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# Co-designing Nature-based Solutions in Living Labs

Deliverable D2.5:  
Final report on co-design  
workshops in Frontrunner Cities  
(Dortmund, Turin, and Zagreb)

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## Partner organisations in countries where FRC Living Labs are located

Name	Short name	Country
RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN	RWTH	Germany
COMUNE DI TORINO	COTO	Italy
FONDAZIONE DELLA COMUNITA' DI MIRAFIORI ONLUS	MIRAFIORI	Italy
PARCO SCIENTIFICO E TECNOLOGICO PER L'AMBIENTE - ENVIRONMENT PARK SPA	ENVIPARK	Italy
UNIVERSITA' DEGLI STUDI DI TORINO	UNITO	Italy
POLITECNICO DI TORINO	POLITO	Italy
ASSOCIAZIONE ORTIALTI	OA	Italy
DUAL SRL	DUAL	Italy
STADT DORTMUND	DORTMUND	Germany
DIE URBANISTEN EV	URBA	Germany
HEI-TRO GMBH	HEITRO	Germany
LOHRBERG STADTLANDSCHAFTSARCHITEKTUR PARTNERSCHAFT FREIER LANDSCHAFTSARCHITEKTEN MBH	LOHRBERG	Germany

FACHHOCHSCHULE SUDWESTFALLEN	SWUAS	Germany
AQUAPONIK MANUFAKTUR GMBH	APM	Germany
GRAD ZAGREB	ZAGREB	Croatia
SVEUCILISTE U ZAGREBU ARHITEKTONSKI FAKULTET	AF ZAGREB	Croatia
ZAVOD ZA PROSTORNO UREDENJE GRADA ZAGREBA	ZZPUGZ	Croatia
KOMFOR KLIMA GRUPA DOO ZA PROIZVODNJU TRGOVINU I USLUGE	KKG	Croatia
UDRUGA ZELENE I PLAVE SESVETE	ZIPS	Croatia

## Abbreviations

FC: Follower Cities – Cascais (PT), Cluj-Napoca (RO), Piraeus (GR), Zenica (BA).

FRC: Front Runner Cities - Dortmund (DE), Turin (IT), Zagreb (HR), Ningbo (CN)

LL: Living Lab

NBS: Nature-based solution

proGlgreg: productive Green Infrastructure for post-industrial urban regeneration

WP: Work Package

## Executive Summary

Co-design of nature-based solutions (NBS) lies at the core of the proGlgreg project. It means systematically involving all relevant stakeholders from the very start of the project and engaging them as equal co-creators. The aim of co-design is 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. To establish and steer the co-design process in the Frontrunner Cities (FRC), ICLEI organised three rounds of workshops in the three European FRC that brought together locally relevant project partners and stakeholders and engaged them in the local co-design process of the selected NBS. The target audience for these workshops was the core group in each FRC, composed of the different local project partners involved in the design and implementation of the selected NBS and further key stakeholders, considered relevant for the successful implementation of the respective NBS.

This report summarizes and highlights key outcomes of the third and final round of co-design workshops, held in Dortmund, Turin and Zagreb end of 2019 and provides overall reflections on the co-design process in the FRC. This final round of workshops focused on stakeholder engagement with a particular emphasis on marginalised groups; it also served the purpose of facilitating a smooth transition and handover from the design phase to the implementation phase starting early 2020.

In the second round of workshops, all three FRC identified the urgency and centrality of achieving broad involvement of local communities and particularly marginalised groups. Based on this, the following two issues formed the building blocks for the final round: 1) how to ensure the long-term commitment of stakeholders that will be key for maintaining the NBS throughout the project and beyond; and 2) how to involve and integrate marginalised communities in the LL activities.

In general, stakeholder engagement needs to be planned in a systematic way by focusing on the different locations of the NBS. This includes identifying/mapping who should and can be feasibly engaged in the design and/or implementation of the NBS (depending on what is possible in the different locations), and defining tailored engagement formats for each location, NBS and group of stakeholders.

In all three workshops, participants highlighted the importance of speaking the language of the targeted populations, getting a good understanding of their living circumstances and their perspectives, and identifying representative and suitable intermediaries to win their trust and enable successful engagement. In addition, it was recommended to be as concrete as possible in communicating the value of a particular measure using simple language, visuals and translation services as needed. An interesting example came from Turin which included co-design as one of the key requirements in a tender it recently issued, with the purpose of ensuring that the voice of local populations (and especially those marginalised) is heard and can influence local developments.

The degree to which marginalised groups had been engaged in co-design differed amongst the FRC, depending on the type of NBS and the phase of application. For example, in Zagreb, the LL partners had already mapped out all relevant groups and NGOs, and have been systematically reaching out and involving them via meetings and workshops for the therapeutic garden. In Dortmund, however, the status of involving the population differs widely depending on the status quo of the respective NBS. In some, the co-design and co-creation process is well developed but still open to the involvement of new interest groups. Whereas in others, this was only possible after the third round of workshops as the partners feared raising the residents' expectations only to disappoint and demotivate them later on in the process in light of unclear land leases and contracts issues.

In critical reflection of the overall co-design process, the workshops succeeded in leading to improved management of the overall LL, e.g. clustering the NBS in Turin, allocating roles to specific people and institutions, and facilitating targeted and structured communication within the co-design process.

On the other hand, holding only three workshops in each FRC was only partly sufficient in providing the more tailored and hands-on support that a complex and 'living' process such as co-design requires. More extensive and intensive local involvement is recommended for providing effective support to co-design which is largely dependent on a deep understanding of the local context and social fabric in a given LL.

The input gathered during the three workshop rounds on challenges and drivers for the co-design process will be integrated in co-design guidelines (D2.10) to be submitted in May 2020. These are envisioned to be a practical guidance that facilitates the set-up of organizational and administrative structures suited to the planning and execution of local NBS co-design.



# 1. Introduction

## 1.1. Introduction to the project

Productive Green Infrastructure for post-industrial urban regeneration (proGReg) is developing and testing nature-based solutions (NBS) co-creatively with public authorities, civil society, researchers and businesses. Eight nature-based solutions, which will support the regeneration of urban areas affected by deindustrialisation, will be deployed in Front Runner Cities (FRC) Dortmund (Germany), Turin (Italy), Zagreb (Croatia) and Ningbo (China). The Follower cities (FC) Cascais (Portugal), Cluj-Napoca (Romania), Piraeus (Greece) and Zenica (Bosnia and Herzegovina) will receive support in developing their strategies for embedding nature-based solutions at local level through co-design processes.

## 1.2. Introduction to the report

This report presents the summary and lessons learned from the third and last co-design workshops held in the cities of Dortmund, Turin and Zagreb within the framework of Task 2.2 “Co-design in Frontrunner Cities” in Work Package 2 of the proGReg project. It also gives critical reflections and lessons learned from the overall co-design process in the three FRC.

The third round of workshops was held between end of October and mid November 2019 and was designed, organised and moderated by ICLEI in close collaboration with the FRC who, in turn, were responsible for inviting other LL participants and stakeholders.

The third round of workshops focused on stakeholder engagement with particular emphasis on marginalised groups; it also served the purpose of facilitating a smooth transition and handover from the design phase into the implementation phase that will start in early 2020.

The report is structured as follows: it first describes the implementation of the workshops giving an overview of participants and the updates in the LLs, it then briefly reviews the concept of co-design, followed by taking stock of stakeholder engagement to date, and a summary of the discussions on future stakeholder engagement with a focus on involving marginalised groups. The final section of the report gives city reflections and an outlook for each of the FRC as well as general reflections on the overall implementation of the co-design workshops.

## 1.3. Contextualising the third co-design workshop in proGReg

The **first round** of co-design workshops in the FRC took place in 2018 and had the goal of establishing “mutual understanding” between all concerned. It did so by bringing key local stakeholders to one table and building a common understanding of the characteristics of the LL, its overall purpose and the desired transformation. The following building blocks formed

the basis for these workshops: 1) co-design principles, 2) alignment of long-term expectations for the LL, and 3) identification of stakeholders, and their roles and responsibilities.

In preparation, ICLEI drafted six co-design principles (open and inclusive, diverse, flexible, sharing goals and vision, long-term thinking, experimental and reflective) along with a self-assessment checklist and presented them at the workshops in order to give participants orientation and a framework for the co-design process as well as a means for assessing progress. The addition of a seventh co-design principle, 'be transparent', was the result of the workshop discussions.

Furthermore, the project partners in the FRC developed short mission statements for their respective LL's, and conducted a mapping exercise in each of the cities to identify the key stakeholders that need to be engaged using the impact and influence template, in order to assess their interest and influence for each LL, as well as a plan for their engagement. Details are recorded in Deliverable 2.3 (D2.3).

The **second round** of workshops with its theme of "innovation and transformation", set out to answer the practical question of how to employ technical and social innovations and design the experimentation process to bring about the desired transformation. It was founded on the following building blocks: 1) management structure and definition of roles and responsibilities, 2) review of the co-design principles, 3) risks and implications, 4) transformation potential, 5) work and time plan for 2019.

The co-design principles were reviewed in these workshops revealing the particular relevance of *openness and inclusion* as well as *transparency*. With regard to inclusion, questions were raised such as: At what point and to what extent can inclusion be realised? When and how do we know if everyone is reached?

A major part of the second-round workshops was dedicated to identifying societal risks and corresponding mitigation measures including improved communication, systematic stakeholder involvement, the creation of an overarching LL narrative, and the cultivation of a sense of ownership and a local identity within the LL. Details are recorded in Deliverable 2.4 (D2.4).

