

A photograph of a modern, multi-story building with a rooftop garden. The building has large, rectangular windows and a flat roof with a metal railing. A lush green garden with various plants and trees is growing on the roof. In the foreground, a street scene is visible with several people riding bicycles. A person in a yellow jacket is in the center, and another person in a grey jacket is to the right. The street has a white crosswalk. The sky is blue with some clouds. The text "CLIMATE-POSITIVE CITIES & COMMUNITIES" is overlaid in large, white, bold, sans-serif font. Below it, "A NEB POCKET GUIDE" is written in a smaller, white, bold, sans-serif font.

# CLIMATE- POSITIVE CITIES & COMMUNITIES

## A NEB POCKET GUIDE



# CLIMATE-POSITIVE CITIES & COMMUNITIES

## A NEB POCKET GUIDE

### Project

CrAft – Creating Actionable Futures

### Deliverable

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2

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Creating  
Actionable  
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# *CLIMATE- POSITIVE CITIES & COMMUNITIES*

*A NEB POCKET GUIDE*

The Craft Cookbook vol 2





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# LIST OF ACRONYMS

<b>CrAft</b>	Creating Actionable Futures
<b>ESG</b>	Environmental, Social, and Governance
<b>EU</b>	European Union
<b>GDPR</b>	General Data Protection Regulations
<b>GIS</b>	Geographic Information Systems
<b>IM</b>	Impact Model
<b>KPI</b>	Key Performance Indicator
<b>NGO</b>	Non-Governmental Organisation
<b>NEB</b>	New European Bauhaus
<b>NZC</b>	NetZeroCities
<b>PCP</b>	Pre-Commercial Procurement
<b>PPPP</b>	People-Public-Private Partnership
<b>PPI</b>	Public Procurement of Innovation Solutions
<b>SLCC</b>	Societal Life Cycle Costing
<b>SRL</b>	Societal Readiness Level



# EXECUTIVE SUMMARY

The CrAft project envisions a fresh approach to climate-neutral cities, where urban spaces are harmoniously integrated with nature, culture, and the lives of local communities. This Pocket Guide offers cities a practical guide to foster collaborative governance and work toward climate-neutral, inclusive, and sustainable urban environments. The insights and best practices are gathered from CrAft's extensive European network of partners and stakeholders related to the EU Mission on Climate-Neutral and Smart Cities and the New European Bauhaus.

Building on the foundation set by the CrAft Cookbook<sup>1</sup>, this second volume introduces practical tools and examples for diverse stakeholder groups to actively engage in collaborative practices. Shaped by city sessions, dialogues, workshops, and community feedback, the guide serves as a comprehensive resource for cities seeking meaningful climate-positive change.

To achieve this transformation, the guide identifies the unique roles and needs of various stakeholders. Citizens and civil society groups, empowered by accessi-

ble information and participatory tools, become active partners in climate action. Cultural and creative sectors contribute by nurturing community connections and promoting sustainability through the arts and heritage. Homeowners, including individual property owners and homeowner associations, gain guidance on energy-efficient upgrades and climate resilience. Academic institutions offer research-based insights and foster community engagement through experimental and educational projects. And as orchestrators, municipalities use the guide's tools to foster cross-departmental collaboration and champion inclusive governance.

Through examples such as community network tools, public-private partnerships, and citizen-led initiatives, the guide demonstrates how collaboration can become a lasting part of urban policies and practices.



**1: The Craft  
Cookbook**

# CRAFT AND BUILDING THIS GUIDE



# CRAFT AND BUILDING THIS GUIDE

## CrAfting Our Future

The CrAft project calls for a reimagining of cities and communities where the built environment harmonises with nature, people, and culture. Achieving this requires more than innovative design; it requires collaborative governance, where stakeholders and decision-makers work together to create solutions that are rooted in local needs and aspirations, fostering

resilience and a sense of ownership. This Pocket Guide shares insights and good practices from the CrAft Sandbox and reference cities, and from European project networks to empower cities and communities to learn from each other and adapt ideas to their contexts to create spaces that are climate neutral, beautiful, inclusive and sustainable.

## About Volume 2

This Pocket Guide builds on the ideas of the CrAft Cookbook, enriched with contributions from our cities and communities, students, property owners, cultural organisations and more. In this guide, we introduce new tools and methods, while showing how they can be used in practical ways by different groups of people in their day-to-day work, and in different stages of local collaboration. Our cata-

logue of examples showcases innovative approaches to inspire readers who want to set up actions and projects themselves.

How we have worked with different stakeholder groups to create this Pocket Guide, is explained in Chapter 2.

## Building This Pocket Guide

The CrAft project works hand in hand with cities, communities, regions, and diverse societal stakeholders to foster collaborative local governance aimed at creating climate-positive cities. In close coordination with European platforms and initiatives—such as the Cities Mission and the New European Bauhaus (NEB) Alliance—CrAft builds a robust shared-knowledge base. This network strengthens the bridge between the aspirational NEB values and practical, community-centred action, helping cities translate principles into practice.

### CrAft City Sessions

As the CrAft project unfolded, it became clear that our nearly 100 CrAft Reference Cities had accumulated invaluable insights and practices that could benefit other cities and local stakeholders facing similar challenges. Recognising this, in early 2022, we launched CrAft City Sessions—a collaborative series where these cities could share and discuss their NEB-aligned projects. Across nine sessions, participating cities presented current initiatives, challenges, opportunities, and successes. Each session included breakout discussions, providing a platform for cities to connect, share experiences, and learn from one another's successes and setbacks. These conversations highlighted key factors for successful collaboration,

which have informed the development of the CrAft Cookbook and now also the NEB Pocket Guide.

### 1:1 CrAft City Dialogues

Following the publication of Cookbook Volume 1, we launched a new phase: individual dialogues with CrAft cities. These 1:1 sessions enabled us to understand, in depth, the cities' unique projects and challenges. Through these dialogues, common themes emerged—such as engaging communities, strategic planning, building capacity, securing financing, and fostering societal mindset shifts. With these shared challenges in mind, we compiled tailored tools and methodologies, making it easier for cities to find resources aligned with their needs.

### The Tree of Desire

To gather forward-looking feedback, the NTNU CrAft team introduced the "Tree of Desire" at major events within the European project network, including gatherings in Barcelona, Bologna, and Amsterdam. Participants were encouraged to write their visions for the future on notes, which they added to the tree in any language or format they chose. Their desires often centred around themes of community, greenery, and mobility, providing insight into the public's aspirations. We then highlighted successful examples



from the CrAft network that aligned with these themes, helping cities move toward shared community goals.

### Impact Model Workshops

Through the Re-Value project, NTNU also piloted a gamified approach to the NEB Impact Model for city transformations, engaging CrAft cities in workshops to collect their feedback. Volume 1 of our guide was handed out at each workshop, allowing stakeholders to explore practical guidance first-hand and share what would make future editions even more helpful.

### Meetings, Events, and Ongoing Conversations

Since the release of Volume 1, CrAft project partners have distributed the guide across a range of EU network events, including the Driving Urban Transitions Conference, Nordic Edge Expo, and NEB Festival. In each interaction, we held dialogues with attendees, gathering ongoing feedback and learning what people are most curious about or need for their work.

### Stakeholder Interviews

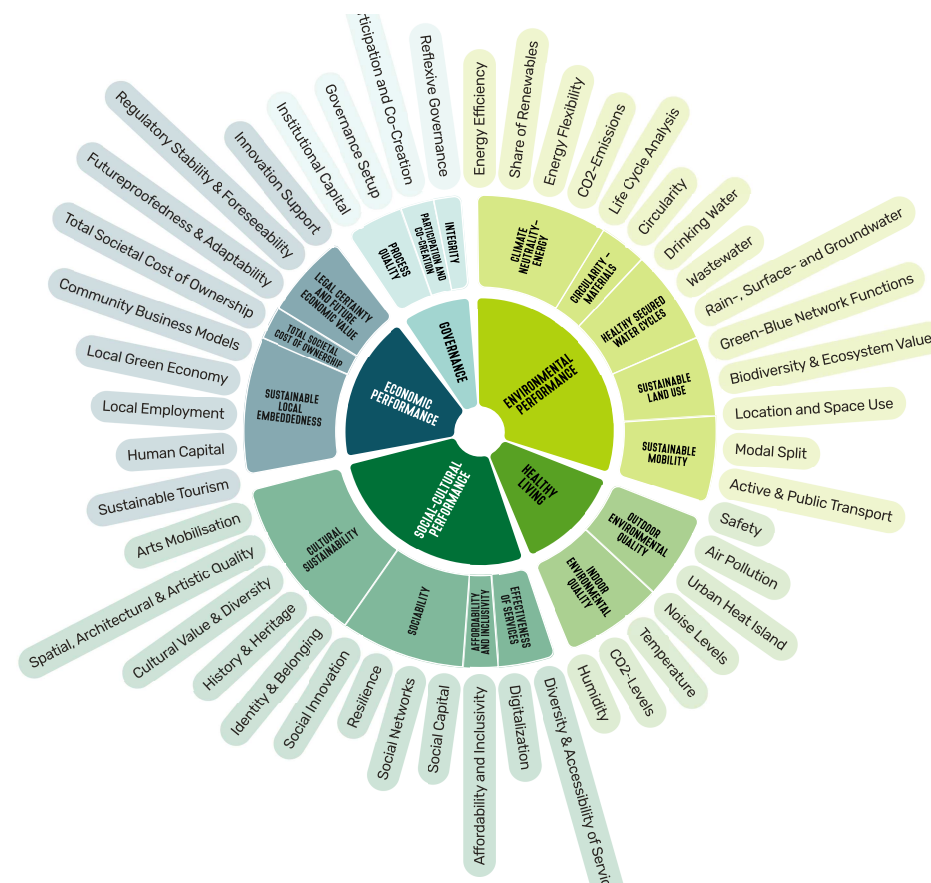
Together with our CrAft partners, we charted the different actor journeys in local collaboration on climate neutrality. Locality and NTNU set up a series of meetings and activities with project partners and organisations representing different stakeholder categories to

get insight into motivations, considerations and needs of different actor groups during all stages of local collaboration. Interviews were set up by LOC with the cultural and creative sectors, property owners/homeowners, Sandbox Cities and organisations representing civil society and municipalities. NTNU and ELIA set up events through hackathons and workshops with students from different fields in arts and science, and self-evaluated its academic role in local collaborative governance. With our partners, we explored needs, roles and responsibilities, and what each actor could actively contribute. For each stage of urban transformation, we identified the most important decisions and actions for each actor in that particular stage of collaboration. The outcomes were complemented by targeted desk research on additional materials provided by the interviewees to confirm and enrich preliminary findings. In addition, we scouted proven tools and methods for making the transition happen. As a next step, other key actors, e.g. energy network managers, mobility and waste operators, will be investigated. Altogether, these activities have provided insights into the different actors' journeys. Further, the specific needs of actors in mutual collaboration on climate neutrality are soon to be further validated in test beds with CrAft's Sandbox Cities Prague, Bologna and Amsterdam. These validated results will be captured in upcoming Volume 3.

## Collaborative Governance: The NEB Impact Model

The Impact Model (IM) has been developed by NTNU and VITO as a versatile tool to enhance understanding and practice of collaborative governance, recognising that achieving climate neutrality requires

a comprehensive, 360-degree approach. The IM is designed to support this holistic vision by working across five key pillars: governance, the environment, healthy living, social-cultural, and economic





performance. It promotes multi-actor dialogue and cooperation on key performance indicators (KPIs), co-benefits, and impact pathways, making it adaptable for various practical applications. Cities can use the IM to analyse strategic plans, targeting diverse benefits and co-benefits, or even use the adapted interactive game to

collaboratively build a roadmap toward sustainable urban development. Through its structured yet flexible framework, the IM enables cities to engage stakeholders, assess project impacts, and foster collaborative approaches to achieve shared sustainability goals.

