab</i> Managing the Living Lab
10:20	30'	<i>Create a list of different options to keep a track record of the innovation and transformation process and communicate it locally as well as with all proGlgreg partners and beyond</i> Documenting the Living Lab story
10:50	30'	Coffee break
11:20	80'	<i>Define tentative time plan and first steps to start each activity cluster</i> Initial action planning for 2019/2020
12:40	20'	<i>Highlight what worked and didn't work and collect ideas for the next workshop</i> Wrapping up
13:00		End of workshop