One of the main points that emerged from the second round of workshops was the need to achieve broader involvement of local communities including marginalised groups. This is where the **third round** of co-design workshops picks up. The main building blocks of this final round were: 1) how to ensure the long-term commitment of stakeholders that will be key for maintaining the NBS throughout the project and beyond; 2) how to involve and integrate marginalised communities in the LL activities; 3) facilitate the transition into the implementation phase; and 4) critically reflect on the co-design process and gather lessons learned.

## 1.4. Preparation and aim of the third co-design workshop round

The objectives and agendas of the three workshops were developed in a co-creative manner with the FRC. With slight variations, the main overarching objectives identified are as follows:

- Get all project partners up-to-date;
- Familiarise all participants with the current draft of LL vision map (excluding Zagreb<sup>1</sup>);
- Familiarise all participants with the NBS implementation methodology as well as the planning and monitoring template;
- Review stakeholder collaboration in the design of NBS;
- Collect ideas for strengthening the involvement of marginalised groups in the co-design of each NBS;
- Share ideas for maintaining interest and commitment of stakeholders in co-implementation and maintenance;
- Plan further stakeholder collaboration for each NBS;
- Collect input for co-design/co-creation guidelines.

The workshop agendas can be found in Annex 1.

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

Turin was the first city to host its third co-design workshop on 30<sup>th</sup> October 2019, followed by Zagreb (6-7<sup>th</sup> November 2019) and Dortmund (12<sup>th</sup> November 2019). The workshops varied in length from one day in Dortmund and Turin, to 1.5 days in Zagreb.

### 2.1. Target audience and participants

Similar to the previous workshops, the workshops' target audience was the core group in each FRC composed of the different local project partners involved in the design and implementation of the selected NBS, and additional key stakeholders invited by the respective FRC.

Apart from the core group consisting of the local project partners, the number and type of additional participants differed in each FRC. With the exception of Dortmund, the second round of workshops included representatives from other municipal departments involved in local urban regeneration projects, and multipliers, such as civil society organisations active in the area and local associations.

The participating organisations in **Dortmund's** workshop were: the Urbanisten (URBA), the City of Dortmund (DORTMUND) represented by the Department for Urban Renewal, the

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<sup>1</sup> Zagreb's LL vision map was finalized after the workshop.

University of Applied Sciences South-Westphalia (SWUAS), Lohrberg  
Stadtlandschaftsarchitektur (LOHRBERG), hei-tro GmbH (HEITRO) and the Aquaponik  
Manufaktur (APM).

The local proGlgreg partners present in **Turin's** workshop were: Municipality of Turin (COTO), the Politecnico di Torino (POLITO), the University of Turin (UNITO), the NGOs Mirafiori Foundation (MIRAFIORI) and OrtiAlti (OA). It should be emphasised that the Municipality was represented by staff from various departments including urbanisation, environment, public buildings, information services, development, EU Funds, and Innovation and Smart City. A couple of participants also attended from the Links Foundation that is a Linked Third Party in proGlgreg as well as a number of students from POLITO and UNITO.

Also, in **Zagreb**, there was a large number of participants representing different organisations, with 21 participants attending on both days. Besides the project partners, namely the Bureau for Physical Planning of the City of Zagreb (ZZPUGZ), the SME Komfor Klima Group (KKG), the NGO Green and Blue Sesvete (ZIPS) and the University of Zagreb (AF ZAGREB) participants included the NGO ISKRA representing vulnerable groups and thus being interested in the therapeutic garden. A number of other local associations and representatives from a successful therapeutic garden project shared their lessons learned.

## 2.2. Update on the state of play

Common to all workshops was a mutual update on the state of play. This was largely done with the support of the LL vision maps in Dortmund and Turin, whereas Zagreb is currently in the process of developing its own and will finalise it by the end of January 2020.

The LL vision maps display the different NBS and their respective locations as well as the phase of development (not started, planning, implementation, etc.). They will be regularly updated throughout the project thereby providing a 'living' map for tracking progress. In addition to capturing the results, they will also serve as a communication and dissemination tool with the wider public and stakeholder groups.

The updates on the status of the different NBS in each of the FRC are summarized as follows.

### Dortmund

Following the decision taken in the second round of workshops to adopt a decentralized approach to implementation rather than a centralized one, the City and the partners are currently in the process of negotiating suitable plots of land with multiple owners. Dortmund's current LL vision map can be seen in Figure 1 below, and a description of the LL updates follows.



Lage und Umsetzungsstand der proGrieg-Projekte in Huckarde, Dortmund  
Location and status of proGrieg -projects in Huckarde, Dortmund

Arbeitsstand 11/2019

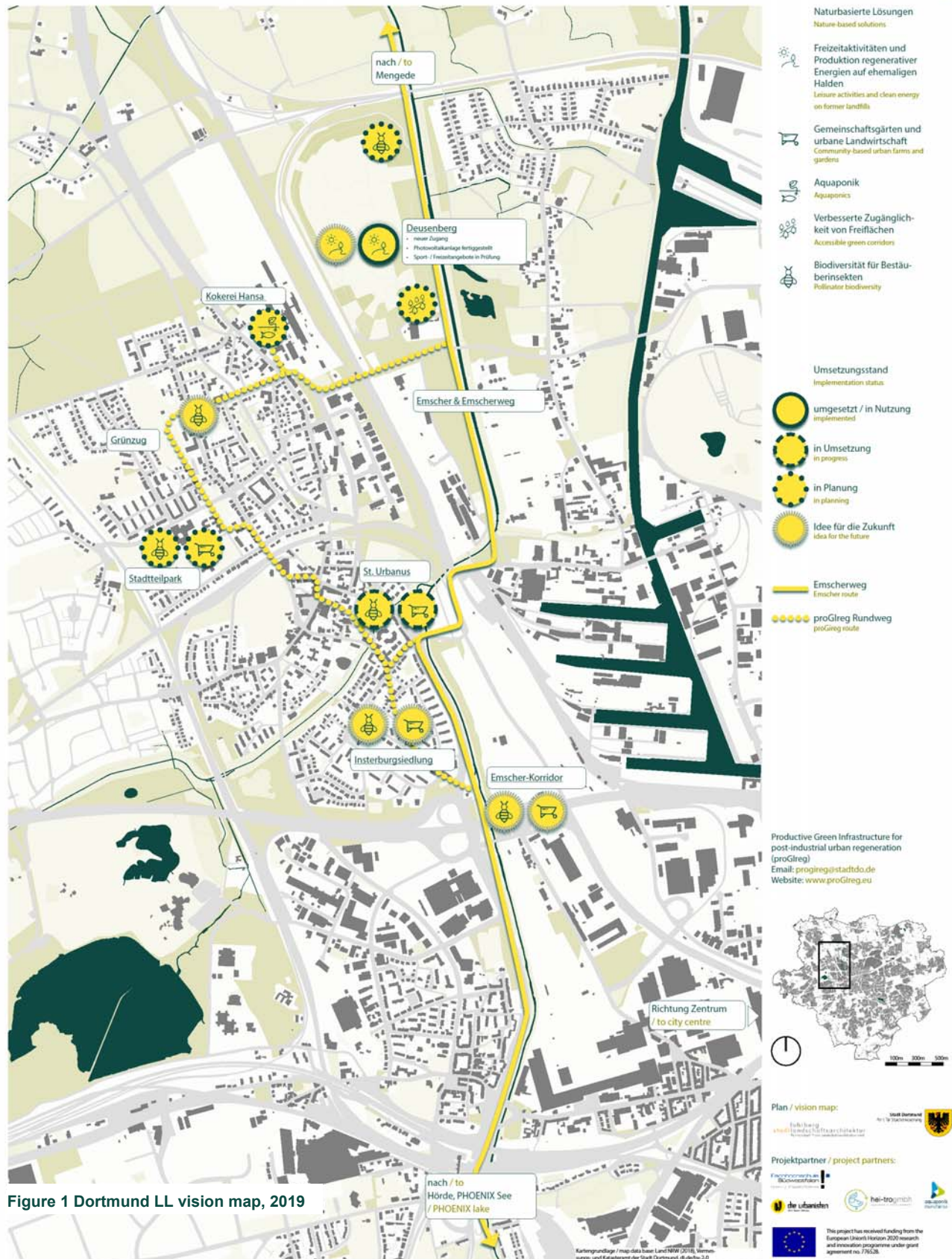


Figure 1 Dortmund LL vision map, 2019

The installation of sport devices on the landfill (**NBS1**) proved to be unfeasible within proGlgreg's lifetime due to competing land uses and timeframes with the IGA<sup>2</sup> project. Alternatives are being explored and involve moving the sports infrastructure further into the Huckarde neighbourhood that has become the LL's centre. It is also intended to integrate these activities with the planned urban farming and biodiversity actions in the neighbourhood (**NBS3 & 8**). One option under consideration is the implementation of a running track, possibly along the round tour/green corridor, which will have various constellations of NBS3 & 8 implemented along it.

A number of different locations were identified for urban farming including those mentioned above (**NBS3**). One that is already being implemented is a piece of cleared land owned by the St. Urbanus Catholic Church on which the Urbanisten, together with local scouts, are co-designing and co-implementing forms of urban gardening and farming, including a food forest and raised-bed gardens. Next steps include consulting the scouts on selecting pollinator-friendly plants (link between **NBS3 & 8**).