## Impact Model Workshops

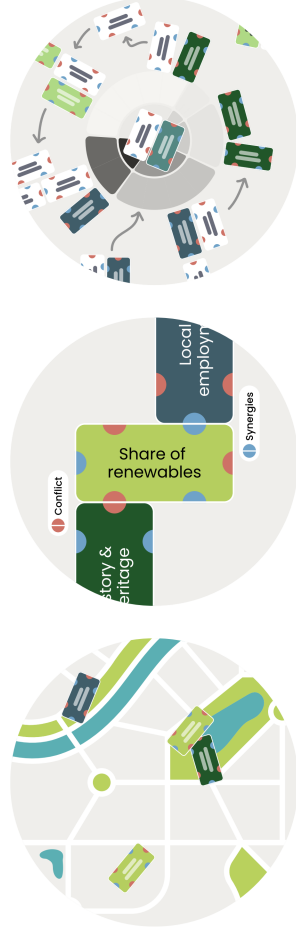
### Gamified Collaborative Governance

NTNU has developed and is testing, through the Re-Value project, a gamified workshop format to help cities and neighbourhoods build collaborative roadmaps for local projects. This method empowers municipalities to engage diverse stakeholders—like community members, NGOs, local governments, developers, academics, businesses, and youth groups—by using a deck of impact cards based on the NEB Impact Model, which now has been translated into eight languages, with more to come!

Each of the 46 impact topics from the model is printed on a domino-style card, which participants use to discuss and prioritise project impacts in small, facilitated groups. Blank cards are also provided for adding new ideas specific to each community's needs.



## HOW IT WORKS



1

### Identifying Impacts

Using a map of the project area, participants select and place cards that represent impacts they believe are important. Each person explains their choices, fostering a shared understanding of diverse priorities.

2

### Connecting Impacts

Participants then build links between impacted by matching the coloured edges of cards. Positive links (synergies) are represented by blue matches, and negative links (conflicts) by red. This step helps groups visualise how different goals interact and identifies potential synergies and clashes.

3

### Building an Action Plan

Based on the connections made in earlier rounds, groups create a roadmap outlining actions, timelines, stakeholders, resources, and KPIs to guide the project forward.

### Interactive, inclusive and actionable

This interactive method helps cities test collaborative governance by creating a shared vision and actionable plans among varied stakeholders, taking a large step toward breaking silos and making local governance more inclusive and coordinated.





# MEANINGFUL COLLABORATION



# MEANINGFUL COLLABORATION

## How We Work: Partnerships and Stakeholder Engagement

Because urban transformations can be quite intricate, many stakeholders are involved, each with their own level of knowledge and understanding, and with specific interests at stake. With our work in CrAft, and this Pocket Guide, we build and mature ecosystems of people with different needs and interests. For most actions, stakeholders depend heavily on each other to make the next steps, e.g. for creating mass, for taking measures, or for formal approvals and permissions. They also have to align their interests, as these might conflict with each other, and agree on the way forward. Everybody has a piece of the jigsaw puzzle, so there is an urgent need to work together.

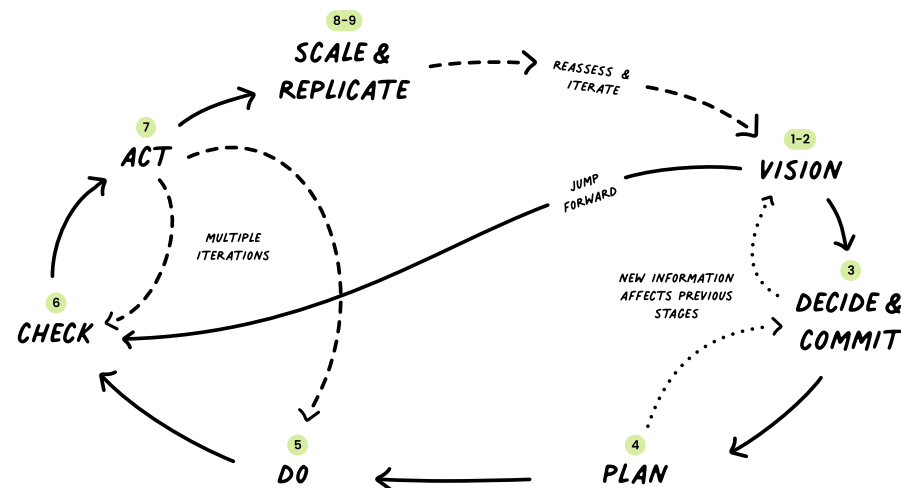
The figure below shows the complexity of local collaboration. At first sight, the stages of local collaboration seem to follow a circular process, from defining a common vision to scaling up and replicating successful collaborations. From the CrAft City Sessions and City

Dialogues, we have learned that often a lot of smaller iterations are needed to keep actions aligned with initial goals, and vice versa, and processes in reality are less clear-cut.

The most important stage iterations are highlighted in this figure. The goals agreed upon in the Vision may be adjusted due to new information on viability of certain pathways or changes in commitment by collaboration partners. Similarly, developing concrete actions in the Plan stage might prompt revising the partnership or pathways for change already decided on. Do, Check, and (Re)Act also create a smaller loop of iterations where new and unexpected elements of real-life implementations call for a refinement, or when modifications in (Re)Act still do not yield the desired collaboration results. The Check stage evaluates progress and results, it might be necessary to go back and align or eventually redefine the Vision to see if actions have followed and real-

ised the shared ambitions. This often comes through checking implementation processes and sharing experiences. Finally, Scale and Replicate reassess the entire process and prepare the ground

for new collaborations and good practices, which then start again with jointly defining a Vision.



With this Pocket Guide, we aim to bring local collaboration to the next level by describing inspiring examples and good practices to relevant stakeholders in a targeted approach. Our CrAft partners represent several key actors to make cities and communities climate-neutral and more inclusive, beautiful and sustainable: citizens and civil society; cultural and creative sectors; home-

owners; academics, municipalities and EU Cities Mission and NEB communities. Together, we have delved deeper into the roles and needs of each group. So let us introduce them here!

As daily users, citizens know their city and neighbourhood in detail and know which needs should be addressed. Their support for and active contributions to



co-creation, and investments in time and money, are vital for progress towards climate neutrality. Grassroots initiatives and NGOs organise collective action and level with municipalities or regions. This Pocket Guide features many outstanding examples of how citizens actively participate in and benefit from local collaboration.

New European Bauhaus is innovative because it engages arts, culture, and creatives such as designers and architects, to make cities not only sustainable and inclusive but also beautiful and attractive. The cultural and creative sector bring people together, touching not only on rational considerations but on the deeper emotional level as well. This Pocket Guide gives several key examples for how art and culture connect community and policy, driving change.

Homeowners play a crucial role in the path to climate-neutral cities since a considerable share of CO2 emissions in cities comes from houses. Making dwellings energy-efficient and adapting them to climate change is key for progress towards a climate-neutral city. For homeowners, it is often not clear where to start and with whom to collaborate. This Pocket

Guide offers inspiration for those who adapt their properties to changing climate conditions.

Research institutes, universities, art schools and students can play an important role in supporting cities by sharing knowledge, experimenting, using art to mobilise people, and bringing in the fresh perspective of youth and intergenerational justice. In the Sandbox City of Amsterdam, the example of the pilot project in Marineterrein, a former military area turned into an innovation district, is centred around the collaboration between knowledge institutes, art and coding school, startups and businesses to engage with citizens and the local community to co-create sustainable ways of living the city.

As the main responsible for both urban transformations and local progress towards climate neutrality, municipalities fulfil the role of orchestrators. They want to develop and deploy successful models for collaboration with local actors. As the CrAft project emphasises actions of local municipalities in our sandbox and reference cities, we showcase several inspiring cases toward collaborative local governance driven by municipalities.



## Citizens and Civil Society

### Citizens and Civil Society in Climate-Neutral City Building

Working with our Sandbox Cities and their local ecosystems in the CrAft project, we have gained a deeper understanding of the role citizens and civil society play in driving local sustainability. Many citizens are committed to making a positive contribution to their city and community by addressing local needs and fighting for

local interests. In their different capacities, tenants, local activists, NGOs, schools and local businesses play a vital role in achieving climate-neutrality. Citizens have inside knowledge of their neighbourhood and can initiate actions. They can help to collect crucial information, adopt good examples, invest in sustainability, and act as ambassadors for climate-positive transformations.



Grassroots initiatives, associations and NGOs such as Sandbox City Bologna's Fondazione IU Rusconi Ghigi (ex FIU)<sup>1</sup> provide civil society platforms where citizens collaborate to address societal issues, playing an all-important intermediary role between municipality and citizens. They mobilise and connect people, help citizens with interpreting municipal information and navigating urban bureaucracies. Several, among them FIU, successfully work in a NEB-inspired way with artists, designers, local activists and institutions for setting up local climate-neutrality initiatives.

Another example is the grassroots initiative Free Spaces in Sandbox City Amsterdam, which is in charge of building and sustaining a cultural community that lives temporarily in areas that are not yet claimed by a proprietor in the pilot Green Field (Groeneveld). The municipality offers pieces of land at a lower rent, but in return, they must organise themselves in a foundation to pay for it and set up artistic and cultural events for the local community to sustain themselves.

### Supporting Citizens and Civil Society

With different roles, capacities, leverage and mindsets, needs can vary greatly, yet

it is essential that all citizens are heard: inclusive engagement strategies must underpin all local collaboration and prevent underrepresentation of specific groups. Crucially, citizens also need a basic understanding of local problems or opportunities, explained in non-technical terms. Why is it a problem or opportunity, and what can be done about it? The City as a Commons collaboration model has proven successful in Bologna's Climate Citizens' Assembly. Citizens also need information about what proposed changes mean for them, what is expected from them, and what is "in it" for them. For example, tenants want to know what retrofitting will mean for their rent and energy bills, which practical consequences it will have, and whether it will improve indoor comfort. Clarification of their role and the contribution they can make in different phases of urban transformation is needed too, as this will enable them to act with greater confidence, empowered by self-determination and independence. Playing an active part, citizens will no longer wait for others to create the right preconditions. They will become prosumers or take on new leadership roles, e.g. as ambassadors of successful experiences.



1. Fondazione IU  
Rusconi Ghigi

### Citizens and Civil Society in Action

Citizens can participate in local meetings, organise info sessions, and serve as ambassadors for climate initiatives. Tools and methods such as public hearings, participatory budgeting, citizen science, and temporary urban projects provide platforms for engagement. Civil society actors can use models like community energy projects, finance tools, and tactical urbanism to drive collaborative urban transformation. Similarly, CrAft's City as a Commons protocol (D1.4)<sup>2</sup> promotes interventions with multi-stakeholder engagement where citizens are given a new active role, and a platform to develop and implement their climate actions, through Climate City Contracts

which support them also financially.

We showcase several other excellent examples such as Bologna's Climate Citizen Assembly, Stavangers "Kvikkttest" platform, Fundão's Academia de Código and Bucharest Urban Imagination Event which highlight these approaches, harvested from the CrAft and NEB Alliance networks.

Through CrAft, we see that empowering citizens with the right knowledge and tools transforms them from passive observers to active partners in climate-neutral urban development.



