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Executive Summary

This document presents a framework for CrAFt Cities process learning using Mutual Learning Exercises, based on the City as a Commons approach and principles of the New European Bauhaus. It is co-designed by CrAFt partners and inspired by previous experiences from the H2020-funded Smart Cities and Communities Lighthouse projects.

CrAFt defines process learning as a combination of social and organisational learning that leads to empowerment of local stakeholders, coordinated systematic changes and broader transformation or urban governance. Process learning is generated by the interaction of local actors with innovative solutions through which they learn how to mainstream innovative and sustainable practices. This results in an increased capacity of individuals, organisations and complex stakeholder ecosystems to transform and utilise innovative approaches.

The CrAFt Cities consist of 3 Sandbox Cities (Amsterdam, Bologna and Prague) and 60 Reference Cities or clusters of cities. All CrAFt Cities will be invited to participate in mutual learning and to share and implement approaches supporting learning on a local level. CrAFt Cities will also mutually learn how to enhance process learning on local level in order to create transformative experiences for local stakeholders which result in wider organisational transformations and the development of new relationships, competences, and roles within the local ecosystem.

The key tool for supporting learning between cities are Mutual Learning Exercises (MLEs) – physical, online or hybrid meetings with CrAFt Cities, consortium partners and invited guests enabling cities to share lessons and implement solutions provided in CrAFt. The framework presents goals and principles for MLEs in CrAFt, as well as mechanisms of capturing and implementing key lessons. Furthermore, the document presents how learning and feedback gathered through MLEs will be shared within CrAFt with all partners in order to inform their work.

The general focus of MLEs will be to:

- Identify and share needs and challenges of CrAFt Cities related to local collaborative governance and New European Bauhaus (NEB) implementation;
- Peer-to-peer learning related to organisational models and processes boosting implementation of NEB;
• Lessons on how local collaborative governance models and NEB can empower local stakeholders to achieve climate neutrality by 2030;
• Sharing examples of good practices and lessons from Sandbox and Reference Cities;
• Co-creation and dissemination of CrAft innovative models, tools and guidelines;
• Presentation of projects, tools and useful sources from outside of CrAft including guest speakers from relevant EU initiatives and organisations;
• Support for development of new projects and partnerships through presenting information on EU funding opportunities and organising networking sessions.

Each MLE will have the following elements, aiming to strike a balance between inviting cities to share their own experiences and providing sufficient input from organizers to ensure there can be an informed debate:

1. **Introduction** of the topics, basic concepts and goals of the exercise;
2. **Presentation of relevant examples and resources** for the topic (projects, solutions, tools, funding mechanisms, databases, platforms etc.);
3. **Sharing session** where CrAft Cities share their needs, experience or know-how in order to learn from each other and produce transferable lessons;
4. **Reflection session** where the participants state what they learned together and identify what are the key lessons coming from the exercise;
5. **Feedback session** focused on collecting feedback on the MLE and identifying knowledge gaps and needs to be addressed in future MLEs or deliverables.
These elements and other best practices (such as the ones collected in the SHIFT Project’s\(^1\) Eco-Guidelines for Networks\(^2\) and Inclusion Handbook\(^3\)) will be incorporated into the CrAft Events Guidelines (currently under development) that will support us in planning events that follow the NEB principles. A plan of future MLEs will be updated every 6 months.

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\(^1\)https://shift-culture.eu/
1. Introduction: NEB-Inspired Learning Framework

Deliverable 4.1 “NEB-Inspired Learning Framework” is developed in Work Package (WP) 4 “Learning in CrAFt Cities” and is the result of Task 4.1 “NEB-Inspired Learning Framework”.

The Czech Technical University in Prague is in charge of coordinating WP4 and Task 4.1 based on their previous experience from Smart Cities and Communities Lighthouse projects under the Horizon 2020 programme (SCC1 projects) and based on dedicated research on process learning in urban demonstration projects and urban experiments. The concept of Process Learning was designed by the joint team of the University of Manchester and the Czech Technical University in Prague.

This document presents a framework for supporting implementation of local collaborative governance, in particular the NEB and the City as Commons approaches, through process learning, and discusses the potential of NEB projects to enhance process learning on a local level. The goals of this document are to: 1) inform the design and implementation of Mutual Learning Exercises with CrAFt Cities and 2) inform the design of NEB projects in cities in order to improve their potential to generate transformative experiences using local collaborative governance.

The framework presents principles of social, organisational and process learning in cities in general and the relevance of these types of learning in the context of the New European Bauhaus. The framework discusses the role that art and the creative sector can play in facilitating social and organisational learning and presents examples of how this can work in practice. This document translates these principles into measures to be implemented in CrAFt and the CrAFt Cities.

Links between the document and other work in CrAFt are briefly presented in the last chapter.
2. Methodology and approach

The framework responds to the needs and priorities expressed by the CrAFt Cities in their response to the Call for CrAFt Cities in the summer of 2022. It is built on the cumulative experience of CrAFt partners and CrAFt Cities, lessons from the SCC1 projects, NTNU’s learning sessions in the +CityxChange project, and pilot testing of the Mutual Learning Exercise model under the European Energy Research Alliance Joint Programme on Smart Cities.