Urban farming (**NBS3**) will additionally be implemented in a public park next to a district school in combination with **NBS8**. This combination of the different urban gardening and pollinator NBS creates important habitat networks across the LL involving multiple stakeholders. The school is also home to an aquaponics (**NBS4**) system as part of the nordwärts project. The students and teachers actively maintain the aquaponics system and will be implementing **NBS3 & 8** together with the project partners. There are plans to also engage the local association of allotment gardens.

Aquaponics (**NBS4**) will be installed on the site of the Hansa Coking Plant consisting of two greenhouses; one as a demonstrator and one for conducting tests to increase the technology readiness level of the system. Plans exist to test a lease model for renting floating rafts on top of the aquaponics to the local population for growing plants and flowers (community-based business model). After a long period of negotiations, a first draft of the lease agreement was issued and is currently under revision for signature.

The implementation of **NBS6** (accessibility to green corridors), involving the creation of a new path between the Huckarde neighbourhood and the landfill is proving to be challenging due to diverse land ownership and topography issues: some stretches of the path have inclines of 9-10% hampering barrier-free access. An alternative was found in expanding an already trodden path, providing a West-East connection to the Deusenberg landfill. A private company (contract signed) is currently conducting a feasibility study and will present its findings early 2020 including recommendations specifying the path characteristics.

In addition to the previously mentioned applications on the Deusenberg, pollinator-friendly flower strips (**NBS 8**) will be grown, with soil preparation commencing in February/March 2020 and sowing scheduled to start in April 2020. Agreements have been reached with the relevant departments for green space management. Especially the above mentioned NBS3 developments will also integrate NBS8 elements.

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<sup>2</sup> IGA: International Garden Exhibition 2027, link [here](#).

## Turin

For Turin, the updates are presented per NBS cluster<sup>3</sup> next and can be seen on the current version of the LL vision map as presented in Figure 2.

***Social gardening:*** The Orti generali were founded, and raised-bed vegetable gardens are already being implemented there. People with mental difficulties have also been engaged and trained in monitoring butterflies. This latter activity will be expanded to include schools and additional vulnerable parts of the population.

***New soil and training:*** A new soil pilot was launched in November 2019 with a preparatory meeting held with gardeners on 5<sup>th</sup> November to explain what will be done, explore how the new soil could be used in gardens, and to start the training activities. Courses and lessons on new soil chemistry will also be offered to high school students.

***Education Community:*** Educational activities for raised-bed gardens in schools are ongoing. The Tool(s)mart sensors have also been installed in schools. The next upcoming activity will be the launch of a school contest to compose a musical jingle for the LL. Also, a collection of artwork/ art gallery on the LL by students from primary to high school (a form of storytelling) is planned, which might become an element of the mid-term conference in Turin at the end of September 2020;

***Green Corridors:*** A meeting was held on 29<sup>th</sup> October 2019 to discuss the final project, and a next and final project meeting was held in December 2019. The purpose of the meeting was to set a timeline for the project, allocate budget and explore how to best align the City's work with Mirafiori's activities;

***Green in Building:*** The assigned green roof has been refurbished and an additional green roof will be realised in February-March 2020. All the green roofs implemented will be cultivated extensively. The veggie roof idea has been abandoned due to security, accessibility and maintenance issues: it is too expensive to construct safe access to the roof for the citizens with the only option being an external stairway. The application of aquaponics is still being discussed and more technical expertise will be necessary to decide where and how to best implement it. It is therefore planned to learn more from an aquaponics case which is being implemented in another part of the city and to have a deeper exchange with the City and other relevant stakeholders in Dortmund to gain from their knowledge and experiences;

***ICT tools:*** The cluster is working on geographical tools and supporting other clusters with a suggestion to create a catalogue of green actions from which companies can pick for their Corporate Social Responsibility profiles.

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<sup>3</sup> **Turin** had established working clusters for the different NBS that are at different stages of collaboration and development. These are five and are as follows: *social gardening and schools, green roofs and walls (green buildings), green corridors, ICT tools*<sup>3</sup> and *new soil*.



# Mirafiori Sud Living Lab Torino | Mirafiori Sud Living Lab Turin

## Mappa della vision del Living Lab | Living Lab vision map



### Obiettivi e vision generale del LL Living Lab goals and overall vision

#### Obiettivo 1

##### Goal 1

#### Obiettivo 2

##### Goal 2

#### Obiettivo 3

##### Goal 3

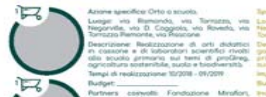
### Dettagli sulle NBS in fase di definizione Details on NBS to be defined



### Dettagli sulle NBS 2 Details on NBS 2



### Dettagli sulle NBS 3 Details on NBS 3



**NBS 1** Orti nel cortile di un edificio di social housing  
**NBS 2** Spazio in cortile di un edificio di social housing  
**NBS 3** Costruzione di un sistema di test per occupazione  
**NBS 4** Acquaponica test system  
**NBS 5** Valorizzazione del patrimonio naturale locale + Azione per accorciare la rete verde e la biodiversità + Percorsi ciclistici e verde diffuso + Semplici  
**NBS 6** Local natural heritage enhancement + Azione to increase green and biodiversity + Cycle paths and urban green spaces

**Azione specifica:** Produzione di New Soil e riforestazione  
**Location:** Lungo Sangeone Park  
**Description:** ...  
**Implementation timing:** 10/2019 - 04/2020  
**Budget:** ...  
**Involved partners:** Daid, Unids, Enigap  
**Other stakeholders:** ...

**Azione specifica:** Orti a scuola  
**Location:** Lungo Sangeone Park  
**Description:** ...  
**Implementation timing:** 10/2019 - 09/2020  
**Budget:** ...  
**Involved partners:** Fondazione Mirafiori, ...  
**Other stakeholders:** ...

**Azione specifica:** Orti in Cascina Piemonte  
**Location:** Lungo Sangeone Park  
**Description:** ...  
**Implementation timing:** 10/2019 - 09/2020  
**Budget:** ...  
**Involved partners:** Associazione Circolità  
**Other stakeholders:** ...

**Azione specifica:** Restauro delle zone del Castello di Mirafiori e nuove promozioni  
**Location:** Lungo Sangeone Park  
**Description:** ...  
**Implementation timing:** 10/2019 - 09/2020  
**Budget:** ...  
**Involved partners:** Associazione Circolità  
**Other stakeholders:** ...

**Azione specifica:** Giardino per impollinatori  
**Location:** Lungo Sangeone Park  
**Description:** ...  
**Implementation timing:** 10/2019 - 09/2020  
**Budget:** ...  
**Involved partners:** Circolità  
**Other stakeholders:** ...

**Azione specifica:** Nuovo tetto verde per un edificio pubblico  
**Location:** Lungo Sangeone Park  
**Description:** ...  
**Implementation timing:** 10/2019 - 09/2020  
**Budget:** ...  
**Involved partners:** Circolità  
**Other stakeholders:** ...

**Azione specifica:** Tetto verde presso Casa nel Parco  
**Location:** Lungo Sangeone Park  
**Description:** ...  
**Implementation timing:** 10/2019 - 04/2020  
**Budget:** ...  
**Involved partners:** Città di Torino, Circolità  
**Other stakeholders:** ...

**Azione specifica:** Retti verdi  
**Location:** Lungo Sangeone Park  
**Description:** ...  
**Implementation timing:** 10/2019 - 09/2020  
**Budget:** ...  
**Involved partners:** Città di Torino, Politecnico di Torino  
**Other stakeholders:** ...

**Azione specifica:** Nuovo tetto verde per un edificio pubblico  
**Location:** Lungo Sangeone Park  
**Description:** ...  
**Implementation timing:** 10/2019 - 09/2020  
**Budget:** ...  
**Involved partners:** Circolità  
**Other stakeholders:** ...

**Azione specifica:** Nuovo tetto verde per un edificio pubblico  
**Location:** Lungo Sangeone Park  
**Description:** ...  
**Implementation timing:** 10/2019 - 09/2020  
**Budget:** ...  
**Involved partners:** Circolità  
**Other stakeholders:** ...

**Azione specifica:** Nuovo tetto verde per un edificio pubblico  
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**Implementation timing:** 10/2019 - 09/2020  
**Budget:** ...  
**Involved partners:** Circolità  
**Other stakeholders:** ...

**Azione specifica:** Nuovo tetto verde per un edificio pubblico  
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**Description:** ...  
**Implementation timing:** 10/2019 - 09/2020  
**Budget:** ...  
**Involved partners:** Circolità  
**Other stakeholders:** ...

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**Other stakeholders:** ...

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**Other stakeholders:** ...

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**Budget:** ...  
**Involved partners:** Circolità  
**Other stakeholders:** ...

**Azione specifica:** Nuovo tetto verde per un edificio pubblico  
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### Legenda | Legend

- Soluzioni nature based  
Nature based solutions
- Rigenerazione di suolo  
NBS 2: Regenerating soil
- Giardinaggio di comunità  
NBS 3: Community urban gardening and farming
- Acquaponica  
NBS 4: Aquaponics
- Tetti verdi e verde verticale  
NBS 5: Green roofs and vertical gardens
- Migliorare l'accessibilità ai corridoi verdi  
NBS 6: Improving accessibility to green corridors
- Insetti impollinatori e biodiversità  
NBS 6: Pollinator biodiversity

### Stato di implementazione Implementation status

- Realizzato  
implemented
- In corso  
in progress
- Programmato  
in planning
- Idea per il futuro  
idea for the future

DRAFT Map by Politecnico di Torino,  
Dip. di Architettura e Design,  
October 30th 2019  
Scale: to be defined

Productive Green Infrastructure for post-industrial urban regeneration (proGireg)  
Email: [progireg@ia.rwth-aachen.de](mailto:progireg@ia.rwth-aachen.de)  
Website: [www.proGireg.eu](http://www.proGireg.eu)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 778526.