2: City as a Commons  
CCC Framework  
Deliverable 1.4 update





## Culture and Creative Sectors

### Culture and Creatives in Climate-Neutral City Building

All CrAft Sandbox Cities boost a flourishing creative economy next to rich cultural heritage and milieu, and cultural and creative professionals play a key role in the project, for example through Dumbo in Bologna, Prague City Pixels Installation, and Sluisbuurt and Marineterrein in Amsterdam. What is more, CrAft partners

such as ECF and ELIA represent key stakeholders such as Europe's cultural sector and European Art Schools. Through working with them, the variety of the cultural and creative sector, and subsequently the differences in roles and needs during urban transformation, has become abundantly clear. Ranging from individuals, such as independent artists and freelancers, to organisations including museums,

production companies and cultural institutions, the creative and cultural sectors collaborate to enrich society's aesthetic experience, preserve and valorise heritage, and foster innovation, bringing competences from various fields.

Regardless of their market orientation, they bring the variety of cultural backgrounds, creativity and viewpoints we need when collaborating towards climate neutrality. Artists and creatives can influence and take the lead, inspiring others to take action in the city. They encourage dialogue and cultural integration at the local level, while the institutions supporting them offer an agora for citizen and community engagement through their programming, events and exhibitions. Institutions have the networks in place to amplify good practices, play an important role in preserving and activating the cultural heritage of their premises and surroundings, and inspire one another on ways of engaging the audience in sustainability issues.

### Supporting the Cultural and Creative Sectors

Firstly, cultural venues—from small local centres to large institutions—need support to make their buildings, which are often important landmarks and icons but lacking the finance for retrofitting, sustainable and climate-resilient. This is even more urgent for grassroots cultural

organisations. While their location is often strategically chosen in neighbourhoods that would potentially benefit the most from the social cohesion that these sectors can bring through culturally diverse activities, creativity and innovation, the sector also needs help to integrate their actions better into long-term municipal improvement programming.

Every venue has the potential to amplify NEB values and practices. The sectors' contribution to changing mindsets, raising awareness towards climate action, and stimulating a more sustainable behaviour is acknowledged, yet often limited to early stages of local collaboration, for example.g. to develop the vision for an area. Therefore, the sector needs help in strengthening its partnerships in the neighbourhood and the city, and in getting involved throughout all stages of urban transformation for cultural and creative feedback and input. Then, they can increase local capacity for joint actions and create mass for overcoming barriers to become more climate neutral by building interactions between residents, local activists, government and businesses, while locally continuing inspiring change.

This is exemplified by the Sandbox City Amsterdam's pilot project Sluisbuurt which explored the role of art in community building. Urban redevelopment of the area did not take the local context and



heritage into account. Lessons learned are that alternative solutions for development from artists and experts, rooted in the identity of the community of the place, should be included early in the decision-making process to prevent disagreement on the masterplan later on, and that collaboration with experts throughout all urban development stages can help artists refine their proof of concept for alternative solutions, while giving them proper recognition for their contribution.

In Sandbox City Prague's City Pixels Installation, urban data, digital interaction and art were combined to create a platform for dialogue between citizens, decision makers and municipal staff on the perception and quality of public spaces.

### The Cultural and Creative Sectors in Action

Culture and creatives play a valuable role in promoting sustainable practices within their communities. By integrating local heritage and community needs into their programming, they can foster a sense of connection and inspire audiences to

adopt more sustainable lifestyles. Collaborating with local actors, they can co-design initiatives that address shared environmental goals and act as a bridge between community voices and policy making.

To support these efforts, culture and creatives have access to various tools. Platforms like Artsmetric<sup>3</sup> can measure the cultural impact of their initiatives, while resources such as the ELIA SHIFT Guide<sup>4</sup> provide models for sustainable business practices and eco-certification. Tool-kits for embedding cultural heritage into decision-making processes ensure that creative contributions enhance urban resilience and sustainability over the long term.

Through these actions and tools, the cultural and creative sectors move beyond traditional roles to become active partners in climate-neutral urban development, influencing both local behaviour and policy to support resilient communities.



3. Artsmetric



4. ELIA SHIFT



## Homeowners

### Homeowners in the Climate-Neutral City Building

In CrAft, UIPI, a network of residential property owners across Europe, helped to investigate the role and needs of these owners and involved key players and frontrunner examples like Serafin. Residential property owners play a crucial role in the transformation to climate-neutral cities. Here we focus on people who live in

the house they own, not private landlords. They can be individual homeowners or homeowner associations, ranging from two to thousands of members. Large associations usually employ facility or condominium managers to handle maintenance and refurbishment plans. Since greenhouse gas emissions from houses form a substantial part of total emissions, making houses energy efficient



and adapting them to climate change are key elements in any policy or initiative towards a climate-neutral city.

Thermal insulation, more renewable sources such as solar panels and heat pumps, energy-efficient appliances and smart metering all help to simultaneously reduce CO2 and improve the property's energy label and enhance its value. They also save on energy costs. However, due to lack of awareness and financial resources, and because of the need for consensus on major investments for homeowner associations, progress has been rather limited so far. As a result, homeowners' power to contribute to the transition to climate neutrality is only partially harnessed. Moreover, fragmented ownership of individual houses in neighbourhoods can hamper collective action.

### Supporting Homeowners

In general, homeowners need help in better understanding climate change and its risks, such as flooding or heat stress. For individual homeowners, the questions are often where to start, which solutions are suitable for their situation and within their reach, how to finance measures and where to find reliable advisors and contractors. Moreover, owners of historical buildings may have to deal with special situations and need customised advice and solutions. Actionable steps explaining "how to" are very important for

individual homeowners. They need access to guidance relevant for their situation, including on financing the upfront costs of measures. Also smaller homeowner associations often struggle with gathering the knowledge and know-how needed to make the right decisions. They usually need guidance or maybe even training on how to organise productive association meetings. Larger homeowner associations may need help to explain the consequences of climate change to members and convince them of the necessity of proposed plans and investments, and to achieve the legally necessary consensus for majority approval.

### Homeowners in Action

Homeowners can play an important role in advancing sustainability within their neighbourhoods. By exploring energy-saving upgrades, such as insulation, efficient appliances, or smart metres, they can make impactful improvements to their homes. For instance, Neighbourhood Energy Teams in Amstelveen provide pre-developed upgrading plans. Participating in homeowner association (HOA) meetings allows homeowners to discuss and build consensus on climate actions that benefit the entire community. Collaborating with neighbours on green initiatives, like adding communal green spaces, further strengthens neighbourhood resilience.

To support these efforts, homeowners can access several helpful tools and resources. One-stop shops provide professional advice and connect them with vetted contractors for eco-friendly projects, for example Serafin which offers both technical and financial advice. Collective buying schemes make solar panels and other green upgrades more affordable, while guides and toolkits offer practical steps for sustainable refurbishments, especially for historic properties. Nature-

based solutions such as green roofs and climate-proofed facades help protect homes from environmental stressors, enhancing long-term resilience.

With these resources and proactive steps, homeowners become more than just residents; they are active participants in creating sustainable, resilient communities.





## Academic Sector

### Academic Sector in Climate-Neutral City Building

The academic sector—including experts, students, and university-led initiatives—plays a unique role in supporting sustainable urban development. Universities collaborate with diverse stakeholders, such as artists, architects, and community activists, bringing research-based insights and new perspectives to tackle urban challenges. This sector's contributions enrich community projects and drive innovation toward climate-neutral cities. As an academic entity, in CrAft we work to connect and empower students to engage with climate-positive transformations. We learn from students through

their CrAft core group, and share their stories and insights in the CrAft stories published online.

### Supporting Academic Stakeholders

Academics play an important role in developing, validating and presenting knowledge for a better society. Universities, researchers and students often need a support system for project processes and project implementation. Depending on the experience of the different academic groups, projects will need a framework for initiation and scalability to create a larger societal impact.

To maximise their community impact, uni-

versities also need access to resources, funding, and partnerships to broaden their reach. Effective tools for stakeholder engagement are crucial, enabling academics to connect meaningfully with local communities while balancing academic goals and community needs.

### Academic Stakeholders in Action

Academia can contribute significantly by developing urban vision plans that engage diverse communities, creating inclusive and innovative solutions that bridge academic knowledge with grassroots needs. By establishing partnerships with local stakeholders, they can drive both regional and national impact, ensuring broader, long-term benefits. Students are an asset to these efforts, as we see them contributing innovative and unique approaches that challenge existing systems and mindsets (CrAft Core group, CrAft stories).

To support these efforts, academic actors have access to several useful resources. Applied research materials and collaborations within university networks enhance the practical application of their work. Community models and frameworks help scale sustainability efforts, while funding platforms and innovation tools support impactful, enduring projects. Exemplified in think-do-tanks where students and researchers discuss and find solutions to societal problems.

In the Sandbox City of Amsterdam, the pilot project of Marineterrein offers a valuable example of a successful collaboration between academics, researchers, students and businesses to turn scientific research into urban innovations. The AMS Institute (Amsterdam Metropolitan Solutions), a collaboration between the city and several universities, has set up the first incubator the AMS Startup Booster<sup>3</sup> specifically focused on urban-tech. Besides students from the knowledge and research institutes, everyone (including citizens) who has an idea can apply. They get mentorship on how to define their value proposition, strengthen their team, vision and business model. The opportunity to test with citizens and get connected to relevant stakeholders within the wide community network, is given either in the area of the district itself, which is an open-air living lab, or in other parts of the city of Amsterdam.

Through these actions and tools, academics use a practical application of research to become active partners in sustainable urban development, making a tangible impact that strengthens communities and supports climate-neutrality goals.



### 3. AMS Startup Booster





## Municipalities

### Municipalities in Climate-Neutral Transformation

Through our NEB Impact Model workshops, CrAft Cities Sessions, and 1:1 City Dialogues, we have gathered insights into how municipalities can drive climate-neutral urban transformation. With responsibilities spanning environmental management, cultural development, social services,

and local economies, municipalities are at the heart of urban change. However, departmental silos can hinder progress on complex issues, making collaboration with citizens, businesses, property owners, and other stakeholders essential for creating inclusive, climate-friendly governance models.

### Supporting Municipalities

To foster effective collaboration, municipalities need reliable tools for inclusive governance, allowing them to engage a wide range of stakeholders in co-creation and ensure shared ownership of climate goals. A unified vision that integrates efforts across departments is crucial to address local challenges, set common goals, and demonstrate the tangible benefits of transformation, like reduced energy costs and enhanced public spaces.

Practical guidance on sustainable urban development is also essential, including support for refurbishing heritage sites, boosting biodiversity, and adopting circular economy practices. Municipalities benefit from data-driven tools to monitor progress toward climate goals, enabling informed decisions across departments. Finally, learning from peer cities provides valuable insights into successful strategies for climate-neutral transformation.

### Municipalities in Action

Municipalities can drive awareness with campaigns, set strategic agendas for urban projects, and support grassroots initiatives. By integrating various perspectives into decision-making, they create a more collaborative environment for climate action. Tools like workshops, living labs, and participatory budgeting foster citizen involvement, while public-private partnerships support sustainable projects.

Financial incentives, such as subsidies and revolving funds, encourage community participation and strengthen collective efforts.

CrAft Sandbox Cities exemplify how vehicles for multi-stakeholder collaboration on climate-neutrality can be deployed.

The Sandbox City Prague created a dedicated team and office inside the Municipality itself for sharing urban plans with citizens and gathering insights into their needs through interactive exhibitions, such as Urbania and Urban pixels. Operational data collected from how the city is managed is turned into accessible and interactive visualisations and installations to engage citizens in the plans for transformation of public spaces and gather their feedback.

The municipality also plays an important role in the pilot project of Marineterrein in Amsterdam. By collaborating with the Advanced Metropolitan Solutions Institute, which includes the University of Delft and Wageningen and MIT as major stakeholders, they learn from agile piloting and embed insights in the way the Chief Technology Office (CTO) works towards innovation in the city.

Also in Bologna, the University (UNIBO), the municipality and Fondazione IU Rusconi Ghigi (ex FIU), formed a successful



triad. In Dumbo, the mandate from the municipality acts as a bridge between the city, the university and citizens, making sure citizens are included in participation processes also when working with other professionals from private sectors.