The model of process learning itself is informed by previous research conducted by the University of Manchester and the Czech Technical University in Prague on learning in smart city projects and urban experiments. The lead authors of that work, who are also the main contributors to this deliverable, studied the impact of SCC1 projects on social and organisational learning in so-called Lighthouse and Follower/Fellow Cities. This was done through review of the official deliverables, workshops and interviews with individuals participating in these projects on behalf of the cities.

Another source of experience from SCC1 projects is the work by experts procured under Scalable Cities to analyze systemic governance changes that were implemented as direct or indirect results of these projects. Some of the contributing experts from Locality (leader of the work on Systemic changes) and Czech Technical University in Prague (key contributor) are also part of CrAFt and facilitated transfer of gathered lessons between the projects.

The Mutual Learning Exercises model (MLE) is based on previous pilots realised by the Czech Technical University in Prague (CVUT) and Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) under the European Energy Research Alliance Joint Programme on Smart Cities (EERA JPSC, coordinated by NTNU). The approach was developed to support the implementation of Positive Energy Districts (PED) in Europe. The main objective was to identify and document barriers, challenges and opportunities in existing PED projects, to share the main mechanisms that either enable or inhibit

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successful diffusion of PED innovation, systems, or policies, and to assess how PED innovations can be scaled up both within the EU and beyond. This approach can be translated into implementation of NEB principles across European cities. The project was tested in Czechia and Italy in 2019. The pilot demonstrated the following effects for three geographical levels:

- On international level: Increased understanding of the structural conditions in EU;
- On national level: Increased understanding of the most effective ways to tackle the specific policy challenges;
- On the local level: Increased understanding of the PED concept and individual roles in the PED ecosystem.

Another source of input for organizing learning sessions, capturing lessons and managing learning materials are NTNU’s learning sessions in the +CityxChange project.8

The above mentioned sources, complemented with experience and approaches of CrAFt partners, have been adapted to reflect the specifics of the New European Bauhaus implementation. Co-creation workshops were organised to propose principles of learning in NEB and to establish connections to other work in CrAFt.

8 https://cityxchange.eu/#
3. How cities learn

Recently, there has been a great effort aimed at capturing relevant lessons from EU funded urban transformation and urban innovation projects and making them accessible for others. Concurrently, experts are developing models for how cities generate, exchange and implement transformative learning on the local level and how these lessons can contribute to systemic changes. Understanding learning processes is important for designing and managing projects focused on testing, implementing and sharing solutions in any area of urban transformation.

This section outlines the importance of social and organizational learning in supporting urban transformation. It is based on previous research in this area and on insights and results from the SCC1 projects. It introduces the concepts of urban experimentation and process learning and shows how they can unleash the potential of urban projects to drive broader organisational change and transformation in cities.

3.1 Lessons from European Smart Cities

The Horizon 2020 Smart Cities and Communities Lighthouse programme funded 18 projects between 2015 and 2020. The projects, involving 120 cities, brought public, private and third sector organisations together to deploy and demonstrate the ability of innovative energy, mobility and ICT solutions to deliver sustainability outcomes.

Research conducted with partners of the SCC1 lighthouses during and after the funding period identified what type of learning is perceived as most beneficial by people directly involved in these projects and how these project contribute to systemic changes in urban governance. Individuals and organizations learnt how to do things differently in order to design, test and implement transformative solutions and drive systemic changes in urban governance. Social learning

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mechanisms present a fundamental pathway for urban innovation projects to drive a broader transformation of urban governance and innovation ecosystems. 

**Key lessons** from SCC1 projects\(^\text{14,15,16}\): 

1. City representatives directly involved in lighthouse projects reported that the **most useful outcome of these projects was learning about how to manage urban transformation and how to improve the process in the future.** The projects helped these individuals to understand roles, organisational structures and processes that are needed to implement innovative solutions in specific areas (energy, digitalization, transportation) or that would improve the overall capacity of the city ecosystem to effectively develop, test and implement new solutions and practices.

2. **Learning of key stakeholders and systemic change were often expected to happen as a by-product\(^\text{17}\)** of testing new solutions or approaches in the city environment and engaging stakeholders in the process. Therefore there were insufficient mechanisms to assess the need for learning (knowledge gaps), design dedicated learning activities and monitor the impact of the project on learning.

3. **For many solutions the key implementation challenges are not technical but legal, financial or social.** This should be considered when designing pilots and experiments to enable cities to be clearer about the different types of knowledge they want from a project. For example, understanding behaviour change among businesses is more important to upscaling solutions like cargo bikes than the production of more evidence concerning their ability to avoid carbon emissions.

4. **Cities stress the importance of peer-to-peer learning** and sharing lessons beyond replicating specific solutions or technology. They need to discuss the broader systemic changes, processes and organizational structures that were required to implement the solutions.

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\(^{16}\) Borsboom-van Beurden, J., Bisello, A., Vettorato D., Vacha, T., & Jakovljevic, D. (to be published). Systemic changes in governance: Equipping local governments for realising climate-neutral and smart cities, CINEA, European Climate, Infrastructure and Environment Executive Agency (CINEA)

\(^{17}\) This is mostly true for early generation projects, while the later projects tend to focus more directly on systemic changes, rather than solutions.
5. Urban innovation projects are often implemented by a small, isolated team of people who lack a sufficient mandate to propose and implement organisational or policy changes. Urban transformation is systemic and cuts across departments and political mandates, but in practice innovation projects are often housed in special projects or policy divisions. As a result, they can remain isolated from operations, running in parallel or duplicating activities like visioning, roadmaps, and data collection that the city has already done for other areas.