This work was financially supported by the National Key Research and Development Program of China (2017YFB05001).

### Partner locali proGireg (e altri importanti stakeholders) Local proGireg partners (and other important stakeholders)



Figure 2 Turin LL vision map, 2019



## Zagreb

Zagreb's current LL vision map can be seen in Figure 3 below, and a description of the LL updates follows.

The Zagreb LL is implementing five NBS as follows: Community based urban farms and gardens (**NBS3**), aquaponics (**NBS4**), green walls and roofs (**NBS5**), accessible green corridors (**NBS6**) and local environmental compensation processes (**NBS7**). These break down into the following six measures that are being implemented in the LL: 1) an info centre; 2) modernisation of the existing urban garden; 3) a new therapeutic garden which will use horticultural therapy to integrate vulnerable populations; 4) green roofs and facades in the former Scleme meat factory; 5) aquaponics, and a 6) new connecting corridor and bicycle lanes that will connect Sesvete's centre with the new housing development Novi Jelkovec.

In addition to these actions, the City of Zagreb is seeking to link proGlgreg to the ongoing strategic and policy developments at national level such as a strategic programme on transitioning towards green infrastructure and circular economy (called *nemam pojma o čemu se radi* and supported by EU funds).

The **info centre** has been refurbished and is increasingly becoming a central meeting place for the district and is in the process of becoming an attractive hotspot for Sesvete's young population and entrepreneurial community which the partners hope to engage in future activities. It also serves as a meeting point for the proGlgreg partners and a host space for the co-design and replication workshops. Furthermore, ZIPS organised a tree-planting event in the week prior to the meeting that attracted approximately 250 people – mainly families with children – to join the activities in the streets around the centre. The area, which previously had only one tree, now has about 200 trees. This is one of the efforts to help change the locals' perception of the area, which is located south of the district and perceived as marginalised. Through proGlgreg, the intention is to move the centre of Sesvete closer to the south and connect the different areas of the district via NBS. The trees were a donation from the Croatian forestry department, and a local radio station was present (the event was entirely sponsored via donations).

The implementation of the **therapeutic garden** will commence in the beginning of 2020. Various representatives from local NGOs especially those representing disabled people were present at the workshop, as well as representatives from the implementers of a successful therapy garden for autistic children who shared their experience.

A small model of a green roof was presented at the workshop in order to raise awareness among relevant stakeholders. The main idea was to show how the drainage works; 10 l of water were poured of which 50% was absorbed with a retention time of 50 minutes, while five substrates are being used.

There are currently experiments on vertical breeding of vegetables and **green roofs** being conducted. However, securing the license for implementing this NBS on the buildings is ongoing. Work on **aquaponics** is in the planning phase.

## Vizualni prikaz Living Laba, Sesevete, Grad Zagreb | Living Lab Vision Map, Sesevete, City of Zagreb

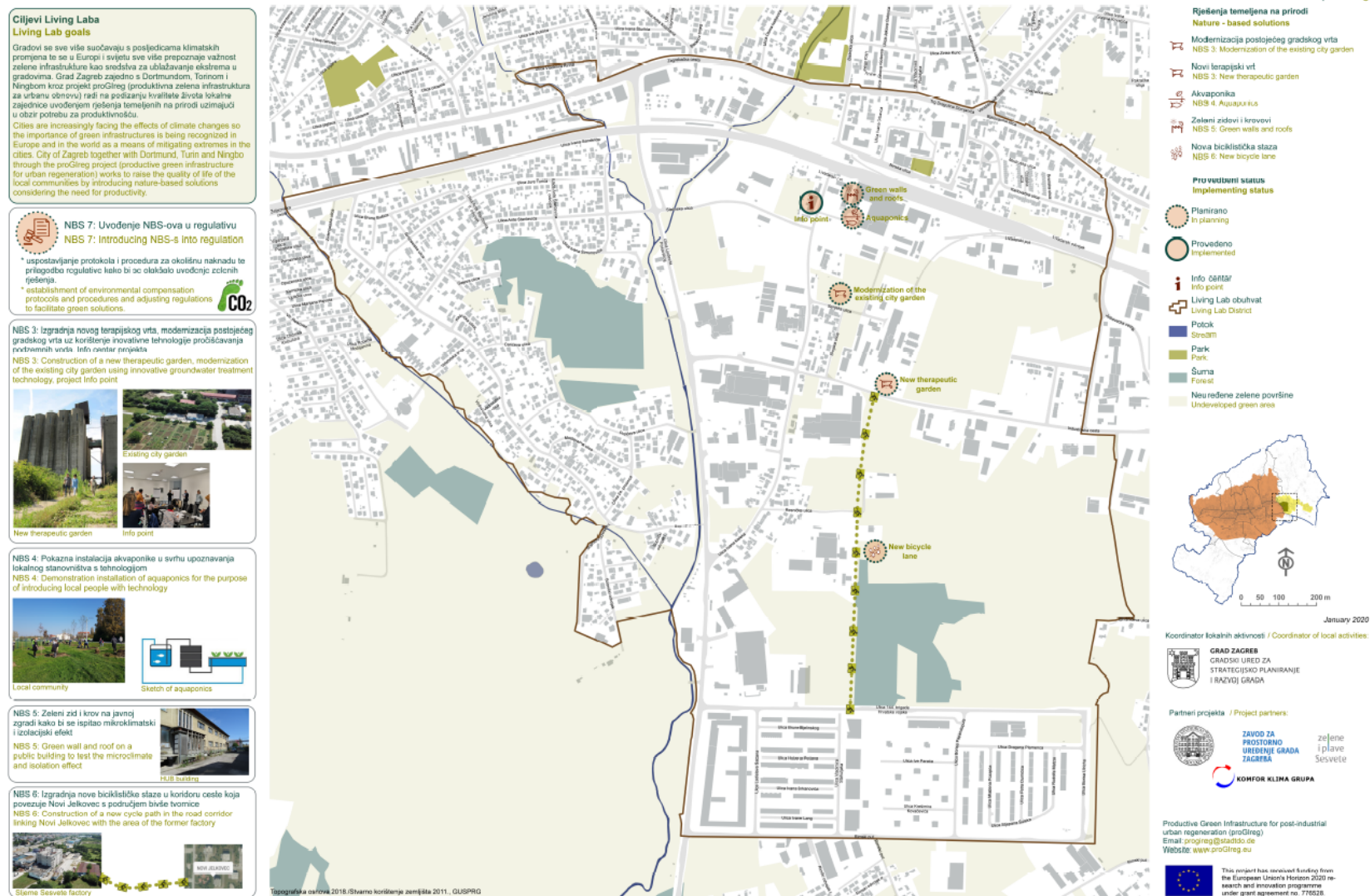


Figure 3 Zagreb LL vision map, 2019

## Ningbo

As mentioned in the second workshop report (D2.4), Ningbo (China) – the fourth FRC – has been a partner since the proposal stage, but only joined the project officially in early 2019. Consequently, the co-design workshops in Ningbo are planned for 2020, starting with a visit organized by ICLEI Europe and URBASOFIA in February 2020. The focus has thus far been on conducting spatial analysis within WP2, which has been finalized. The co-design process in Ningbo will kick-off on the 17<sup>th</sup> of February 2020 with a two-day workshop plus additional meetings and study visits and will run throughout 2020. The main goal for the co-design process in Ningbo will be to raise awareness about the importance of the LL and the Moon Lake park (one of the city's best preserved and most visited parks) as a landmark and multi-functional green space. Ningbo also intends to engage surrounding stakeholders, and will be investigating the replication potential in the city.

### 2.3. Review of co-design concept

The third workshops also served for revisiting the co-design concept in a more general sense. ICLEI stressed the need to be transparent and realistic about the degree and extent of influence that stakeholders can really have on the outcomes of a co-design process. The LL activities so far have shown that this tends to be largely dependent on the type of NBS: for instance, urban farming (NBS3) lends itself to co-design in the early stages, whereas others (such as NBS 1 and NBS 6) were subject to planning procedures and administrative protocols with predefined moments of stakeholder consultation.

Furthermore, the experience of the cities shows that the phases of co-design and co-implementation cannot be neatly cut or separated by time phases (e.g. by assigning a year for co-design and the following for co-implementation), but require flexibility and room for trial and error. This reflects the reality of design thinking, which is not linear but a rather iterative process allowing for constant loops of feedback and improvement.

As the FRC move forward into the implementation phase, it is important to ensure that the processes and implemented activities in each LL allow for flexibility and adaptability in response to the possibly changing needs of partners and stakeholders. The FRC indicated that they plan to continue the regular meetings with all proGlgreg partners and external stakeholders following the end of the co-design process. These have proven beneficial in terms of open dialogue, generating trust, merging different interests and perspectives into joint goals, moving ahead in a coordinating manner, and also for resolving conflicts that arise along the way.