The municipality is an important stakeholder also in the Serafin association example of a one-stop shop. They support the semi-public association in guaranteeing the quality and transparency of

the process and the inclusion of more disadvantaged households.

With these tools and collaborative actions, municipalities become central coordinators in the journey toward climate-neutral cities, ensuring lasting, community-centred impacts on urban resilience and sustainability.





A large, light blue, stylized number '3' serves as a background for the main text.

*NEB IN  
ACTION*





## ENGAGEMENT / CO-CREATION

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For cities, it can be a challenge to come up with new and innovative ways to incorporate the “together”-aspect of the NEB values. Cities may, for example, face participation fatigue from their stakeholders after a project has been going on for a long time, or find it difficult to convey the importance of feedback and participation in areas of the project that are more abstract, like developing zoning regulations or spatial strategies. Another common issue is reaching beyond the “usual suspects” for a more diverse set of voices. Here, we highlight some creative approaches to address these challenges.



# BURGAS LIGHTS UP

BURGAS, BULGARIA

📍 Runners ready to start the race. Credit: Burgas Municipality



Read more



Blending culture, fitness, and sustainability to create lasting positive change.

*Burgas Lights Up* celebrated the installation of new street lighting on the main thoroughfares of Burgas with a special community event. As part of the festivities, 170 athletes participated in a nighttime 5K run, symbolising the city's commitment to improve safety and sustainability through better infrastructure, uniting the community to promote active, healthy lifestyles. The event engaged citizens in public participation towards a shared vision of a greener, more sustainable city using sports and other activities as an initiator for change. It particularly included young people in sports, dance and song promoted by local clubs, but also adults and project partners in sports or arts and crafts-related workshops to create interior and garden design solutions and new functional spaces. These workshops initiated the transformation of the Mladost Sports Hall into a vibrant community hub to foster social well-being with nature-based solutions to become a Nearly Zero Energy Building (NZEB).

## RECOMMENDED STAGES

### 🗨 Vision

Gather the community at a public event to create collective initiatives.

### 👉 Decide and commit

Include various sports organisations in the event.

### 📅 Plan

Arrange the sports event to initiate the retrofitting of the local sportshall.

### 🛠 Do

Establish various activities at the event to engage the population.

## CO-BENEFITS

Location and space use

Affordability and inclusivity

Social capital

Identity and belonging

Cultural value and Diversity

Participation and co-creation

Futureproofedness and adaptability



# UMECOM

UMEÅ, SWEDEN

📷 Credit: Fredrik Larsson



Read more



Umeacom

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Driving the city's future by uniting citizens, businesses, and authorities to co-create sustainable urban solutions.

The Umeå Co-Creation Model (*Umeacom*) is inspired by Kamacon, an organisation in Kamakura in Japan which creates a collaborative space where citizens gather once a month to discuss and select solutions to improve their city. *Umeacom* has used this method to develop a cross-collaboration platform with workshops, open forums and projects where residents, businesses, and local authorities jointly develop solutions towards climate resilience, social inclusion, and resource efficiency. *Umeacom* hosts various events such as art and culture festivals, re-design and clothing workshops, parkour and skateboard competitions, and picture games for children. In writing workshops, residents can express suggestions for creative sustainable solutions for change in the urban environment. The public can also attend live podcast events like *Klimatet* where climate researchers and companies present their ideas for societal approaches for a sustainable future. The initiative empowers citizens to participate in inclusive activities impacting the community's future, enhancing transparency and engagement in urban development.

## RECOMMENDED STAGES

### 🗨 Vision

Establish an organisation to drive community activities in Umeå.

### 👉 Decide and commit

Engage stakeholders like municipality, institutions and local companies in public events.

### 📅 Plan

Host a festival that focuses on community activities and sustainable living.

### 🛠 Do

Arrange activities to engage multiple communities in a publicly accessible area.

### 🔄 (Re)act

Expand the event and activities according to community interest and engagement.

## CO-BENEFITS

Affordability and inclusivity Social capital

Identity and belonging Arts mobilisation

Cultural value and diversity

Futureproofedness and adaptability

Governance set-up



# CITY PIXELS

PRAGUE, CZECH REPUBLIC

🕒 Prague Pixels storytelling and engaging presentation of urban data empowers citizens and decision makers to use data insights into co-creating sustainable futures. Credit: OICT – Smart Prague

Transforming public spaces by blending art, data and community engagement.

Prague Pixels engages communities in sustainable urban transformation by exploring and perceiving urban data with an interactive, artistic tool for co-creation. Real-time data from the city are transformed into vivid, immersive and interactive audio-visual installations. Through this unique visualization of the city, accompanied by music composed in real-time based on the data, participants can interact with its representation, discover various elements, and gain a new perspective on potential urban transformations. Presented data-stories range from urban mobility through waste management to heat islands: the flexible tool adapts data from almost any dataset to create stories based on specific needs and interests. The installation creates a platform for dialogue between citizens, urban planners, and other stakeholders, encouraging interest in public spaces through shared experiences and emotional connection to the stories urban data can tell. Prague Pixels promotes transparency and inclusivity, and strengthens community sense and collective responsibility by connecting not only public institutions with residents, but also connecting different municipal teams to NEB in a multi-disciplinary way.

## RECOMMENDED STAGES

### 🗨 Vision

Create a shared vision of how public spaces should be.

### 👉 Decide and commit

Engage participants through a collaborative platform to create dialogue.

### 🔍 Check

Collect and interpret urban data.

### 🔄 (Re)act

Adapt/iterate design solutions according to this data.

## CO-BENEFITS

Participation and co-creation

Innovation support

Futureproofedness and adaptability

Human capital

Social innovation

Social capital

Digitalisation

Read more





# THEATER-BASED SCENARIO SESSIONS

NIJMEGEN, NETHERLANDS

🕒 **Stage action of stakeholders exchanging roles:** Use of theatrical techniques, such as role play, role taping (physically demarcating your role-space on the theater floor) and role swaps, in Scenario Sessions. Credit: Bram Versteeg



Applying artistic and theatrical principles to support better decision-making.

RadboudUMC, the university hospital of Nijmegen, have examined their role in diminishing health gaps in society. Radboud University, Arthouse LUX and the City of Nijmegen, have developed an approach using artistic principles to support better participation and decision-making. Patients, doctors and other staff explored alternative solutions and future scenarios using theatrical techniques. Role play enabled expression of all aspects of their own role in overcoming health gaps, also emotional aspects. Role swaps, interpreting and enacting someone else's role in the process, made them better appreciate the situation experienced by others: e.g., doctors looked at things from patients' perspectives. Role taping physically demarcated one's role-space on the theater floor, making participants aware of limitations.

Bureaucratic processes can inadvertently create barriers to effective care and some assumptions were not realistic. An inclusive approach is needed, where everyone's voice is heard and power is more evenly distributed. Patients and staff pointed out potential

solutions: greater involvement, better communication, and a shared commitment to reducing health disparities.

## RECOMMENDED STAGES

### 👤 Vision

Theater-based scenario sessions help to create a shared vision where everyone's voice is heard, felt and included, based on a more equal power distribution.

### 👍 Decide and commit

By experiencing constraints and possibilities of various roles from the perspective of one another, it becomes easier to agree on and commit to plans.

### 📅 Plan

Alternative solutions are harvested, this improves the quality of and support for plans.

## CO-BENEFITS

Reflexive governance

Participation & co-creation

Arts mobilization

Cultural value and Diversity

Identity and belonging

Social innovation

Social networks

Social capital



# UMARELL OASIS OF PUBLIC SPACES

PANTIN, FRANCE

☺ Chalk cycle lane for kids to play. Credit: Rudy Ouazene



Read more



## RECOMMENDED STAGES

### 1. Do

Create a platform to promote dialogue between the neighbors and public authorities, delivering permissions, and partnering with local community centers for support.

### 2. Scale and Replicate

Empowering communities by teaching them methods to better understand their own environments stimulate them to take action. The prototyping together shows them how, so that they can share it and replicate it themselves.

## CO-BENEFITS

Participation and co-creation

Spatial, Architectural & Artistic Quality

Cultural Value & Diversity

Identity & Belonging

Social Networks

Social Capital

Affordability and Inclusivity

Safety

Location & Space Use

Biodiversity & Ecosystem Value

Circularity

Regenerative practices and climate shelters to fight unsafe urban areas.

A group of women in Pantin, Paris, were concerned about the safety of their neighborhood. Through a network supporting minorities they contacted a collective of architects, city makers, and anthropologists to start a community-led action. Acting as a bridge between local community and public authority, the collective empowered them to take over a square and turn it into an inclusive, safe climate shelter, especially for kids, women and elderly people. Through playful activities such as a tree game and narratives about biodiversity, they offered a tool kit to analyze their environment and regenerate it to mitigate heat stress in the city. Drawing a temporary cycling lane on the pavement for kids to play also served to start a dialogue with men who were gathering there, who were not giving a welcoming impression. Once approached, they reacted warmly, and some of them even helped the kids draw the lane. The initiative progressed to include co-designing and prototyping urban furniture in the square. This participative learning process ensured that everyone took ownership and respect for the square, while diversifying the uses and users of the public space.



# NEIGHBOURHOOD ENERGY TEAM

AMSTELVEEN, NETHERLANDS

Physically present and easily accessible Neighbourhood Energy Team are indispensable for inclusive transition.

Amstelveen counts 95.000 inhabitants of 144 nationalities and aims to reduce CO2-emissions by 95% between 1990–2040. Four Neighbourhood Implementation Programmes pilot co-development. Initially, the city shared data on dwelling's energy performance and informed about measures and finance. This proved not enough to mobilise everyone. Citizens wanted to be guided more. The municipality installed a local Neighbourhood Energy Team accessible by consultation

without appointment and organising local meetings. Every household received a tailor-made stepwise plan for making their dwelling energy-efficient. Because of the many expats, these plans were sent in Dutch and English. They became the entry point to a consultation or a kitchen table talk with an energy expert, who explains every step. If needed, a translator is hired. For special cases, the team organises help, e.g. specialist construction advice for differently built houses, for cleaning afterwards or by involving social services for deprived households to prevent energy poverty.

© **Consultation of the Neighbourhood Energy Team:** Consultations guide inhabitants from start to actual retrofitting with a customised approach, identifying low-hanging fruit and helping to secure finance. They also take away barriers for special cases. Energy inspections of more and more houses enable even better guidance. Credit: Eva Kramer





## RECOMMENDED STAGES

## 🔍 Vision

Citizens co-develop the Neighbourhood Implementation Programmes. Energy performance data enable citizens to set aims for their own house and neighbourhood.

## 👉 Decide and commit

Neighbourhood Energy Teams guide citizens on feasible options for insulation, renewables, and financing. Stepwise retrofitting plans sent to all inhabitants, facilitate better inclusion and fastforward tailor-made plans in the Plan stage.

## 📅 Plan

Neighbourhood Energy Teams guide citizens in developing tailored plans. Collective buying schemes make retrofitting more affordable and enhance citizens' confidence through collaboration with neighbours.

## 🛠️ Do

Neighbourhood Energy Teams support difficult cases by expert advice and hands-on help if citizens cannot do this themselves. E.g. for specific constructions, or for untidy attics that must be emptied for roof insulation.

## 🔄 (Re)act

More and more data from energy inspections of participant's houses enable even better guidance for new ones.

## 📦 Scale &amp; Replicate

Active citizens become ambassadors. By involving other citizens and districts, solutions can be scaled.

## CO-BENEFITS

- Energy Efficiency
- Share of renewables
- CO2 emissions
- Digitalisation
- Diversity and Accessibility of Services
- Affordability and Inclusiveness
- Social Networks
- Cultural Value and Diversity
- Governance Set-up
- Participation and Co-creation
- Reflexive Governance

Credit: Patrick Lie ☺





# HOUSE OF TIME

BRUGES, BELGIUM

☺ Shared garden beds of House of Time. Credit: Han Vandevyvere.