6. Useful and transformative learning should not be limited to the people directly involved in the demonstration projects. In order to drive broader changes to stakeholder organisations, the transformative experiences of individuals and groups involved in the project should be identified, captured and shared (emulated) effectively.

Although learning was not explicitly intended or managed in the earlier projects, it still occurred. Developing tools and approaches to properly learn from urban projects can unleash the latent potential of learning to inform broader change.

There are several aspects of pilot projects or urban experiments that can be improved based on the experience from SCC1 lighthouses:

**Design:** Cities can benefit from implementing a “Learning by design” approach in the design phase and focus on learning as an integral, explicit part of the project with dedicated goals, activities, and responsibility.

**Engagement:** Relevant members of a given innovation ecosystem need to be involved in activities enabling mutual learning. Their involvement should be based on quality stakeholder analysis. It is not enough to involve key organisations but to make sure people representing the organisations have sufficient mandate and capacity to provide input for mutual learning and to implement the lessons in their organisation. The organisations participating in the project shouldn’t be represented only by top management or very junior people/subcontractors. The combination of both mandate AND capacity (knowledge, experience, time) is crucial.

**Management:** The project management needs to have a mandate to involve key stakeholders and to address policy makers and decision makers. The team should have a person with sufficient capacity, resources and expertise for learning-related activities

**Efficiency:** One of the key challenges is finding cheaper, quicker, and more efficient methods of achieving the type of learning generated by the relatively
expensive (20 million Euros per project, by H2020) and long (5 years) SCC1 demonstration projects. Cities need to find a balance between quality and impact of the learning, and resources (time, money, personal capacity). One of the key areas of focus for CrAFt is identifying methods and tools which can achieve this and to share them with cities to accelerate energy transition and urban innovation.

**Implementation:** For learning generated by the project to have impact, it needs to be adopted by key stakeholders and transformed into coordinated action by key stakeholders. This can involve new roles, processes, organisational structures, regulation, funding schemes, KPIs and so forth.

These challenges related to improving learning in urban transformation projects are addressed in this framework and will be reflected in Mutual Learning Exercises with CrAFt cities.

### 3.2. Social, organisational and process learning

**Social learning** is learning that takes place in social units and occurs through social interactions between actors and their environment\(^\text{18}\). It can lead to changes in understanding, attitudes, and norms in individuals as well as changes to social and organisational structures (both formal and informal)\(^\text{19}\). Social learning is highly relevant to the goals of urban transformation\(^\text{20}\). It can shape rules, norms, roles, and power relations within established social groups and help establish new relationships, social structures, and shared identity\(^\text{21}\).

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\(^{15}\) Reed, M. S., Evely, A. C., Cundill, G. et al. (2010) What is social learning? „Ecology and Society“. ISSN 1708–3087


Social learning as an emerging governance mechanism to promote concerted action— adapted from Collins and Ison 2006

Organisational learning refers to the ability of organisations to identify, capture and share useful lessons among its members in order to improve over time\textsuperscript{22,23}. To achieve the rate and scale of change needed in cities, key organisations including local government will need to change rapidly. Urban projects stimulate individual and social learning that should provide fuel for rapid organisational learning.

The term process learning describes the kind of learning that takes place in demonstration projects and urban innovation projects and represents a combination of social and organisational learning generated by the interaction of local actors with innovative solutions which results in an increased capacity of individuals, organisations and complex stakeholder ecosystems to transform and utilise innovative approaches. Process learning results in better understanding of how to design and implement urban innovation and urban transformation projects. It is learning that relates to and strengthens the processes that enable innovation. Process learning results in changes on individual level as well as in structural changes. Picture 2 shows the path from experience shared by key stakeholders, through reflecting key lessons to impact on psychological & social, and structural level.

When talking about learning and replication, cities are often personificated (e.g. the city will learn, cities will implement). While this has practical reasons (ease of communication) it can lead to oversimplistic project designs. Cities and urban innovation projects comprise complex and diverse groups of organisations, each of which is also multifaceted and divided into multiple units that relate to each other in different ways. The city clearly isn’t a sentient being that learns (though it can change). It is a variety of individuals and organisations who learn by interacting with their environment. Based on this learning they drive changes in order to adapt the city to the changing environment or to positively impact the environment itself. This is why the process learning approach is important to understand how personal and organisational learning is generated through the process of innovation, and can subsequently be used to improve the process of urban innovation.

Leipzig in Germany offers a good example of process learning. The city started as a Follower City in SCC1 project Triangulum and continued as a Lighthouse City in the SPARCS project. The experience of being a Follower City led directly to changes in organisational structure in the municipality. A new “Digital unit” was

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24 https://triangulum-project.eu/
25 https://sparcs.info/
created to oversee smart city projects and international collaboration. The city representatives involved in the project realised the city needed a dedicated unit to develop specific organisational capacity and implement processes necessary for the effective design and execution of smart city and international projects and engagement of local stakeholders in these projects. The design of the new unit was inspired by local feedback as well as by input from other cities engaged in the Triangulum project. This shows how learning from local experience combined with mutual peer-to-peer learning led to broader changes to city administration and processes supporting urban transformation.