### 2.4. Stakeholder engagement

Stakeholder engagement needs to be planned in a systematic way by focusing on the different locations of the NBS, identifying/mapping who should and can be feasibly engaged

in the design and/or implementation of the NBS (depending on what is possible in the different locations), and defining tailored engagement formats for each location, NBS and group of stakeholders.

To this end, ICLEI utilised participation planners in Zagreb and Dortmund, and a mini-questionnaire in Turin to map out existing and planned stakeholder engagement in the LLs. The participation planners (see Annex 2 for a sample) offer a structured approach for capturing already involved and future stakeholders, and the envisaged type/intensity of involvement (from passive 'recipients' to active co-creators). This allows for identifying all relevant stakeholders, highlighting five levels of potential engagement (inform, consult, involve, cooperate, and empower) and different methods of engaging with the stakeholders within these levels. This served as a starting point, and the core teams are expected to add to and update the planners as the process progresses.

This section is divided into two parts: The first gives a brief summary of the stakeholder engagement in each FRC to date, and the second summarizes the discussions on engaging marginalised groups in the LL activities.

## 2.4.1 Stocktaking and tailoring engagement

### Dortmund

In Dortmund, the participants were split into two groups based on NBS and asked to fill out the participation planners for the respective NBS (See Figures 4&5).



Figure 4 Overview of NBS being implemented in Dortmund





Figure 5 Participants filling out the participation planners in Dortmund

The discussion highlighted the essential next step of bringing the different neighbourhood projects together (proGlgreg, nordwärts, IGA) in order to combine interests and communicate in one common language that the citizens can easily understand. An overall renewal concept for the district could be one such way of achieving this.

For **NBS4** (aquaponics system) it is essential to engage citizens in the development of business models, greenhouse horticulture growers, florists, schools and kindergartens, and local politicians in different constellations and roles.

**NBS3** (urban farming and gardening) & **8** (pollinator biodiversity) are currently being implemented in the backyard of St. Urbanus church. The alignment of interests between the project partners and the local church (pastor and scouts) and fortunate circumstances have contributed to the success of the NBS. The local pastor had a vital interest in reviving the church's backyard with citizen-led activities, and the scouts were very interested in taking ownership of the design and implementation of the NBS. It is foreseen to engage the church congregation and the wider district through co-design, co-implementation and eventually co-maintenance (citizen science for monitoring pollinator diversity) activities. NBS3 is also planned for other locations within the Huckarde settlement.

## Turin

The discussions here took place in cluster groups (see Figure 6 for the NBS, and Figure 7 below) and a sample of the ‘questionnaire’ can be found in Annex 3.

### TURIN PROGIREG NATURE-BASED SOLUTIONS

- NBS 2: a 2 000 m<sup>2</sup> test area “New soil and plant species for urban forestry” in Parco Sangone
- NBS 3: a 8 ha development area for urban farming and gardening involving disadvantaged groups
- NBS 4: a small aquaponics testing installation
- NBS 5: small scale GI interventions
- NBS 6: a new greenway and cycling corridor along Sangone river which is connected to the overall Turin metropolitan cycling network and links ex-industrial private areas with public ones
- NBS 7: New environmental compensation instruments, connected with the environmental assessment and compensation of big events and the realisation of a “green business network”
- NBS 8: Pollinator friendly green spaces

Figure 6 Overview of NBS being implemented in Turin

For the **green in building and green walls (NBS5)**, four main actors were highlighted to engage marginalised groups for co-design: homeless people living in shelters, care managers in the shelters, neighbours in the area of the shelter, and the municipality’s social services. The municipality is seen as having the needed capacities to maintain the NBS long-term. Other stakeholders identified as relevant for the long-term maintenance are: service managers<sup>4</sup>, schools and universities (field research and teaching), and local citizens (create a sense of ownership, utility and wellbeing).

The **social gardening (NBS3)** cluster identified the following collaborative partners for the design: social housing establishments, district’s primary school and kindergarten, local residents, and a local association representing a number of marginalised groups. It is foreseen that the NBS will be maintained via a cooperation agreement between Fondazione Mirafiori and the local association as well as volunteers. Other relevant stakeholders for long-term maintenance are: scouts, piazza ragazzabile project, and other local associations and networks.

The **education community (NBS3, 8 & 5)** cluster comprising of community urban gardening and farming identified school managers, teachers, students, parents/families/caretakers, the users and educators of the mental health centres, support teachers for kids with special needs, and associations managing summer activities as critical stakeholders. The school teachers have been identified as the most likely ones to maintain the NBS after the implementation, whereas families and non-teaching staff are also seen as necessary to support the project’s long-term sustainability.

<sup>4</sup> These are the heads of technical services of the City (social housing and school building maintenance departments).

**Green corridors (NBS6)** will need to involve the township committees<sup>5</sup>, media, local associations, social housing establishments and mental health centres. The local associations will most likely maintain this NBS. The focus on plants that attract pollinators in this neighbourhood is to leverage the actions to promote inclusiveness and participation. Key actors to get involved are people living along these corridors, also in order to recreate this model elsewhere in the city. The media will play a critical role in spreading and amplifying the information. Schools, local social housing, local police and a hospital for people with Alzheimer's have already been engaged.

For **new soil (NBS2)**, the City has so far reached out to gardeners and plans to engage the following stakeholders: metrological research institute, experts from the Municipality of Forlì and the agriculture's union. Due to the scientific nature of this NBS, citizens are not directly involved, however opportunities for observing and learning exist. The biotopic component of new soil can be useful for gardeners, whereas the municipality (Green Areas Services department) will be in charge of maintaining the NBS after implementation.



**Figure 7** Participants filling out the mini-questionnaires in Turin

<sup>5</sup> These are public district committees led by the local city council



## Zagreb

The main NBS being implemented in the Zagreb LL are as summarized in Figure 8 below.

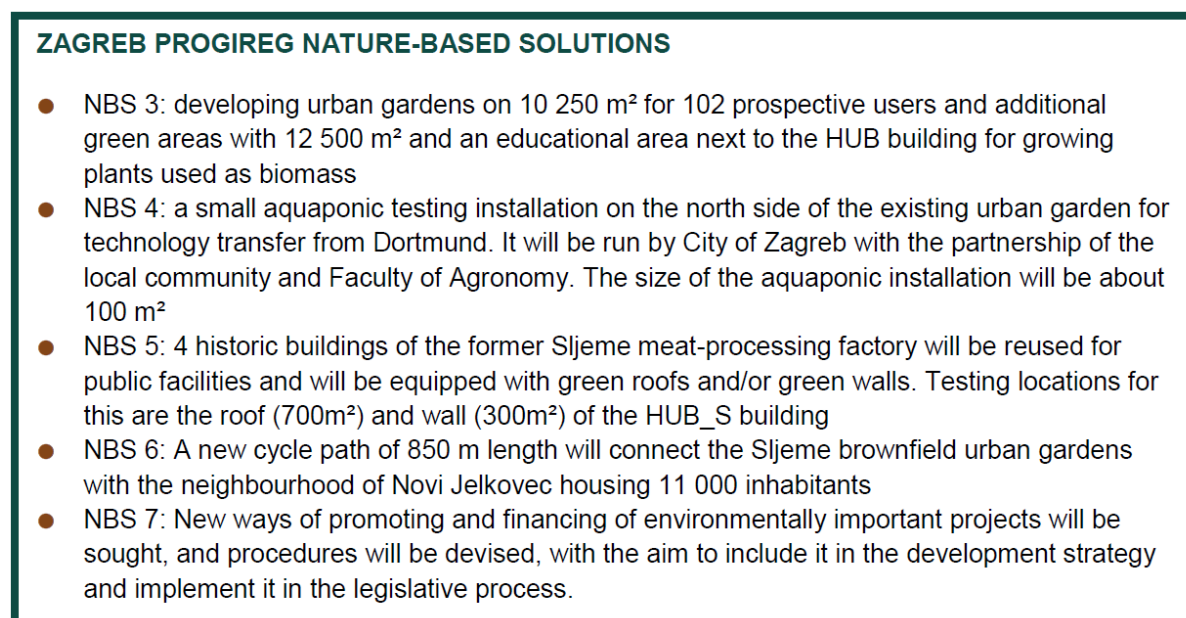


Figure 8 Overview of NBS being implemented in Zagreb

Key goals for stakeholder engagement in the Zagreb LL are to tailor the **therapeutic garden (NBS3)** design to the residents' needs, whereas the **green corridor (NBS6)** aims to connect the therapeutic garden with the new housing development in Sesvete, the LL and the centre of Sesvete. A number of local NGOs within the housing development are very actively engaged in the process alongside the City of Zagreb, Green-Blue Sesvete, the office for urban planning (which is distinct from the municipality) and the manager of the therapy garden (which is an NGO responsible for people with multiple disabilities).

The management structure for the therapeutic garden still needs to be set up and will likely be managed by the agricultural department of the City who will also be in charge of providing the needed materials/supplies. The participants conducted a mapping exercise and identified additional associations and organisations within the vicinity of the garden. A landscaping firm in charge of maintenance of public spaces in Zagreb under the ownership of the city will be involved.

Participants noted that it is important to identify multipliers for the **green roofs and walls (NBS5)** in order to facilitate replication in other parts and buildings of Sesvete, Zagreb and beyond. The actual refurbishment of the HUB building is in the hands of the office of the City Office for Economy, Energetics and Environment protection. Currently, the main concerns are: 1) who will be in charge of maintenance; and 2) how will the plants and trees be chosen?