Read more



House of Time is a social centre for inclusive artistic creation and collaboration. It is a hub with an indoor and outdoor studio, a yurt, and a kitchen that serves as a multipurpose room.

The hub hosts woodworking courses such as spoon carving using “waste” wood, in addition to creating and designing wooden objects in the workshop facilities for the public who lack machinery and materials. *House of Time* also hosts various urban gardening initiatives, e.g. the collaboration project *Potting Soil*, collaborating with four organisations to offer youth with special needs a workshop in potting plants, building self-esteem and integration in the social fabric. *The Stand-shout/Vershout* project transforms fallen wood or trees into functional furniture for the hub. *House of Time* is a gathering space motivating teenagers for problem-solving through art and architecture, building a larger community that tackles social and societal issues through doing and making. *House of Time* is an outcome of the *Triennale* of Bruges in 2018.

## RECOMMENDED STAGES

### 🔗 Vision

Establish a centre for artistic collaboration and co-creation.

### 👉 Decide and commit

Collaborate and co-create with multiple communities.

### 📅 Plan

Locate and encourage re-use of materials into functional objects.

### 🛠️ Do

Organise creative workshops and activities to connect and re-engage creative sectors.

### 🔄 (Re)act

Accommodate the need of workspace and artistic expression by transforming unused buildings into active workshops.

## CO-BENEFITS

Life cycle analysis

Circularity

Location and space use

Diversity and accessibility of resources

Identity and belonging

Cultural value and diversity

Spatial, architectural and artistic quality

Human capital

Governance set-up

Community business models





## STRATEGIC PLANNING / CAPACITY BUILDING

To support cities with limited capacity in developing their planning models aligned with the NEB values, we have highlighted several examples that may provide inspiration and help facilitate adaptations of creative and innovative approaches.



# NTNU PLANBUSSEN

TRONDHEIM, NORWAY

🕒 Students creating a space for open dialogue with local citizens using a coffee stand and map.

Credit: Markus Schwai

Supporting rural municipalities by engaging NTNU students and rural residents in hands-on urban planning solutions.

*The Planning Bus* is a course at The Norwegian University of Science and Technology (NTNU), designed to create bottom-up approaches to real-life urban planning and development. The students travel by bus to rural areas and work with local residents and the municipality to define development goals.

*Kjerknesvågen* is a tiny coastal village on a fjord island, a two-hours' drive north of Trondheim. The harbour is a popular stop for boat tourists, and the local café and supermarket a cherished meeting point for this tight-knit community. On their wish list was upgrading the centre, re-activation of the harbour, and a path along the coast. *The Planning Bus* integrated these aspects into a toolbox guide to measure cost efficiency, value creation and future tourism, and the municipality included them in its development strategy.

*The Planning Bus* gives small communities access to competence, and students hands-on experience they could never get on campus. Win-win!

## RECOMMENDED STAGES

### 🔗 Vision

Uses a university course to suggest positive development to smaller communities

### 🔗 Decide and commit

Students work with information from municipalities and communities to enforce the projects.

### 🔗 Plan

Students create projects based on long term goals like master plans, policy or opinions from the community.

### 🔗 Do

Host an event where stakeholders and the local community can express their opinions of their work.

## CO-BENEFITS

Location and space use

Diversity and accessibility of services

Cultural value and diversity

Participation and co-creation

Human capital

Identity and belonging

Social innovation





## CITY ATELIER

BRUGES, BELGIUM

🕒 Collaborative meeting at the the Atelier to discuss the Kaai District. Credit: Bruges Municipality



## Creating a space for collaborative local governance

City Atelier is a collaborative platform aimed at simplifying administration by aligning developers and stakeholders directly with the city's policy. More specifically, it was formed to create a narrative for the strategic development of the Kaaidistrict (The Quay District). City Atelier gathers people with relevant, practical knowledge to discuss how to improve mobility, public space, green areas, clean water, principles for neighbourhood development, and a mix of housing programmes towards the development of the Kaaidistrict master plan. The city atelier attendees propose projects, master plans and other propositions unanimously to developers.

Innovation Camps, organised by Vlajo (Flemish Young Enterprises), gathered 115 students in a think-do-tank, to suggest solutions for food, water, housing, economy, and energy flows in the Kaaidistrict. The event was a success: the students' ideas are being used as inspiration to update the plans of the district, and changing Bruges' Climate-Neutral Contract. The challenges of the event became integrated in school curriculums, in collaboration with Vlajo, to provide ideas for sustainable urban innovation.

### RECOMMENDED STAGES

#### 🗨 Vision

Establish a platform to co-create to simplify and unite visions of the city.

#### 👉 Decide and commit

Connect colleagues of several departments to align collective vision.

#### 📅 Plan

Establish and discuss strategic development, agree on conditions and principles.

#### 📋 Do

Make a list to inform developers what is needed to succeed with urban development.

#### 🔍 Check

Ensure agreement between several municipal departments and property developers.

### CO-BENEFITS

- Location and space use
- Social capital
- Green-blue network functions
- Diversity and accessibility of services
- Spatial, architectural and artistic quality
- Futureproofedness and adaptability
- Regularity stability and foreseeability
- Participation and co-creation
- Institutional capital



# PARK DE TRIOMPHE

CULEMBORG, NETHERLANDS

🕒 **Citizens discussing the new park development:** A diverse group of 170 people from 6 to 86 years were invited to discuss the design. The solution for an 'adventurous playful connection' made people feel heard and satisfied with the quick result of a direct access to the park. This raised interest in the area's sustainability. Credit: AM Landskab

How to set up a good process and include all stakeholders' interests with the hourglass method

In the Dutch City of Culemborg, the design of a park situated between newly built and existing houses raised dilemmas. Project developers envisioned a 'natural and adventurous park', whereas the municipality wanted 'a place where everybody could meet'. New houses had been sold showing a bridge for walking and cycling to the park, but the budget was not reserved and residents stood up. The hourglass method was deployed for co-creation. It first brings together all interests of all actors, also considering the place's surroundings and specificities. An impartial facilitator ensures everyone's turn. After discussing pain points and common denominators, reflection follows: are all intentions somehow translated into the design? Are gains, costs, and everybody's interests well-balanced? The resulting design for the Park de Triomphe serves all. An 'adventurous playful connection' bridges the water through a sports circuit. Although everyone had to give up something, consensus was reached and citizens, seeing their needs addressed, showed ownership by explaining it to others and engaging local companies to keep the money in the district.

## RECOMMENDED STAGES

### 📌 **Decide and commit**

Bring all the interests from diverse stakeholders together. Redefine the assignment for each stakeholder and generate a common understanding of the process.

### 📅 **Plan**

Using local resources and local organizations that can co-produce and co-own to ensure adaptation and maintenance of the intervention.

## CO-BENEFITS

Participation and Co-creation

Cultural value & Diversity

Identity & belonging

Social innovation

Social networks

Social capital

Urban heat island

Diversity and accessibility of services

Biodiversity & ecosystem

Location en space use

Spatial quality





# CLIMATE CITIZENS' ASSEMBLY

BOLOGNA, ITALY

🕒 Meeting of the Citizens' Assembly. Credit: FIU



Read more



Inviting citizens to participate in selecting and shaping their local environment

Through the *Climate Citizens' Assembly*, Bologna municipality invited 100 random participants to develop and propose solutions to the city's Zero Climate Impact by 2030. The incentive of a 73-€ presence fee, and baby-sitting service if needed, resulted in an 80% attendance. The *Assembly* was hence composed of 80 citizens, aged 16 and older, gender and citizenship balanced, including 10 local public transport subscribers and 10 out-of-town students of the University of Bologna to reflect the population of the city.

The *Assembly* focused on three areas: energy use, collaboration in addressing climate risks, and identifying policies preventing sustainable change. Their work resulted in six recommendations: sustainable homes through renovation of old and construction of new net-zero emission buildings, sharing renewable energy, green and blue infrastructures, public spaces to encourage walking and biking, sustainable and public mobility, and local food. Within four months, the municipality managed to examine the recommendations and integrate them in Bologna's Climate Contract.

🕒 Credit:





## RECOMMENDED STAGES

**Q Vision**

Focus on including citizens in urban development.

**👍 Decide and commit**

Encourage governmental departments to gather with citizens to come up with new solutions.

**📅 Plan**

Set up meetings across a year to cover various aspects of collaboration and implementations.

**🛠️ Do**

Give incentives to participating citizens, creating engagement and diverse community representatives.

**🗳️ Check**

Ensure collective agreement on decisions through democratic voting in the Assembly.

**🔄 (Re)act**

Change municipal plans or policies as a result of the decisions made in the Assembly.

## CO-BENEFITS

Active and public transport

Affordability and inclusivity Social capital

Identity and belonging Human capital

Cultural value and diversity

Futureproofedness and adaptability

Regularity and foreseeability

Institutional capital Governance set-up

Participation and co-creation





# INCLUSION THROUGH ART

VILA FRANCA DE XIRA, PORTUGAL

In the City of Vila Franca de Xira, neighbourhood Póvoa de Santa Iria increasingly experiences climate change effects as heat stress, whereas social cohesion declined and deprivation and discrimination increased with many new people arriving.

1100 participants engaged in free activities: growing vegetables in communal gardens, sports, campaigns for healthy lifestyles or active citizenship, and artistic-cultural activities promoting creativity and citizens' participation, such as hip hop clinics, photo exhibitions, urban art and circus techniques.

The city wanted to better understand other cities' initiatives remediating climate change and exclusion, and built up European partnerships at events. New projects provided the means for improvement. 150 social housing apartments were retrofitted and the quality of public spaces upgraded. Social inclusion was fostered through creativity. Over

Despite COVID-19 and disappointing initial participation, involvement of stakeholders and communities grew over time. Integrating more activities proposed by the residents, strengthened connections greatly as these turned out to be the most fun for everyone. The city learned that it is crucial not to give up and not eschew risks when trying out new approaches, e.g., including activities originally not foreseen.

© Photo session in which the protagonists were the residents. Residents took their role as models very seriously and the result of the photo shoot was presented at the Community Center and then at the parish Council. Credit: Câmara Municipal de Vila Franca de Xira - Ana Catarina Brito





## 72 Inclusion through art

### RECOMMENDED STAGES

#### Plan

Integrate artistic-cultural actions to promote social inclusion when planning for urban transformation

#### Do

Upgrade public spaces to meeting points, and offer varied artistic-cultural activities catering to different groups and mobilising interest in the development of the neighbourhood in future

#### Check

Measure progress and impact using questionnaires. If possible, take into account language barriers and education level. Being not afraid to make mistakes, allows learning from them and finding creative solutions.

#### (Re)act

Make changes to the original plan if needed. E.g., in planning and communication. It was necessary to adjust the activities to the rhythm of the community – school breaks, end of the day and weekend, which proved sometimes difficult to combine.

#### Scale and Replicate

The city learned a lot from the project and from co-creation together with the residents. Some of the methods learned are put into practice in new projects such as ReGreenation (Horizon Europe) and Med-Routes (Interreg).