*Picture 3: Four basic categories of process learning to be distinguished in CrAft (main author's illustration).*
Process learning can be divided into four categories (picture 3). In the CrAFt project the term process learning is used to capture both the transformative learning that can be generated by NEB projects on a local level as well as the exchange of lessons (mutual and peer-to-peer learning) related to successful implementation of NEB principles. In these two categories it concerns not just learning related to specific solutions or concepts, but also broader lessons about the urban transformation process and systemic changes in urban governance.

3.3. Accelerating learning in cities

The link between process learning and urban policy is vital to inform rapid urban transformations that are required to address a range of global sustainability challenges. Large-scale SCC1 Lighthouse projects demonstrated the potential of experimentation and pilot projects to generate process learning which has a positive impact on the local urban ecosystem beyond implementation of specific solutions. The experience from these projects can inform design of future projects aiming at rapid implementation of transformative concepts such as NEB. On the other hand, SCC1 lighthouse projects were very expensive and lasted for up to 5 years. While the scale of these projects can be justified when demonstrating brand new technology and approaches which represent high uncertainty and risks it also represents an issue when trying to replicate the process of generating local impact in terms of process learning and local collaborative governance. Not every city is so lucky to be awarded millions of euros to experiment and learn, nor do they have time to dedicate 5 years for a learning exercise.

For the purpose of transforming the local ecosystem to adopting new solutions and tools, cities need to find a cost-efficient and flexible way of generating transformative experiences for all relevant actors. Another key challenge is capturing and transferring process learning from one project (city) and emulating the transformative experience the original project provided to people and organizations directly involved.
4. Process learning in NEB

NEB represents an opportunity to apply process learning in order to create transformative experiences for local stakeholders; these, in turn, result in wider organisational transformations and the development of new relationships, competences, and roles within the local ecosystem. The emphasis on inclusivity, beauty and creativity in NEB projects supports the learning environment through shared experience of local actors related to how they can contribute to sustainable urban transformation.

In other words, NEB projects can generate broader process learning and empower local stakeholders to work together in tackling a wide range of challenges. The picture and following chapter show how NEB process learning can boost NEB implementation and how NEB projects can create opportunities for border process learning.

4.1. How process learning can boost NEB

NEB is in its essence creative, engaging, and inclusive. Framing NEB in terms of process learning contributes to using the potential of NEB to generate impactful experiences and transform them into lessons which are reflected and shared by local actors, embedded in organisations and implemented more widely.

CrAFt seeks to identify and share approaches that can boost learning related to NEB implementation (as described in the following chapters). These approaches aim to support:

*Picture 4: Link between NEB and process learning (main author’s illustration)*
• **Shared understanding of Local collaborative governance models (LCGM)** by key actors in the CrAfT Cities, and their relevance for the journey to climate neutrality by making cities more beautiful, inclusive and sustainable (implementation of NEB principles)

• **A vision** of NEB for the city that is shared across sectors and enables stakeholders to understand their role in adopting NEB;

• **Organisational changes** leading to support of NEB at the city level through systemic changes to local governance and improved cooperation of key organisational units of the municipality;

• **New formal and informal networks** around NEB supporting further learning and cooperation;

• **Improved capacity** of the stakeholder ecosystem to co-design and implement coordinated changes leading to wide implementation of NEB principles through a joint effort and collaboration;

• **Improved ability** of the stakeholder ecosystem to participate in the international NEB community by learning from others and sharing lessons, tools and transformative experience;

• **Adoption of learning-by-design approach** in NEB projects and activities.

### 4.2. How NEB can boost process learning

The New European Bauhaus presents opportunities for creating transformative experiences and engaging cultural and creative sectors in experimenting with new ideas, sparking discussion and engaging stakeholders in the transition process to climate neutrality.

There are already examples of engaging cultural and creative sectors in experimenting with urban space and engaging citizens in tackling local challenges. Place-making and City-as-a-Commons projects from Barcelona, Prague, Bologna and other cities as collected by CrAfT partners in Deliverable 1.4 (D1.4)\(^\text{26}\), show how art can facilitate learning through “lived experience” by engaging citizens on an emotional and spiritual level. The cultural and creative sectors have a potential to link with other key actors implementing carbon-neutral policy in the city and establish art-based methods of process learning as a standard tool used along other means of experimenting and stakeholder engagement.

\(^\text{26}\) An extensive list of examples can be found in Annex 2 of Deliverable 1.4 City as a Commons CCC Framework coordinated by UNIBO.
Examples of specific cultural and creative approaches that can be utilized in supporting sustainable transformation, as collected in DL.4, include:

**Small scale interventions**

_Urban experiments_ through small scale or temporary interventions in the public space are a great way of discovering the potential of systemic urban transformations. Citizens can directly experience the impact of proposed change on their daily life. City representatives can evaluate potential impact of full-scale or long-term intervention and coordinate cooperation of key departments that are needed for implementing proposed change or solution.