Furthermore, options for securing the financing from the city's budget need to be explored; the City is financing at the start, but SMEs may take over at a later point to eventually reduce public expenditures as well as try to become – at least partly – self-sustained.

The **green roofs and walls (NBS5)** as well as the **aquaponics (NBS4)** can provide a training and learning experience about low carbon development, green infrastructure etc. for the younger population. It is also foreseen that students will be involved in aquaponics research if the NBS are implemented on a local educational institution. Long-term success and maintenance are linked to connecting these NBS with existing institutions and creating a sense of ownership. The management of the institution that will house the NBS will be in charge of the maintenance.

### 2.4.2 Engaging marginalised groups

A mapping exercise was conducted in all three FRC to identify marginalised groups within the vicinity of the NBS, and who will be affected by the activities in the LLs. This was followed by a brainstorming session on how best to reach out to the different groups and involve them.

The degree to which marginalised groups had been engaged in co-design differed amongst the cities depending on the type of NBS and the phase of application. For example, in **Zagreb**, the LL partners had already mapped out all relevant groups and NGOs, and have been systematically reaching out to them and involving them via meetings and workshops for the **therapeutic garden (NBS3)** (see Figure 9). This was facilitated by the fact that different NGOs in the district already cooperate and work together on joint events and workshops. This is largely owed to a strong civil society partner, namely ZIPS, with a solid anchoring in and a good outreach to the local community. A further enabling factor was the presence of volunteers from high schools and neighbouring communities as well as students from the university faculties (who study rehabilitation for example) who already engage in the district. In addition, the concept of a therapeutic garden lends itself to extensive co-design. This has not been the case (thus far) for the **green roofs and walls (NBS5)** or the **aquaponics (NBS4)** where the potential for co-design is rather limited, but where co-maintenance or co-implementation are more relevant.



Figure 9 Participants mapping out marginalised stakeholder groups

In its spatial analysis (D2.2), **Dortmund** had worked out a very detailed list of possible stakeholders, also listing marginalised groups. However, engaging the marginalised groups in the NBS design phase proved to be difficult because – in large part – leases and contracts for land had not been signed. The partners feared raising the residents' expectations only to disappoint and demotivate them later. But, with the confirmation of the spaces almost done, in a next step the partners will be mapping the critical groups and intermediaries and get in touch with organisations in the district working with marginalised groups. They will also strategize on means and methods on how best to reach them. For example, unemployed residents can be trained in growing tomatoes and in developing business models, whereas the St. Urbanus church's network and its access to welfare organisations can be utilised to gain access to these groups. An initial step undertaken was talking to multipliers at a citizens' consultation event for the IGA on 19<sup>th</sup> July 2019 where contacts of interested citizens were collected.

In **Turin**, the different marginalised groups and their intermediaries for the **green in building and green walls (NBS5)**, **green corridors (NBS6)** and the **social gardening (NBS3&8)** clusters were identified during the workshop including suggestions and strategies of how to reach out and involve them. A tender (currently on hold) has also been issued for green roofs that includes co-creation with the local community as a requirement.

Engaging the identified marginalised groups for the **community urban gardening and farming (NBS3&8)** cluster has already started. The users and educators of two mental health centres have been involved in designing butterfly gardens and are being educated to become 'trainers' on butterflies with upcoming plans to train them on how to choose suitable plants for promoting pollinators' biodiversity. A core goal here is to enable and empower them so that they can in turn train others.

For the **new soil (NBS2)** cluster, gardeners have been identified as the marginalised group due to their low income. They are already being involved through the neighbourhood offices (circonsrizioni) and will be incentivised to get engaged through educational activities.

**In general**, the discussions and actions in the FRC unveiled some important points about engaging with marginalised groups and making them an integral part of the NBS. It is important to agree on a common understanding of marginalised groups and to differentiate between marginalised and vulnerable groups. The definition used in the workshops defines marginalised groups as *"groups who have limited or no access to certain resources"*, with vulnerability highlighted as a key driver for exclusion, potentially leading to marginalisation.

In all three workshops participants highlighted the importance of speaking the language of the targeted populations, having a good understanding of their living circumstances and their perspectives, and identifying representative and suitable intermediaries to win their trust and enable successful engagement.

To garner the support of marginalised groups and citizens in general, it was deemed crucial by the participants to frame NBS along the needs of the particular group and their daily routines. For instance, refugees often have a close connection with agricultural activities,

whereas social housing residents might want to profit from subsistence benefits provided by the community gardens' produce. In addition, it is recommended to be as concrete as possible in communicating the value of a particular measure using simple language, visuals and translation services as needed. An interesting lesson learned from Turin was including co-design – or co-creation more generally – as a requirement in tenders to ensure that the voice of local populations (and especially those marginalised) is heard and they can influence local developments.

Another lesson learnt in the engagement of local stakeholders and marginalised groups is the collaboration with intermediaries. In Turin it is mainly the Fondazione Mirafiori, a central hub of foundations, which is well connected. This foundation is a single point of contact for all smaller initiatives in Mirafiori Sud. In the context of designing and operating the green roof on a homeless shelter in Turin, care managers have proven to be a useful point of contact to reach out to homeless people.

A final point that was consistently and repeatedly emphasized in the FRC was the dependence of successful engagement on striking the right balance amongst the following components:

- 1) location/place
- 2) type of NBS
- 3) people

For future endeavours it would be important to answer the following two questions prior to embarking on co-design:

- For which NBS is it essential to 'shape the design' together with marginalised groups?
- In which cases can marginalised groups have a tangible impact on the final design of an NBS?

Once this is clarified, the details of involving relevant groups can be developed by gauging their particular interests in the NBS application, ways and means to engage them most effectively etc.

## 2.5. Transitioning to implementation

The third and final round of workshops wrapped up the co-design phase of the project and facilitated the handover from WP2 to WP3, which is concerned with implementation, led by COTO (see Figure 10).

To usher in the implementation phase planned to start in early 2020, COTO presented the implementation plan template which the FRC are expected to use in the coming years of the project to record and track their implementation progress. The participants filled out a sample of the implementation plan to test it and give feedback on its applicability and user-friendliness. Following is a brief assessment of the implementation status in each FRC.

## Dortmund

Timely implementation of NBS 1 (renaturing landfill sites for leisure use and energy production) might be an issue due to the reconceptualization of the whole NBS. To mediate this, a running trial is planned to consider combining it with the other NBS in the district of Huckarde as mentioned in Section 2.2. NBS6 (accessibility of post-industrial sites and renatured river corridors accessible) might be delayed due to the adjusted plan and the undergoing feasibility study for designing the track. The other NBS (3 – urban farming and gardening, 4 – aquaponics and 8 – improvement of pollinator biodiversity) appear on track to start implementation early 2020.

## Turin

In some cases, the transition from planning to implementation has already happened, whereas with some others, such as NBS2 (new soil) and NBS4 (aquaponics) more effort and time will be needed to get them off the ground. It is expected that most NBS will be implemented largely as originally foreseen. COTO had also introduced from early on a so-called 'schede attività', activity sheets of a sort, to keep track of the progress on the different NBS.

## Zagreb

Implementation is set to start at the beginning of 2020 with the first NBS to be implemented representing a combination of

- a) refurbishment of the existing urban garden in Sesvete (with ground works, replacement of water pipes etc.)
- b) kicking-off the development of the therapeutic garden.

There are still some hurdles in the implementation of the other NBS, such as the green walls and roofs and the aquaponics. Both NBS are awaiting the development of the HUB building; if this does not happen on time, then another local public building will be chosen for implementation.



Figure 10 COTO presenting the implementation plan template (WP3) to the Dortmund core group

## 3. City reflections and lessons learned

The overall purpose of the co-design workshops was to exclusively work with the core team to establish and steer the co-design process, and to initiate, facilitate and maintain feasible collaboration among the project partners and additional key stakeholders. Both of these aspects were achieved within the framework of the co-design workshops. The responsibility for co-design with (other) key local stakeholders (including marginalised groups) lies fully with the core team of each FRC who are best positioned to engage with them.

This final section first gives individual city reflections on the local co-design process in each of the FRC, and secondly critical reflections and lessons learned from escorting the co-design process from ICLEI's side.

### 3.1 City reflections

#### Dortmund

The search for potential locations of the different NBS as well as ensuing negotiations with landowners delayed the stakeholder engagement process at the different locations in



Dortmund, which is why the discussion of a tailored stakeholder engagement had a prominent role only in the final workshop.

A critical reason for the delay in identifying sites was due to the fact that no public spaces were predefined and available at the beginning of the project for NBS 3 (urban gardening and farming), 4 (aquaponics) and 8 (improving pollinator diversity). Hence, the project partners had to identify feasible locations and negotiate with the many different landowners, which proved to be a very lengthy process. This was exacerbated by the fact that it is intrinsic to the nature of co-design to keep the options of uses and outcomes open (since NBS are supposed to be co-planned and co-design together with the stakeholders). Consequently, it was difficult to precisely communicate to landowners what will be done on their land, which they – understandably – wanted to know prior to signing a lease. A key challenge in the Dortmund LL was how to communicate with and engage stakeholders at an early stage with no lease contracts signed. This created tension between truly wanting to involve the stakeholders (early stakeholder engagement is a core principle of co-design), but at the same time fearing to disappoint and disengage them in the case of the contracts not being signed. Co-design requires accepting and dealing with uncertainty, which is not always easy to communicate to and be accepted by stakeholders.