### CO-BENEFITS

- Energy efficiency
- CO2-emissions
- Green-blue network functions
- Safety
- Urban heat island
- Temperature
- Affordability and inclusivity
- Resilience
- Social networks
- Social innovation
- Identity & belonging
- Arts mobilisation
- Cultural value & Diversity
- Future-proofedness & adaptability
- Participation and Co-creation
- Reflexive governance

Credit: Aurora Rosa 



Inclusion through art

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# FOLKEPANEL

LARVIK, NORWAY

🕒 **Result of the Folkepanel work:** Since it is with the citizens that the most valuable information regarding the way to use the city resides, this method can be used to mobilize and engage citizens in areas dealing with complex urban challenges such as climate adaptation, wellbeing and identity of local community. Credit: Larvik Kommune

## Inclusive and unified approach to urban development.

The City of Larvik considers redeveloping its port area by reconnecting the sea-front and old harbour to the centre, and submitted it to the EUROPAN international architecture competition. Wanting to have a strong citizens' engagement in this development, the municipality of Larvik created a Folkepanel (Citizen Assembly) to ensure representatives from all ages and backgrounds had a say in shaping the plans. The municipality sent 5,000 people a text message to invite them to register for the Folkepanel, which 10% of the population did. 30 people from all ages and backgrounds were randomly chosen as representatives of the community. An agreement with a public school ensured that 6 out of 30 would be under 17 years old. The Folkepanel made recommendations on which needs, qualities and opportunities the architects must take into account to develop the area so that it creates pride and joy for Larvik's residents. They followed the progress of the competition and a jury composed of both experts and citizens selected the winning project.

### RECOMMENDED STAGES

#### 🗣️ Vision

Established an assembly which includes young people to ensure a unified approach to urban development.

#### 👉 Decide and commit

Engage multiple sectors and communities in the decision process.

#### 📋 Scale and replicate

Create a citizens panel as a platform also in between municipalities that experience similar issues to exchange solutions.

### CO-BENEFITS

Governance setup

Participation and co-creation

Institutional capital

Social network

Human capital

Social capital







## ***INVESTMENTS AND PARTNERSHIPS***

It can be challenging to maintain momentum in a project after the grant funding ends, or to even get a project off the ground by securing grant funding or local investments. To address this, it is important to ground a project in a solid foundation of partnerships or in the local business environment, so that the community can take ownership and keep the project going.



# NORWAY UNLIMITED

OSLO, NORWAY

## Investing in local entrepreneurs to enhance community business models

*Norway Unlimited* is a national organisation designed to drive change across the country. It connects local social entrepreneurs with incubators, municipalities, and private partners to develop impactful solutions for social and environmental challenges by funding opportunities supporting local neighbourhood projects. The organisation provides digital handbooks guiding the establishment of neighbourhood incubators promoting inclusivity and economically sustainable approaches. An example described elsewhere in this book is the *Kvikkttest* (Agile Piloting).

An additional initiative is the media production house “*Ildfluene*” (Fireflies), supported by the neighbourhood incubator *Tøyen Unlimited*, a subsidiary of *Norway Unlimited*. Teenagers who want to

promote local activities and highlight topics interesting for young people, initiating production of movies, text, photography and other art forms. “*Ildfluene*” has provided such services to institutions like Oslo Met, Øyafestivalen, Festivalen Showbox, and to Oslo municipality, contributing to funding equipment and expanding the organisation's impact on local neighbourhoods. The platform promotes young people's experience of their neighbourhood, creating a counter voice to media narrative.

Read more





## RECOMMENDED STAGES

## 🔍 Vision

Create a national organisation initiating local innovation incubators.

## 👍 Decide and commit

Create an accessible platform to engage stakeholders and citizens in establishing their own initiatives.

## 📅 Plan

Establish an educational programme where local incubators and stakeholders can collaborate with the local initiative.

## 🛠️ Do

Ensure guidance and funding is provided through a testing period of local incubators.

## ✅ Check

Ensure local incubators collaborate to provide guidance and funding to local initiatives.

## 📋 Scale and Replicate

Create incubators across the country to multiply the national innovation platform.

## CO-BENEFITS

Location and space use.

Diversity and accessibility of services

Digitalisation Social capital

Social networks Human capital

Local employment

Community business models

Innovation support Governance set-up

Participation and co-creation

Credit: Norway Unlimited





# KVIKKTEST (AGILE PILOTING)

STAVANGER, NORWAY

🕒 Visitors are shown the project site and plans. Credit: Stavanger Municipality



Investing in local entrepreneurs to enhance community business models.

*Kvikkttest* is a procurement process used by Stavanger municipality where companies are invited to test innovative products and services alongside citizens to address specific challenges and support mutual learning. The platform becomes a collaborative space to start new business ideas open for testing over a six-month period. The municipality selects five such solutions and covers the testing expenses.

The urban farming initiative *Permaby* transformed an unused backyard into a meeting space for people over food production. The yard now flashes a donated caravan, a greenhouse and vegetable beds constructed with reused wood and windows from the demolished local police station, and a water collection system.

*Permaby* was tested during the summer of 2024, and has now become a permanent solution, providing next-door restaurants with vegetables and becoming a social gathering space for neighbours, schools and refugees. The project hosts breakfast events and open-garden days to engage the public, testing sustainability and circular economy principles in urban spaces.

## RECOMMENDED STAGES

### 🗨 Vision

Establish an incubator promoting local innovation.

### 👉 Decide and commit

Connect local stakeholders to projects, encouraging local innovation.

### 📅 Plan

Ensure a testing period for project impact.

### 🛠 Do

Provide funding and guidance to the establishment of the project.

### 🔍 Check

Enable the project to become permanent through measuring success of impact.

### 🔄 (Re)act

Provide additional funding to allow for initiative to become permanent.

## CO-BENEFITS

Location and space use

Diversity and accessibility of services

Social capital Social networks

Social innovation Digitalisation

Human capital Local employment

Community business models

Total societal cost of ownership

Innovation support Governance set-up

Participation and co-creation

Read more





# STORHAUG UNLIMITED

STAVANGER, NORWAY

🕒 A movable 3D-printed module built by Co Creators. Credit: Stavanger Municipality



Read more



Storhaug Unlimited

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Solving societal issues through a creative innovation platform.

Stavanger established the neighbourhood incubator *Storhaug Unlimited* as a platform testing young entrepreneurs', organisations' or locals' innovative ideas for sustainable solutions to social issues. The initiatives are provided funding and mentorship to test their solutions in creating value and becoming established companies.

*Co-Creators*, a company from *Storhaug Unlimited*, built movable 3D-printed modules, using citizens' creativity to improve playgrounds and other public spaces. The colourful modules are built from waste material collected at construction sites, and they provide shelter from the weather and a space for people to train, practice yoga, play, host festivals, accessible food stalls, plant, fish or relax. The blocks are adapted to the needs of the users, turning them into lively creative spaces for all ages.

The results are attractive gathering spaces in *Pedersgata* in *Stavanger*, playgrounds and previously unused public spaces. The company is now in the process of creating a registration platform to make waste materials from construction companies accessible for organisations and citizens.

## RECOMMENDED STAGES

### 🔗 Vision

Engage neighbourhood through local innovation and grassroots initiatives.

### 🔗 Decide and commit

Collaborate with local entrepreneurs to provide innovative solutions to community building and urban development.

### 🔗 Plan

Establish neighbourhood incubators that provide networks, mentorship, funding for design implementation.

### 🔗 Do

Create an innovation platform to engage local entrepreneurs.

### 🔗 Check

Provide a follow-up period to the product's local impact.

### 🔗 Scale and Replicate

Provide support and funding for a scale-up of product implementation.

## CO-BENEFITS

Circularity

Diversity and accessibility to services

Affordability and inclusivity

Social capital

Social innovation

Arts mobilisation

Innovation support

Governance set-up

Participation and co-creation



# ACADEMIA DE CÓDIGO

FUNDÃO, PORTUGAL

Collaboratively elevating the local workforce.

In 2012, the city of Fundão collaborated with businesses, universities, banks, public and private institutions and citizens on developing the Strategic Innovation Plan to create jobs, retain talent and attract new citizens.

To create educational programmes aimed at industrial and technological innovation, the municipality established a partnership with Code For All, responsible for the development and implementation of the Academia de Código (Coding Academy). In an intense 14-week boot-camp, 180 people who had no higher education or were unemployed became

software developers specialised in Java and Javascript, aligned with the needs of local businesses. Two months after the course, 96% of the fresh professionals were already employed.

Other projects followed. Through social entrepreneurship, collaboration and participation of the local community, a total of 1000 new jobs were created, the city has managed to attract new residents and achieved its desired net migration reversal. Academia de Código is a major connector for industries and businesses to locate talent and for employees to find jobs.

Read more





## RECOMMENDED STAGES

## 🔗 Vision

Transform underutilised buildings in the city into educational spaces to attract people to the city.

## 👉 Decide and commit

Connect local companies with the academy, ensuring the education programmes respond to market needs.

## 📅 Plan

Establish training spaces to gather local talent and competence.

## 🛠️ Do

Establish a Coding Academy training camp in abandoned buildings.

## 🕒 Check

Provide a follow-up after the programme to ensure employment of the participants.

## 🔄 (Re)act

Adapt educational programmes according to market needs and create a Junior Coding Academy.

## CO-BENEFITS

Location and space use

Diversity and accessibility of services

Digitalisation Affordability and inclusivity

Social capital Human capital

Local employment

Community business models

Futureproofedness and adaptability

Innovation support

Participation and co-creation

Governance set-up Reflexive governance

Credit: Fundao Municipality 📷





# SERAFIN

FRENCH ASSOCIATION

Serafin

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## One-stop shop for a simple and inclusive energy transition with local partners

Renovating a house to make it energy-efficient can be complicated and expensive. It requires much technical expertise, and much effort to find reliable professionals to do the work. Subsidies are available but to find and get them is often demanding. Moreover, those needing subsidies the most as they lack the financial means to cover the remaining costs, are often socially disadvantaged. The French association Serafin set up a third-party financing company mastering the technical, social, and financial aspects of house

renovation. They accompany households throughout the retrofitting process. As a semi-public player, they guarantee and control the quality and transparency of the process for households. They scan and orchestrate preferably local players in the energy transition, e.g., banks and tradespeople, combine it in a comprehensive offer, and help to secure finance including subsidies. This anchors renovation plans locally - making it easier to learn and scale-up. Tailor-made solutions for poor households, make the energy transition more inclusive and not only affordable for affluent and middle-class households.

Read more



© Credit: Hendrik Waterwaves





## RECOMMENDED STAGES

### 👉 Decide and commit

Serafin offer technical and financial solutions, including subsidies to property owners who want to renovate their house. In addition, Serafin create partnerships and agreements with nearby municipalities and regions.

### 📅 Plan

Work with individual owners and co-owners, to ensure their needs are addressed in a customized plan for renovation. Team up with banks to create financing plans for those who cannot afford renovation.

### 🛠️ Do

Accompany and guide households through the entire process until the final quality check ensures that measures are implemented in a proper way, energy savings are achieved and energy bills are reduced.

### 📊 Scale and Replicate

Local anchoring makes it easier to share and learn together, while the collaboration and partnership model can be adopted in other areas.

## CO-BENEFITS

Future-proofness and adaptability

Innovation support

Regulatory stability & foreseeability

Community business models

Local green economy   Local employment

Resilience   Social networks

Social capital   Affordability and inclusivity

Humidity   CO2 levels   Temperature

Energy flexibility   Energy efficiency

Credit: Hendrik Waterwaves





# MARINETERREIN NEB HUB

AMSTERDAM, NETHERLANDS

Testing and learning for future developments.

A former military compound in Amsterdam needed to be repurposed and integrated into the city fabric. The city was interested in having a testing ground for urban experiments, the National government in showcasing innovation. With this shared ambition, they designated the area as an innovation hub featuring institutes and businesses involved in arts & culture, research & education, societal and postgrowth innovation. This unique composition of actors work all together to tackle urban challenges using the entire area as a living lab. A forerunner NEB hub in the way arts and culture have been used as a tool to help

the transition. Citizens are engaged in testing urban solutions and sustainable ways of living and working are promoted through events and workshops. The transformation is rooted into the naval and military heritage while living labs and the incubator for urban-tech startups offer lessons that can be scaled up to the city and elsewhere. After ten years of successful experimentation, the three major educational and research organizations (AMS Institute, CODAM, AHK school of art) formed a coalition to keep promoting the collaboration between art, technology and science, and leave a legacy for the next phase.