For example, diverting traffic in order to turn a street into pedestrian space for a limited amount of time can demonstrate both positive and negative effects a long term change could have for the local community and the city as whole. This can inform public discussion and support informed decision making.

Cities can experiment with placing simple furniture into previously under-used public spaces and let citizens discover how this space can be used and use this feedback to invest in more permanent solutions.

Cultural interventions can bring attention to challenges of the city or specific area by highlighting the problem or by expressing how positive change could look like.

*Picture 5: Bologna Example: ‘Pedestrianization of Via Milano: Tactical Urbanism Action to experiment new uses of the space” based on the City as a Commons approach. ²⁷*

²⁷ Aerial image view with drone and list of items in via Milano, photo by Margherita Caprilli. [Via Milano pedonale (fondazioneinnovazioneurbana.it)](http://fondazioneinnovazioneurbana.it)
with placing simple furniture into spaces previously used for traffic or parking. This quick and cheap intervention already helped to turn several places into permanent public space.  

Cultural Events in public space

Local community festivals, neighborhood events and fairs can be a great way of bringing citizens together and creating intensive shared experiences in public spaces. These cultural events can be combined with other short-term interventions in public spaces (e.g. temporary change of space use). These events are a great way of supporting inclusivity and diversity by inviting minorities or marginalised groups to participate or by organising the event in underdeveloped neighbourhoods. Festivals can address community development in general or have dedicated themes such as sustainable food production, circular mobility, energy transition or celebration of diverse cultures.

Individual events are one-time interventions. For long-term impact, they need to be rooted in long-term process-based projects and used together with other types of interventions (relational art interventions, participatory urban interventions, etc).

Exhibitions and audio-visual installations

Exhibitions and installations can produce, replicate or transfer process learning by recreating real life experience, stimulating emotions and provoking discussion.

29 Neighbourhood festival in Prague, picture provided by Creative Prague
For example Prague developed “Urbania exhibition”\textsuperscript{30} to replicate the learning generated by direct involvement in smart city pilot projects to a broader audience through creating a transformative experience. The exhibition was designed together with the local creative sector and social scientists. The emphasis was put on space for reflecting the experience with other participants and translating the lessons into professional and personal life. The participant feedback from the exhibition was used as additional input for defining challenges for Prague. This created a good starting point for NEB implementation since Prague already experimented with the role of the art and creative sector in engaging stakeholders in sustainable urban transformation.

\textit{Picture 8: Urbania Exhibition, IPR Praha}\textsuperscript{31}

**Beautiful and inclusive co-production spaces**

Process learning in the area of collaborative governance and sustainable transformation can be supported by establishing physical spaces for co-production and for creative and social enterprises. These spaces can be co-designed and further developed with local stakeholders and creative sectors to represent the NEB values in their design (beautiful, inclusive and sustainable) and to serve as living labs and demonstration projects. Existence of physical spaces for co-creation and stakeholder engagement or for co-working of new social and creative enterprises can contribute to creation of formal and informal networks of people and organizations and culture of long-term and systematic

\textsuperscript{30} Also described in D3.1 Common Approach to Pilot and Intervention Selection

collaboration. Inclusion of artists and creative enterprises as tenants or users of the space together with social enterprises and urban innovation teams can lead to understanding the benefits of engaging culture and the creative sector in a broader variety of projects.

**Systemic cultural collaboration on climate**

Artists can help visualise possible futures and turn abstract ideas into art and prototypes that people can interact with. There are examples of systematic engagement of arts and cultural organisations in supporting sustainable transformation. One of these examples is Manchester Arts Sustainability Team (MAST), a network of 35 arts and cultural organisations based in Manchester who aim to work together to support the delivery of the Manchester Climate Change Strategy 2017–2050 and foster a collaborative learning ethos which unites art forms, organisations, voluntary, and civic bodies in a shared commitment to a sustainable and equitable future. MAST supports the role of arts and culture in finding new ways to engage people on climate change.32

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32Cultural collaboration on climate, Manchester Arts Sustainability Team (MAST): [https://obs.agenda21culture.net/sites/default/files/2022-03/Manchester_EN.pdf](https://obs.agenda21culture.net/sites/default/files/2022-03/Manchester_EN.pdf)
5. Learning in CRAFT

The CrAFt project seeks to support process learning in CrAFt Cities in two areas:

1. Mutual Learning with CrAFt Cities
2. Local learning in CrAFt Cities

CrAFt Cities consist of 3 Sandbox Cities (Amsterdam, Bologna and Prague) and 60 Reference Cities and city clusters. All these cities will be invited to implement approaches supporting learning on a local level and to participate in Mutual Learning Exercises and co-creation sessions.