The workshops in Dortmund were successful in achieving a feasible and functional collaboration among the project partners and was supplemented by regular *jour fixes* and meetings amongst the project partners. This helped to reconcile different agendas and working modes and create mutual understanding and support.

At the time of the third workshop, the partners had started to collaborate with additional key stakeholders such as landowners (e.g. Emscher Genossenschaft, Foundation for Industrial Heritage) and local administrative heads such as the district representative in Huckarde who is a prominent supporter and enabler for the project. Public engagement has been limited to date due to above mentioned reasons, but is now picking up pace as the locations are confirmed with a workshop for external stakeholders planned in early 2020.

## Turin

The main desired outcomes for the final co-design workshop in Turin were:

- 1) an increased awareness of stakeholders who are not yet sufficiently considered and involving them in the different clusters
- 2) core team's improved readiness/plans for engaging with the marginalised groups relevant for NBS planning and implementation;
- 3) an increased awareness of future ownership and long-term maintenance.

This has been largely achieved within the workshop's time and participant limitations. The workshop could only give a snapshot of the many on-going plans and processes within the LL, each progressing in its own ways depending on the nature and constellations of NBS, place and people. The core team in Turin is strong and experienced in stakeholder engagement as the ongoing work shows.

## Zagreb

Public engagement in NBS activities has been quite extensive in Zagreb. This has been relatively easy to achieve for two reasons:

- 1) the Office for strategic planning and development of the City has been very engaged and has built a very strong relationship with the other project partners;
- 2) the local NGO ZIPS has a strong connection and great credibility with the local community and the young population of Sesvete, which culminated in a tree planting activity that took place just before the third co-design workshop, managing to bring together 250 people from Sesvete and introduce them to the proGlgreg project.

The Zagreb LL core team rates the co-design process a success since key stakeholders in the larger LL were identified and first contacts established. It is intended to deepen these relationships and interactions in the transition to the implementation phase.

Co-design entails friction among people and organisations due to differing views and hence conflicts may arise: the first co-design workshop addressed issues between the local university and the Office for strategic planning and development of the City at the beginning of the process, but by the end of the co-design process all partners worked well together, overcoming communication barriers via holding regular monthly meetings. The way the partners in the LL overcame their disagreements and learned to see and validate each other's viewpoints in both the Zagreb and Dortmund LLs was exemplary.

## 3.2 Critical reflections and lessons learned from the co-design workshops

ICLEI's approach to steering and escorting the co-design process in the three cities included assigning one contact person or 'escort' per FRC of the project team who acted as the main responsible person for conducting three co-design workshops in 'her' or 'his' city, holding regular update calls with the city representatives.

The workshops succeeded in leading to an improved management of the overall LL, e.g. clustering the NBS in Turin, allocating roles to specific people and institutions, and giving targeted and structured communication a more prominent role in the co-design process. The main lessons learned are summarized as follows:

### Scope:

- Three workshops in each FRC were not sufficient to provide the more tailored and hands-on support that a complex and 'living' process such as co-design requires. *It is recommended for future endeavors to include more frequent site visits allowing more depth and context to the exchange.*

### Local context and citywide linkages:

- The co-design process in each FRC revealed how unique the local contexts are and how significantly the context-specific dynamics of place, people, governance and knowledge oscillate. This made it challenging to define common building blocks, reports and frameworks. *Providing effective support to co-design is closely linked to understanding the local context and social fabric in a given LL.*
- Establishing linkages between the individual NBS activities and the LL's vision and the broader city policies and programmes is essential for facilitating a smoother and more sustainable implementation, strengthen the long-term viability of the solutions applied and enable replication in the city.

### Stakeholder engagement:

- The type, extent and degree of stakeholder engagement in co-design is largely dependent on the type of NBS in question. For example, a therapeutic garden allows for intense stakeholder involvement already in the planning and design phases, whereas a more technical NBS, such as green roofs, has a more limited scope of engagement. *It would therefore be a useful exercise to map out stakeholders per NBS and establish realistic expectations of their involvement as early as possible.*
- The boundaries between the specific purpose and features of co-design and more generally stakeholder involvement tend to be fuzzy and very dynamic. It is difficult to keep the focus on co-design in a narrower sense (i.e. on engaging stakeholders with the aim to enable them to make a tangible impact on the actual design of the NBS).
- Keeping the focus on the actual beneficiaries of the implemented NBS: do they have a voice right from the beginning? If yes, how? If not, why? *In hindsight, it would have been an asset to pull together an inventory of actual methodologies for practical implementation of co-design with specific groups of stakeholders – especially marginalised groups – and within the context of urban regeneration.*

### Co-design guidelines: Moving forward

The 3<sup>rd</sup> co-design workshop also served to gather more in-depth inputs on challenges and drivers regarding the set-up and implementation of a co-design process from the FRC, which will ultimately contribute to the co-design guidelines due in M24 (May 2020). The co-design guidelines are envisioned as a practical guidance (handbook) for the set-up of organizational and administrative structures suited to co-design and to facilitating local co-design processes around NBS. They target other cities aiming at replication. The guidelines will revolve around easy-to-use co-design principles established and tested in the process of the three co-design workshops by illustrating practical application in the FRC and ways of overcoming experienced barriers to co-creation/co-design formulated as recommendations.



## Annex 1: Workshop agendas

### Agenda 3. Co-Design-Workshop Dortmund, November 11-13, 2019

<b>Preparation Meeting Co-design Workshop No. 3 / Dortmund, 11.11.19</b> Location: room 351, Stadthaus, Südwall 2-4, 44137 Dortmund			
	Agenda item	Objective	Type / Content
15.00-15.05	<b>Welcome Overview agenda</b>		City of Dortmund
15.05-15.20	<b>Dortmund LL Vision Map</b>	Overview about Dortmund's NBS and their locations	Brief Overview: LL and NBS Presentation of LL Map
15.20-16.20	<b>Status quo of NBS 1&amp;6, 3&amp;8, and 4</b>	Common understanding of current status of NBS: results and challenges	NBS 1&6 NBS 3&8 NBS 4
16.20-17.00	<b>Discussion/ Questions &amp; Answers</b>		

<b>Co-design Workshop No. 3 / Dortmund, 12.11.19</b> Location: room G 116, ALTES Stadthaus, Olpe 1, 44137 Dortmund			
	Agenda item	Objective	Type / Content
<b>08.45 – 09.00</b>	<b>Welcome &amp; Introduction to workshop agenda</b>		City of Dortmund/ICLEI
<b>09.00 – 09.10</b>	<b>From Co-design to co-implementation – a reality check</b>	<i>Sustain a joint and realistic understanding of co-design and co-implementation</i>	Presentation by ICLEI

09.10 – 10.25	<b>Stakeholder Engagement Strategy / Part 1</b>  Taking stock + tailoring stakeholder engagement	<i>Stocktaking of co-design process and planned activities; define tailored engagement concepts, communication strategies with actors (for each of the different locations of the NBS)</i>	Interactive group work
10.25 – 10.40	Coffee break		
10.40 – 11.20	<b>Stakeholder Engagement Strategy / Part 2</b>  Involvement of marginalized groups	<i>Identify marginalized groups to be involved in the co-design/co-implementation and set next steps</i>	Brainstorming and discussion
11.20 – 12.20	<b>Stakeholder Engagement Strategy / Part 3</b>  Lessons learnt & sharing experiences with Turin	<i>Gather and capture insights from the co-design process (challenges, enablers, solutions, etc.) / learn from other cities' experiences</i>	Discussion / Q&A with Municipality of Turin
12.20 – 12.50	<b>Review of co-design workshops and ideas to guide replication</b>	<i>Collect feedback on learning resulting from the co-design workshops / collect perspectives which aspects should be covered in the co-design guidelines</i>	Discussion
12.50 – 14.00	Lunch Break		
14.00 – 14.50	<b>Overview WP3 and introduction of the Implementation (IP) Template</b>	<i>Get an overview of contents, deliverables, time plan for FRC involvement in WP3 actions</i>	Presentation by Municipality of Turin and Q&A
14.50 – 15.05	Coffee break		
15.05 – 16.15	<b>Testing the IP Template (WP3) on two selected NBS in Dortmund</b>	<i>Testing the IP Template and provide feedback for further revision/improvement</i>	Interactive group exercise
16.15 – 16.30	Feedback and outlook		

### **Agenda Co-design workshop No. 3**

06-07.September 2019

Zagreb, Croatia

	Activity
09.00 – 09.15	<b>Welcome</b> Matija Vuger, Iva Bedenko (City of Zagreb) <b>Overview of the workshop agenda</b> Vasileios Latinos (ICLEI)
9.15 - 9.30	<b>Presentation: From co-design to co-implementation</b> Vasileios Latinos (ICLEI)
9.30 - 9.45	<b>WP3 Presentation</b> <i>Laura Ribotta (City of Turin)</i> Familiarise all participants with NBS implementation methodology as well as planning and monitoring template
9.45 – 10.00	<b>Bring participants up to speed with recent developments in Sesvete LL</b> Matija Vuger, Iva Bedenko (short presentation or discussion)
10.00 – 10.15	<b>Questions and Answers with partners and stakeholders</b>
10.15 – 11.00	<b>Open Session – moving towards the co-implementation</b> <i>Obj.: moving from co-design to co-implementation responsibly and with clear targets and ideas for the future; ensure to follow the co-design methodology and apply it in the co-implementation process; define concrete challenges and measures to overcome them</i>
11.00 – 11.30	<b>Coffee Break</b>
11.30 – 12.30	<u>Co-creation I – state-of-the art:</u>  <i>Obj.: Review stakeholder collaboration in the design of NBS so far</i>