Read more





## RECOMMENDED STAGES

## 🔍 Vision

The first community of tenants were specifically selected based on their engagement with sustainability and innovation, and their willingness to invest in and be part of a community.

## 👉 Decide and commit

Engage startups, knowledge institutes, students, businesses, and researchers to set up living lab projects to collaborate towards common sustainability goals and challenges.

## 📋 Do

Host workshops and events, fully or partially open to the public to discuss innovations. Regularly invite artists, philosophers and anthropologists to reflect on the transformations happening in the area and connect with the community and cultural heritage to promote a sense of identity and belonging.

## 🔄 (Re)act

The discussion about the next phase of development in combination with housing inspired the coalition of AMS Institute, CODAM, AHK school to write a manifesto which contributed to obtaining that 20 % of the area will still be dedicated to learning purposes in the future.

## CO-BENEFITS

- Future-proofness & adaptability
- Innovation support
- Participation and co-creation
- Governance set-up
- Digitalisation
- History & heritage
- Cultural Value & Diversity
- Spatial, Architectural & Artistic Quality
- Identity & Belonging
- Social Networks
- Social Capital
- Location & Space Use
- Biodiversity & Ecosystem Value
- Circularity
- Arts mobilisation

Credit: Bureau Marineterrein ↻





## CHANGING MINDSETS

Another key part of the NEB values is changing the mindset of the population. This aligns with the notions of societal readiness in that supporting creative approaches including storytelling, locally grounded events and initiatives, or larger-scale movements can shift society's perspective and pave the way for broader policy changes. We are a social species, and the NEB values capture the idea that we must work together to build a more sustainable and beautiful future. Art and culture can be major drivers of shifts in mindset. Here, we highlight some outstanding examples of initiatives across the network that facilitate societal change, laying the foundation for societal readiness.



# SALTY PEOPLE

BURGAS, BULGARIA

🕒 Public screening of the movie. Credit: Burgas Municipality



Read more



Making environmental sustainability a shared cultural responsibility.

The film *Salty People* blends environmental advocacy with art and culture. It tells the story of conservation efforts around Lake Atanasovsko, highlighting how local traditions, culture, and livelihoods are connected to the preservation of this unique ecosystem. The film uses compelling visuals and personal narratives to bridge the gap between scientific conservation and human experience, making the environmental message more relatable. This model can be applied to other communities, demonstrating how engaging with cultural identity and artistic expression can mobilise people to take action to protect their environments. The film proves how storytelling can inspire collective action, making environmental sustainability a shared cultural responsibility. This method of intertwining science, community, and creativity can be replicated globally to foster grassroots environmental movements and sustainable development.

## RECOMMENDED STAGES

## 🔍 Vision

Present a movie for the preservation of biodiversity and local resources.

## 👉 Decide and commit

Create local engagement in the preservation of biodiversity.

## 📅 Plan

Create various grassroots initiatives that enforce long-term plans for environmental preservation.

## 🛠️ Do

Enforce local regulations to preserve local qualities.

## 🔍 Check

Monitor the impact of ecosystems and threatened species.

## 🔄 (Re)act

Ensure sustainable approaches are used in the protected area.

## CO-BENEFITS

Wastewater Life cycle analysis

Green-blue network functions

Biodiversity and ecosystem value

Identity and belonging

History and heritage Sustainable tourism



# THE FRIZON PROJECT

UMEÅ, SWEDEN

📷 Credit: Fredrik Larsson



Read more



## RECOMMENDED STAGES

### 👤 Vision

Establish a project to create a safer environment for teenage girls.

### 👉 Decide and commit

Create workshops and dialogue with users of the project to establish an inclusive environment.

### 📅 Plan

Facilitate co-creation between local artists and users to design the project.

### 🛠️ Do

Build the project together to ensure it accommodates the needs of the users.

## CO-BENEFITS

- Location and space use
- Safety
- Affordability and inclusivity
- Identity and belonging
- Cultural value and diversity
- Spatial, architectural and artistic quality
- Art mobilisation
- Participation and co-creation

Redefining urban spaces by empowering young girls to shape safe and inclusive public environments.

The city of Umeå in Sweden creates sustainable urban transformation projects that also generate inclusive and safe public spaces. Together with researchers from the university and an architecture studio, they have developed the Frizon Project. Young girls were invited to a series of dialogue workshops to express which qualities in the urban environment would make them feel safe. Traditionally, most urban spaces for young people focus primarily on physical activities where boys dominate. Frizon addresses that imbalance by involving girls directly in the design process, ensuring that public areas reflect their needs, desires, and safety concerns. Their input, e.g. well-lit streets in the park and seating areas adjusted to the average height of teenage girls with views towards open terrains ensuring good vision, contributed to shaping the spaces for teenage girls to gather.



# THE CANAL SWIMMERS' CLUB

BRUGES, BELGIUM

🕒 People enjoying the swimming platforms. Credit: Bruges Municipality



## Using art to transform the citizens' relationship with canals

*The Canal Swimmers' Club* is a contemporary art project reconnecting residents with the canal by introducing sustainable interaction with water. Bruges municipality spent 40 years cleaning the canal through reducing boat tours, upgrading the city sewer system, and introducing sensors monitoring water quality. In 2015, the canal was opened for swimming, as an installation of the *Triennale*. This inspired the architectural company Atelier Bow-Wow to build a temporary platform to facilitate swimming competitions by the local clubs, sunbathing, and to introduce a flag system to indicate the water quality.

The platform can be easily assembled in spring and disassembled for the winter. The club offers various programmes, from beginner lessons to competitive training, promoting water safety and fitness. The platform has also hosted contemporary artworks such as the spectacularly eye-catching *Selgascano Pavilion*, in collaboration with Bruges *Triennale*.

### RECOMMENDED STAGES

#### 🔗 Vision

Use a swimming platform as an activist initiative, creating engagement towards water quality in the canals.

#### 🔗 Decide and commit

Create a project that re-activates the canals' accessibility to the people.

#### 🔗 Do

Make a platform that can host various activities, events and swimming programmes.

#### 🔄 (Re)act

Create a swimming platform as a response to improved water quality in local canals.

#### 🔗 Scale and Replicate

Extend this initiative by collaborating with local art events.

### CO-BENEFITS

- Wastewater
- Green-blue network functions
- Location and space use
- Diversity and accessibility in resources
- Affordability and inclusivity
- Social capital
- Social networks
- Arts mobilisation

Read more





## SLADOVNA PÍSEK

PÍSEK, CZECH REPUBLIC

☺ Children playing in the interactive exhibition, "Grains". Credit: Sladovna Písek

Integrating art and culture into everyday life to foster vibrant and inclusive communities

*Sladovna Písek* is a historical malthouse retrofitted into a gallery creating interactive exhibitions using play and exploration. The exhibition uses installations and creative participation to involve children and their adults into storytelling.

In *The Anthill*, a labyrinth playground, children become the main characters through habitation. By climbing it, running through it, playing hide and seek in it, they "become" ants.

The beehive, *Pilariste*, is an Animarium exhibition where children and adults explore the city perspectives as they explore the exhibition.

*Gallery to Play* offers a space for children and adults to create and learn together, crossing the daily boundaries of childhood and adulthood. The gallery offers adults a guided tour dedicated to the history of malting, contributing to local tourism.

These exhibitions have encouraged schools to use interactive approaches for learning and self-expression in the classroom. *Sladovna Písek* connects generations into appreciating culture, supporting personal growth and strengthening community bonds.

## RECOMMENDED STAGES

## 🔗 Vision

Use art to express a larger perspective on individual perception, and participation in a collective.

## 👉 Decide and commit

Engage multiple sectors, stakeholders and organisations in an art gallery.

## 🏠 Plan

Turn a gallery into an educational hub for the local community.

## 🛠️ Do

Establish workshops, exhibitions and installations with local artists and residents.

## 🔄 (Re)act

Create art and workshops responding to societal issues within the community.

## CO-BENEFITS

Location and space use

Affordability and inclusivity

Social capital

Social networks

Identity and belonging

Cultural value and diversity

Spatial, architectural and artistic quality

Art mobilisation

Institutional capital

Read more





# SALZKAMMERGUT REGIONAL EXPRESS

SALZKAMMERGUT, AUSTRIA

🕒 A woman listening to the stories on the train. The Railway Express is a project by Ella Raidel, Petra Ardai, and Marlene Rutzendorfer. Credit: Wonderland/Pia Fronia 2023



Read more



Inform the future through an immersive experience of cultural and natural heritage.

The Salzkammergut region is an important Austrian heritage site, once connected with all of Europe through the salt trade. The salt production industry is key to the region's identity, but changes in the industry and closures of factories have had a deep impact on people's lives. Tourism is growing, yet it affects the landscape and locals' connection to their land. To preserve the region's heritage, little-known stories, capturing diverse lifestyles, realities and experiences from the past, are brought to the attention of not only tourists but also decision-makers. An acoustic-visual narrative, accessible by an app and virtual reality and developed by researchers and curators, is offered to passengers on the Gmunden-Bad Aussee train. This journey, through the past into the future, is aligned with the train stops. It immerses passengers in the region's natural and cultural heritage, and inspires how the future can be anchored in the history, identity, belonging and lifestyles of different inhabitants.

## RECOMMENDED STAGES

## Q Vision

Create a narrative and an experience accessible through different media, to share and include unheard voices and stories informing the future.

## CO-BENEFITS

- Sustainable mobility
- Sustainable Tourism
- Cultural Sustainability
- Sustainable Local Embeddedness
- Affordability & inclusivity
- Social capital
- Cultural value & Diversity
- Identity & Belonging

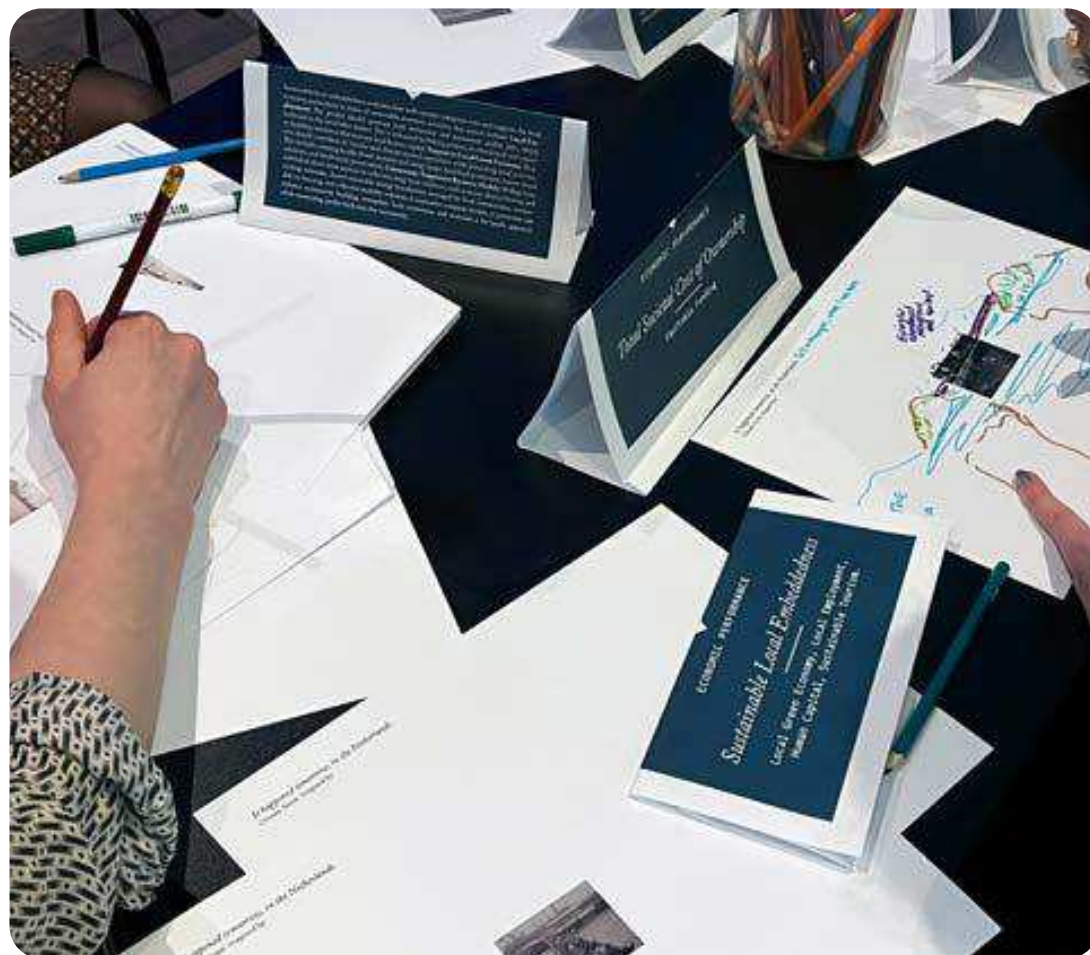


## CHANGING MINDSETS

# IT HAPPENED TOMORROW

HILVERSUM, NETHERLANDS

🕒 Climate fiction workshop using the NEB impact model. Credit: Sound & Vision/Carlo de Gaetano