5.1. Mutual learning

CrAf will support peer-to-peer learning and sharing of transformative lessons and approaches to implementing NEB principles, through Mutual Learning Exercises. Mutual Learning Exercises (MLEs) are physical, online or hybrid meetings of CrAFt City representatives and CrAFt partners. They will be organised either as stand-alone events (e.g. dedicated online sessions) or back-to-back with other events (for example events organised by the Cities Mission, NEB or their respective communities). The specific content of MLEs will be tailored to match the needs of CrAFt Cities and adjusted based on their continuous feedback. MLEs will also be used to inform and implement outcomes of other CrAFt activities and deliverables. The general focus of MLEs will be to:

- Identify and share needs and challenges of CrAFt Cities related to local collaborative governance and NEB implementation;
- Peer-to-peer learning related to organisational models and processes boosting implementation of NEB;
- Lessons on how local collaborative governance models and NEB implementation can empower local stakeholders to achieve climate neutrality by 2030;
- Sharing examples of good practices and lessons from Sandbox and Reference Cities;
- Co-creation and dissemination of CrAFt innovative models, tools and guidelines;
- Presentation of projects, tools and useful sources from outside of CrAFt including guest speakers from relevant EU initiatives and organisations;
• Support for development of new projects and partnerships through presenting information on EU funding opportunities and organising networking sessions.

Each MLE will have clearly stated goals responding to at least one point mentioned above. Specific focus of individual MLEs will be based on:

A. Needs of CrAfT Cities collected from their application to the Call for CrAfT Cities;
B. Feedback from previous MLEs and communication with the cities;
C. Requests from CrAfT WP leaders (lessons in specific areas, co-creation and feedback related to a selected deliverable etc.);
D. Thematic focus of events within which MLEs are organized.

The WP4 leader (CVUT) together with NTNU will organize regular coordination meetings with representatives of all WPs to steer the selection and design process and to align the effort with work in other WPs. Events outside CrAfT will be regularly monitored to seek opportunities for back-to-back sessions which will reduce organizing and travel costs. A plan of future MLEs will be updated every 6 months.

Once the focus, scope, format and dates of the MLEs are set, dedicated co-creation sessions will be organized to design the activities, assign roles and prepare input from partners or external guests.

Each MLE will have the following elements:

6. **Introduction** of the topics, basic concepts and goals of the exercise;
7. **Presentation of relevant examples and resources** for the topic (projects, solutions, tools, funding mechanisms, databases, platforms etc.);
8. **Sharing session** where CrAfT Cities share their needs, experience or know-how in order to learn from each other and produce transferable lessons;
9. **Reflection session** where the participants state what they learned together and identify what are the key lessons coming from the exercise;
10. **Feedback session** focused on collecting feedback on the MLE and identifying knowledge gaps and needs to be addressed in future MLEs or deliverables.

The goal is to strike a balance between inviting cities to share their own experiences and providing sufficient input from organizers to ensure there can be an informed debate.
Some MLEs will be designed as a series of workshops with one underlying goal or theme. An example of such a series are the CrAFt Cities Sessions, organised to inform the Climate-Neutral and Smart Cities Guidance Package: NEB Edition. The need to organize this series was identified by WP2 partners NTNU and Locality and proposed to the WP4 leader. In a co-creation session, the MLE was designed as a workshop series including sharing and reflection sessions.

**Capturing lessons from mutual learning and other work in CrAFt**

Lessons generated in MLEs (Task 4.4) as well as in the work conducted in other WPs (Task 4.3) will be captured, stored and implemented. Mutual Learning Exercises and work in WPs 1–7 are expected to produce two types of lessons: 1) Feedback and input directly related to a specific deliverable. 2) General process learning and relevant lessons on collaborative governance and implementation of NEB principles emerging from interaction between CrAFt partners and cities.

For the purpose of collecting lessons, an internal learning repository will be created. It will contain structured reports with learning from every MLE as well as documents with lessons extracted from other WPs together with Work Package leaders and contributors (Task 4.4 “Extract experience-based learning material from WP1–7”). These reports will be collected by CVUT as WP4 lead with input from dedicated partners facilitating sessions in particular MLE or working on a particular deliverable. All CrAFt partners will have access to the repository; individual reports from MLEs will be shared with the participants of the respective MLEs. Relevant lessons will be used to inform individual deliverables in CrAFt, and made available publicly.

Lessons gathered from other WPs will be presented in D4.5 “Experience-Based Learning Material” (M24 preliminary and M36 final version). The final version will contain the completed approach and the completed material from the project.

The key lessons gathered through MLEs will be presented in D4.6 “Mutual Learning Exercises Summary” (M24 preliminary and M36 final version).

Findings gathered throughout MLEs will be transformed into content for Task 6.1 “Storytelling campaign” and into the “Climate-Neutral and Smart Cities Guidance Package: NEB Edition” in Task 2.2.

Participants of MLEs will be instructed to reflect what they learned and to discuss how they can implement relevant lessons in their city.

CrAFt Mutual Learning Exercises focus on tapping into existing resources, collaboration with other projects and initiatives, sharing them between cities, and
feeding them into project learning. This effort is coordinated by the project coordinator (NTNU) and implemented by project partners, who will provide input in the areas relevant for their WPs. This also concerns capturing lessons from CrAFt and sharing them through relevant channels, in close cooperation with WP2 (Guidance Package – NEB Edition), WP6 (Communication and dissemination, Storytelling campaign) and WP7 (Task 7.4 Reference groups with other relevant European initiatives).

Picture 10: Input and output of MLEs

### 5.2. Learning in CrAFt Cities

CrAFt will seek to **identify and share successful approaches** for implementing process learning in local collaborative governance in CrAFt Cities and NEB projects. CrAFt will focus on how the cities:

1. Tap into existing sources and examples and use them to inform local projects and stakeholders;
2. Define target groups for learning;
3. Design dedicated activities for generating learning;
4. Design dedicated activities for capturing and implementing the learning;
5. Exchange lessons with other cities and partners;
6. Work with cultural and creative sectors in generating, capturing and sharing learning and engaging local citizens into transforming their cities.