	<p>Inventory and identification of critical gaps per NBS (with reference to spatial plan and co-creation principles)</p> <ul style="list-style-type: none"> <li>• NBS group work moderated by ICLEI</li> </ul>
<b>12.30 – 13.15</b>	<p><u>Co-creation II – ensuring long-term engagement</u></p> <p><i>Obj.: Sharing ideas for maintaining interest and commitment of stakeholders in co-implementation and maintenance</i></p> <p>Introductory presentation by NN, ICLEI:</p> <p>Compilation of key factors for success and exchange of further ideas - moderated by ICLEI</p>
<b>13.15 – 13.30</b>	<b>Recap and taking stock</b>
<b>13.30 – 14.30</b>	<b>Lunch</b>
<b>14.30 – 15.15</b>	<p><b>Impressions from the co-design process – the LL Vision Map</b></p> <p>Open discussion moderated by ICLEI</p>
<b>15.15</b>	<b>Closing of Day 1</b>
<b>DAY 2</b>	
<b>09.00 – 09.30</b>	<b>Recap of DAY 1 and feedback round</b>
<b>09.30 – 10.30</b>	<p><u>Co-creation III – focus on the principle of inclusion:</u></p> <p><i>Obj.: Collect ideas for strengthening the involvement of marginalised groups in the co-design of each NBS</i></p> <ul style="list-style-type: none"> <li>• NBS group work moderated by ICLEI (incl. reference to first Cities Webinar tentatively planned for beginning of December and envisaged to address options and good practices for the involvement of marginalised groups in co-design)</li> </ul>
<b>10.30 – 11.45</b>	<u>Co-creation IV – planning for 2020/2021</u>

	<p><i>Obj.: Plan further stakeholder collaboration for each NBS</i></p> <p>Start developing long-term plan for further stakeholder collaboration around each NBS (based on outcomes of previous sessions and with reference to relevant section in implementation plan template)</p> <p>NBS group work moderated by Zagreb/ICLEI</p>
<b>11.45 – 12.15</b>	<p>Review of co-design workshops and ideas to guide replication</p> <p><i>Obj.: Collect input for co-design/co-creation guidelines</i></p> <p>Participants will be asked to look back at their learning resulting from the three workshops and to provide their perspectives on which aspects should be covered in the guidelines that are to be developed by ICLEI in support of replicating co-creation processes in other cities</p> <p>Plenary discussion moderated by ICLEI</p>
<b>12.15 – 13.00</b>	<p><b>WP3 – introduction to co-implementation of NBS in proGlgreg</b></p> <p>What to expect and next steps</p> <p>Moderated by Laura Ribotta, COTO</p>
<b>13.00</b>	<p><b>Closing of Day 2</b></p>

**Living Lab Turin**

# **Co-design Workshop No. 3**

**30 October 2019**

## **Agenda**

Comune di Torino (COTO)/ICLEI European Secretariat (ICLEI)

Final version, 28 October 2019

## Wednesday, 30 October 2019

Time	Duration	Agenda items ( <i>objectives in blue</i> )
09:00	10'	<p><i>Riccardo Saraco, COTO</i></p> <p>Welcome</p> <p><i>Barbara Anton, ICLEI</i></p> <p>Introduction of agenda</p>
09:10	20'	<p><i>Obj.: Get all project partners up-to-date</i></p> <p><i>Laura Ribotta, COTO</i></p> <p>Major developments after last co-design workshop in April</p>
09:30	20'	<p><i>Obj.: Familiarise all participants with current draft of Living Lab vision map</i></p> <p>Presentation by <i>Sara Ceraolo, POLITO</i></p> <p>Q&amp;A, discussion</p>
09:50	40'	<p><i>Obj.: Familiarise all participants with NBS implementation methodology as well as planning and monitoring template (D.3.1)</i></p> <p>Presentation by <i>Riccardo Saraco, COTO</i></p> <p>Q&amp;A, discussion</p>
10:30	15'	Coffee break
10:45	60'	<p><u>Co-creation I – state-of-the art:</u></p> <p><i>Obj.: Review stakeholder collaboration in the design of NBS so far</i></p> <p>Inventory and identification of critical gaps per NBS (with reference to spatial plan and co-creation principles)</p> <p>NBS group work moderated by ICLEI</p>
11:45	60'	<p><u>Co-creation II – focus on the principle of inclusion:</u></p> <p><i>Obj.: Collect ideas for strengthening the involvement of marginalised groups in the co-design of each NBS</i></p>



12:45	45'	<p>NBS group work moderated by ICLEI (incl. reference to first Cities Webinar tentatively planned for beginning of December and envisaged to address options and good practices for the involvement of marginalised groups in co-design)</p> <p>Obj.: <i>Familiarise all participants with communication strategy, plan and tools (incl. storytelling) for Torino Living Lab</i></p> <p>Presentation by Silvia Lombardi, Fondazione Mirafiori</p> <p>Q&amp;A, discussion</p>
13:30	60'	Lunch break
14:30	45'	<p><u>Co-creation III – ensuring long-term engagement</u></p> <p>Obj.: <i>Sharing ideas for maintaining interest and commitment of stakeholders in co-implementation and maintenance</i></p> <p>Introductory presentation by NN, ICLEI:</p> <p>Compilation of key factors for success and exchange of further ideas - moderated by ICLEI</p>
15:15	15'	Coffee break
15:30	45'	<p><u>Co-creation IV – planning for 2020/2021</u></p> <p>Obj.: <i>Plan further stakeholder collaboration for each NBS</i></p> <p>Start developing long-term plan for further stakeholder collaboration around each NBS (based on outcomes of previous sessions and with reference to relevant section in implementation plan template)</p> <p>NBS group work moderated by COTO/ICLEI</p>
16:15	10'	<p><u>Co-creation V – wrapping up and conclusions</u></p> <p>Impressions shared by ICLEI team (including potential suggestions for further development of LL vision map)</p>
16:25	20'	<p>Review of co-design workshops and ideas to guide replication</p> <p>Obj.: <i>Collect input for co-design/co-creation guidelines</i></p> <p>Participants will be asked to look back at their learning resulting from the three workshops and to provide their perspectives on which aspects should be covered in the guidelines that are to be developed by ICLEI in support of replicating co-creation processes in other cities</p>

		Plenary discussion moderated by ICLEI
16:45	-	Closing of 3 <sup>rd</sup> and final workshop

## Annex 2: Participation planner sample (Dortmund and Zagreb)

Participation Planner for **XXX (Name der Intervention), Date**

Participation mode	Inform	Consult	Involve	Collaborate	Empower
Methods of participation	i.e. News-letter	i.e. citizen questionnaire	i.e. work-shops, events	i.e. urban gardening	Leading role in one NBS
District representation					
City Representation					
District representation					

<b>Local citizens</b>					
<b>Media</b>					
<b>Educational institutions</b>					
<b>Farming initiatives, farmers etc.</b>					
<b>NGOs/associations</b>					
<b>NGO/associations working with marginalized groups</b>					
<b>Other public bodies</b>					

<b>Other public bod- ies</b>					
<b>Other public bod- ies</b>					
<b>NGO/associations working with mar- ginalized groups</b>					
<b>NGO/associations working with mar- ginalized groups</b>					
<b>Other (specify)</b>					
<b>Other (specify)</b>					
<b>Private Firms</b>					

<b>Private Firms</b>					
<b>Private Firms</b>					
<b>Private Firms</b>					
<b>Suppliers</b>					



## Annex 3: Questionnaire sample (Turin)

Co-creation sessions I to IV:

### List of questions for group work

→ **Version for NBS still in the design/planning phase**

Title of NBS: .....

Name of person/s who made entries: .....

Email of person/s who made entries: .....

*Please ensure that a copy of this page will be available for ICLEI!*

a) Which institutions, social groups and/or individuals (other than project partners) who need to have a say in the collaborative design of 'your' NBS have you identified so far?

b) Which of the above institutions, social groups and/or individuals represent or belong to marginalised groups?

c) How do you intend to reach out to each of these marginalized groups? What will be the incentives to get them on board?

Who will be in charge to make this happen?

d) Which of the above stakeholder/s will most likely be in a position (technically, financially, legally ...) to maintain the NBS after implementation?

Which *other* stakeholders will be most relevant for the long-term maintenance of the NBS? What will motivate them to remain engaged?

Co-creation sessions I to IV:

## List of questions for group work

→ **Version for NBS already in the implementation phase**

Title of NBS: .....

Name of person/s who made entries: .....

Email of person/s who made entries: .....

*Please ensure that a copy of this page will be available for ICLEI!*

a) Which institutions, social groups and/or individuals (other than project partners) have had a say in the collaborative design of 'your' NBS so far?

Who do you still intend to approach?

b) Which of the above institutions, social groups and/or individuals represent or belong to marginalised groups?

c) How did you reach out to each of the marginalized groups? What have been the incentives for them to contribute to the NBS design?

Who has mainly been in charge?

If applicable: How will you reach those who are not yet on board? Who will be in charge?

d) Which of the above stakeholder/s will most likely be in a position (technically, financially, legally ...) to maintain the NBS after implementation?

Which *other* stakeholders will be most relevant for the long-term maintenance of the NBS? What will motivate them to remain engaged?