Process learning in CrAFt will be addressed in dedicated Mutual Learning Exercises and the lessons on process learning gathered from MLEs will be reflected in WP4 meetings including CrAFt partners. WP4 lead CVUT will collect lessons on how to
support process learning in cities and will transform them into input for relevant deliverables:

- D1.3 NEB Impact Model (M36)
- D2.1, D2.2, D2.3 Climate-Neutral and Smart Cities Guidance Package: NEB Edition (M12, M24, M36)
- D4.2, D4.3, D4.5 Experience-Based Learning Material (M12, M24, M36)
- D4.4, D4.6 Mutual Learning Exercises Summary Report (M24, M36)
- D5.4, D5.6 Regular report on the next generation CrAft Think/Do Tank (M18, M36)

The process learning approach will be also implemented in the Sandbox Cities in a close cooperation with WP3 and will be reflected in Impact Stories from Amsterdam, Bologna and Prague.

The goal is to make the process learning approach an integral part of all relevant activities in CrAft and help cities to improve their own local projects in terms of creating transformative experiences and lessons supporting Local collaborative governance.

The CrAft Cities will receive presentations on the experience from previous projects in terms of learning including recommendations to address process learning in their projects.

### 5.3 Local Advisory Teams

Process learning in the Sandbox Cities has a link to the work of the Local Advisory Teams (LAT)\(^{33}\). The CrAft Sandbox Cities are expected to establish teams representing the local NEB ecosystem. Coordinators of these teams will be provided with materials to present the concept of process learning to the local stakeholders and translate its principles in how the group approaches pilot projects, mutual collaboration and international exchange of best practices.

Prague has especially strong emphasis on implementing process learning in working with local stakeholders and in dedicated pilot projects. Prague established an Innovation Team for NEB which will take on the role of LAT in CrAft. The core of the team is formed by city departments, municipal subsidiary organisations and companies, and representatives of the academia. The goal of the group is to coordinate the implementation of NEB across organisations and projects of the city, enable process learning and exchange on local level.

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\(^{33}\) The Local Advisory Teams are further described in D3.1 Common Approach to Pilot and Intervention Selection
coordinate international cooperation and align roles and competences of key organisations in implementing local collaborative governance and NEB.

The Sandbox Cities will present their experience to all CrAFt Cities so they can voluntarily select relevant structures and lessons to implement in their own cities. Early experiences from the Sandbox Cities include measures such as the following:\(^34,35\):

- **Dedicated capacity**: Appointing one person or organisational unit to be responsible for managing learning across NEB projects. This responsibility includes working with project managers on capturing lessons through measures described below, managing the city diary and exchanging lessons with other cities. If the city has organised a Local Advisory Team, this responsibility can be integrated in the LAT.

- **Project logs**: A digital “project log” can track how the project progressed and capture key lessons related to its design, implementation and impact. In this manner, each individual project can become a mutual learning exercise providing lessons for the local NEB ecosystem.

- **Debriefing sessions**: Structured debriefing sessions after key milestones, activities or events in NEB projects will help capture experiences and lessons perceived by involved actors as important. Debriefing provides opportunity to share the lessons and brings the group closer to mutual understanding paving the way towards coordinated transformative changes.

- **Sharing feedback surveys**: Feedback surveys are an easy and fast way of gathering feedback and lessons learned from a large group of stakeholders (e.g. visitors of a festival), though at a superficial level. To support mutual learning the results of these surveys should be presented back to the stakeholders.

- **Dedicated time for learning**: Meetings with local NEB stakeholders could include a short section dedicated to mutual learning, sharing lessons learned and proposing edits to the city diary or other shared repository for NEB learning.

Throughout the project CrAFt partners and cities will co-develop a shared understanding of how to utilise the potential of local collaborative governance.

\(^34\) Additional experiences and details are available at D1.4 City as a Commons CCC Framework

\(^35\) Additional experiences and details are available at D3.1 Common Approach to Pilot and Intervention Selection
and NEB activities to produce transformative experiences and generate process learning.
6. Links to other work in CRAFT

The learning framework and related activities have connection to most of the work in CrAFt. Below we describe the most relevant parts of CrAFt in terms of their relation with Organisational learning in Reference Cities (WP4).

In WP1 the link to the learning framework is two-fold:

1. Mutual Learning Exercises will help provide input and feedback for several tasks, especially Task 1.2 “Develop a NEB-inspired impact model” and Task 1.3 “Creating dialogue, understanding and mutual action between property owners and tenants, and local authorities”.
2. WP4 will extract lessons from activities and materials in WP1 especially from Task 1.1 “Develop a CCC framework based on the city as a commons” and Task 1.4 “Engaging the European cultural sector” and use them as an input for MLEs as well as for D4.5 “Experience-Based Learning Material” and D4.6 “Mutual Learning Exercises Summary”.

Mutual Learning Exercises and learning in the CrAFt Cities has a strong link to the Guidance package in WP2. A dedicated series of Mutual Learning Exercises will be organized to provide input for Task 2.1 “Gather and qualify emblematic projects with collaborative local governance models”. Selected lessons, tools and examples gathered from all MLEs will serve as key input for D2.3 “Climate-Neutral and Smart Cities Guidance Package: NEB Edition”.

The Sandbox Cities (WP3) will be the first among the CrAFt Cities to implement the learning framework locally and will play a central role in Mutual Learning Exercises since they are expected to implement dedicated and monitored local initiatives. Apart from Amsterdam and Bologna, the city of Prague has a key role in implementing, testing and further developing learning approaches since it selected process learning in NEB as a central topic for its pilot projects. Cooperation with the Reference Cities and Sandbox Cities will be aligned through regular coordination meetings.

Process learning is relevant for the Student STEAM Teams and Think/Do Tanks (WP5) for several reasons: a) the principles can be implemented in dedicated activities for students, b) the students will be involved in local projects and play an active role in designing and implementing learning activities in the city and c) the process learning approach can be used to improve the way CrAFt Cities engage students in NEB and in urban transformation in general.
The learning activities in the cities and the MLEs outlined in this framework will provide valuable input for the **Storytelling Campaign and Policy Briefs (WP6)**. The process learning approach seeks to capture real transformative experiences including personal testimonies of key actors that are valuable for the Storytelling Campaign. The process learning is useful input for the Policy Briefs to generate advice and recommendations on local, national and European level.

Close cooperation with **WP7** will ensure alignment with the overall project coordination (T7.1) and Inclusiveness and Diversity Management (T7.3). Cooperation with Task 7.4 “Reference groups with other relevant European initiatives” will ensure two-way transfer of lessons, as well as coordination of events and overlapping activities. This includes links to the Cities Mission, the Mission Platform and NEB, and alignment towards the Climate City Contracts. A plan for MLEs will be co-designed together with WP7 partners every 6 months to seek opportunities to join MLEs with other events and activities in and outside CrAfT.

All WP leaders are expected to contribute to Task 4.3 “Extract experience-based learning material from WP1-7” by providing reports with process learning generated in their work and by sharing the lessons in joint meetings.

Learning and feedback gathered through the Mutual Learning Exercises will be regularly shared with all WP leaders in order to inform their work. WP leaders will be also invited to co-design MLEs or organise additional learning or co-creation activities.
7. Conclusion

Process learning captures the kind of learning that takes place in urban demonstration projects and urban innovation projects. It represents a combination of social and organisational learning generated by the interaction of local actors with innovative solutions, which results in an increased capacity of individuals, organisations and complex stakeholder ecosystems to transform and utilise innovative approaches. Implementation of NEB and local collaborative governance models can be enhanced by and provide opportunity for process learning. Experiences from the CrAft partners and SCC1 projects show the importance of social and organizational learning in driving sustainable urban transformation, empowering local stakeholders and enabling coordinated change on local level. They also point to the importance of peer-to-peer learning and exchange of lessons related to processes, organizational models and culture of collaboration on the local level.

The CrAft project seeks to support process learning in two areas 1) Mutual Learning with CrAft Cities and 2) Local learning in CrAft Cities. The goal of mutual learning in CrAft is to support peer-to-peer learning between CrAft Cities and sharing transformative lessons and approaches to implementing NEB principles. Furthermore, CrAft seeks to support cities in co-designing and implementing process learning approaches in their own projects related to local collaborative governance and NEB. The 3 Sandbox Cities (Amsterdam, Bologna and Prague) and 60 Reference Cities and city clusters will be invited to implement approaches supporting learning on a local level and to participate in Mutual Learning Exercises and co-creation sessions.

The specific goals and core principles of the Mutual Learning Exercises are described in Section 5.1 together with processes for their design and for capturing and implementing lessons they produce. Section 5.2 further outlines how CrAft will help cities to identify and share successful approaches for implementing process learning in local collaborative governance and NEB.

The learning framework and related activities have connection to most of the work in CrAft. Mutual Learning Exercises will enable all WPs to gather input and feedback for their activities and deliverables. The WP4 Lead will also extract experience-based learning material from WPI-7 in Task 4.3. The key lessons gathered through MLEs will be presented in D4.4 and D4.6 “Mutual Learning Exercises Summary” (M24 preliminary and M36 final version). Findings gathered from MLEs will be transformed into content for Task 6.1 Storytelling Campaign and
into the Climate-Neutral and Smart Cities Guidance Package: NEB Edition (Task 2.2). Lessons gathered from other WPs will be presented in D4.3 and D4.5 “Experience-Based Learning Material” (M24 preliminary and M36 final version).
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# List of Acronyms

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<tbody>
<tr>
<td>AUAS</td>
<td>Amsterdam University of Applied Science</td>
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<td>CrAFT</td>
<td>Creating Actionable Futures</td>
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<td>CVUT</td>
<td>Czech Technical University in Prague</td>
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<td>ECF</td>
<td>European Cultural Foundation</td>
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<td>EERA</td>
<td>European Energy Research Alliance</td>
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<td>European League of Institutes for the Arts</td>
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<td>EU</td>
<td>European Union</td>
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<td>Horizon 2020</td>
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<td>Inclusiveness and Diversity Management Plan</td>
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<td>Local collaborative governance Model</td>
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