It happened Tomorrow

///

## NEB Impact Model in a participatory Climate Fiction Workshop.

The Dutch Institute for Sound & Vision in Hilversum invited people from the municipality, finance, NGOs, academic, and arts & culture to imagine future ways to deal with rising sea levels in Dutch cities. Stills from films, documentaries and news reports from the institute's archive were used in combination with the NEB Impact model to create climate scenarios. Through them, participants creatively engaged with the impacts of climate change in the Netherlands, fostering collaboration, critical thinking, and imaginative storytelling that resonated with their personal memories and experiences. The NEB Impact Model guided the exercise. Working with co-benefits helped one group to develop a line of thought combining art, nature restoration and green, by reflecting on the role of art in communicating climate change. The imagined scenarios allowed participants to relate to each other's narratives and talk about the impact of those. With a final set of action points, this method can inspire policy and decision making that are related to everyday life experiences within participants' organizations.

### RECOMMENDED STAGES

#### 🕒 Vision

Use cultural collections as visual input and the NEB impact model to create shared visions and guide reflections on possible connections between different scopes and interests.

### CO-BENEFITS

Participation and co-creation

Future-proofness & adaptability



# PERMANENT LIVING LABS

BUCHAREST, ROMANIA

📍 An interactive green space to connect the local community. Credit: Municipality of Bucharest District 2.



Reclaiming public space for habitation and inclusion.

In 2024, the municipality of Bucharest launched a permanent living lab project, transforming a car-filled, pigeon-dominated area into a vibrant community garden. It is one of two pilot projects designed to reclaim public spaces for pedestrians and change mindsets around car use in the city.

Local schoolchildren forwarded ideas for green spaces, shade, benches, and plantings. Designers brought their sketches to life, and the planting process itself was a community effort, with pupils and local flower businesses working together to cultivate the garden. Through twinning workshops with children, the plants will grow around frames designed to provide shading for the new seating areas.

The aim is to create an inviting and educational space, teaching visitors about the value of green areas. Visitors can scan QR-codes and learn about current air quality, monitored by solar-powered sensors, and read educational panels about the environmental and individual impact of air pollution. Future workshops and maintenance activities will ensure the garden remains a lively, sustainable space for all.

## RECOMMENDED STAGES

### 🔍 Vision

Align goals and approaches to reduce car occupancy and air pollution.

### 👉 Decide and commit

Create collaboration with schools and stores to enforce new transformation using local competence.

### 📅 Plan

Establish clear approaches to prevent parking and destruction of green space.

### 🛠️ Do

Host workshops to build the projects with local stakeholders.

### 📊 Check

Apply sensors to measure impact on air quality.

## CO-BENEFITS

- Location and space use
- Air pollution
- Safety
- Urban heat island
- Noise levels
- Temperature
- CO2-levels
- Cultural value and diversity
- Spatial, architectural and artistic quality



# PARKING SQUARE TRANSFORMATION

BUCHAREST, ROMANIA

🕒 Public space used for gathering of children and adults. Credit: Municipality of Bucharest District 2.



## RECOMMENDED STAGES

### 🔗 Vision

Establish an event to reclaim public space and address the car-occupancy issue.

### 🔗 Decide and commit

Invite local police and local stores to contribute to the event.

### 🔗 Do

Host activities which provide people with temporary jobs.

### 🔗 Check

Analyse the implication and impact of the event for future scalability and permanency.

## CO-BENEFITS

Location and space use Noise levels

Diversity and accessibility of resources

Cultural value and diversity

Spatial architectural and artistic quality

Art mobilisation Sustainable tourism

Governance set-up

Building community and transforming urban space through public activities.

2nd District of the Municipality of Bucharest in collaboration with the DivAirCity initiative, created a pilot project transforming a parking occupied square into a lively public gathering space for a day. The traffic police together with Local Police of District 2 helped clear the square of cars, making room for the community to gather, relax, and connect. Local businesses offered food, lemonade, and treats, while local artists filled the air with live music. Thoughtfully arranged tables and chairs created welcoming spots for everyone to sit, chat, and soak in the atmosphere.

This heartwarming event was a glimpse of what's possible when public spaces are designed for people rather than cars. It fostered a sense of togetherness and collaboration between the municipality, local businesses, and the community to make the city more liveable and vibrant. Transforming the square for a day could lead to more permanent solutions to reclaim public spaces for citizens' use and improve the residents' quality of life.



# URBAN BEEHIVES

NOVA GORICA, SLOVENIA

🕒 Busy bees coming in and out their hives, which feature art from local children. Credit: Katherine Weir

Preserving nature and engaging the community with nature-based solutions.

In Nova Gorica, the municipality uses nature-based solutions (NBS) to promote a climate-friendly future, with urban beehives as a standout example. These beehives create unique opportunities for societal change as vital pollinators. They teach citizens of all ages how to coexist with bees rather than fear them, paving the way towards embracing biodiversity and environmental awareness, with the bees' role in creating honey as an example. The beehives' location along a well-visited green park with a playground and a stream encourages children to play along them. The project connects urban life with natural ecosystems, integrating biodiversity into city transformations and sustainable design. Over time, it will create more resilient and ecologically balanced urban spaces.

## RECOMMENDED STAGES

## 🔗 Vision

Establish urban projects to change mindsets around biodiversity and ecosystems in urban settings.

## 📍 Decide and commit

Use public areas to create a broad and long-term impact on the community.

## 📅 Plan

Implement a long-term plan around beekeeping and honey harvesting over time to include local neighbourhoods.

## 🛠️ Do

Build the beehives in a visible place to ensure effect on the daily lives of citizens.

## 🔍 Check

Observe the engagement from children around the area.

## CO-BENEFITS

Green-blue network functions

Biodiversity and ecosystem value

Location and space use Social capital

Cultural value and diversity

Identity and belonging

Futureproofedness and adaptability

Institutional capital





CHANGING MINDSETS

# THE TRANSITION EXPERIMENTS

BRAGA, PORTUGAL

The Transition Experiments

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Rethinking urban space by  
trough using activity and  
participation.

A PhD thesis, in collaboration with the Municipality of Braga and society, established a co-creating methodology to improve public space. The project experimented with transforming car-oriented areas into spaces that promote walking and cycling. The Transition Experiments Project was born, with three temporary success stories co-created so far.

*Parklet* has transformed two parking lots into a wooden seating area outside a primary school, creating informal meeting places for the children and their parents, and other residents.

*Painting Piano on the Asphalt* was an interactive painting exercise for children, expanding the sidewalk to create safer environments next to traffic.

*Liveable Streets* transformed a parking lot into a space for children to learn how to ride a bicycle.

*The Transition Experiments* highlight “learning by doing” by involving citizens in the process, and ensure that the projects are aligned with the community’s aspirations for an improved, sustainable and resilient city.

Academic

Citizens and Civil Society

Read more



© Children walking on the new, safer area along the street. Credit: Braga Municipality





## 120 The Transition Experiments

### RECOMMENDED STAGES

#### 🔍 Vision

Establish experiments to tackle the car-use and parking spaces in the city.

#### 👍 Decide and commit

Include local stakeholders in the experiments to create collaboration with users and create a larger impact.

#### 📅 Plan

Locate specific areas of interest where these experiments will create engagement and interest.

#### 🛠 Do

Co-create with a target group to establish community initiatives.

#### 🔄 (Re)act

Shape the experiments according to the needs of the users to increase engagement and usability.

#### 📊 Scale and Replicate

Use multiple areas for a testing period to emphasise impact.

### CO-BENEFITS

- Location and space use
- Safety
- Affordability and inclusivity
- Social capital
- Social innovation
- Identity and belonging
- Cultural value and diversity
- Spatial architectural and artistic quality
- Art mobilisation
- Participation and co-creation

Credit: Braga Municipality 📷





# SUSTAINABLE TOURISM

CONSTANȚA, ROMANIA

📍 Visitors in the city center. Credit: CONSTANȚA Municipality



## Creative festivals for historical and cultural preservation

Constanța has created attractive areas boosting its culture and heritage. The municipality collaborates with various organisations to promote cultural events such as the *Neversea Festival* on the beach, and the *Urban Art Festival* that reanimates empty walls with large murals. Cultural and historical landmarks are spotlighted, and important buildings, like Constanța Casino, are being restored to promote walkability and attractive areas.

*The Innovation Camp*, a competition organised together with the Re-Value consortium, was a collaboration between city stakeholders and 63 high school students to find solutions to reduce traffic in the city centre. The students developed ideas together, improving their problem-solving skills and critical thinking, with guidance from experts to create innovative solutions. Some of the solutions they came up with were the use of hydrogen cars, improving pedestrian areas with a multi-storey car park, and increasing bus accessibility through intelligent transport systems.

### RECOMMENDED STAGES

#### 🔍 Vision

Arrange various events aimed towards sustainable travel and mobility around the city.

#### 👉 Decide and commit

Engage various stakeholders to arrange activities and initiatives that will mobilise people and encourage sustainable travel.

#### 📅 Plan

Locate landmarks and areas of interest to arrange artistic and creative interventions.

#### 🛠️ Do

Use landmarks and events as strategic tools to create a more pedestrian-friendly city.

#### 🔄 (Re)act

Use local student competitions to adapt plans and processes.

### CO-BENEFITS

Active and public transport

Identity and belonging

History and heritage

Cultural value and diversity

Spatial architectural and artistic quality

Arts mobility Sustainable tourism

Social innovation Local employment



# CONCLUSION

As cities face increasingly complex challenges on their journey toward climate neutrality, the CrAft project emphasises the importance of collaboration across sectors and communities. This Pocket Guide offers a practical roadmap for cities and stakeholders to move from vision to action, ensuring that every step is informed by local needs, shared learning, and NEB-aligned values of inclusivity, sustainability, and beauty. By using the tools, methods, and insights presented here, cities across Europe can transform their urban landscapes into resilient, climate-positive spaces that serve both current and future generations.

## **Open invitation to contribute to the next edition(s)**

As we prepare for the final volume of the CrAft guide, we invite you—our readers, partners, and community members—to contribute your insights, experiences, and ideas. Whether through innovative projects, examples of collaboration, or feedback on the tools provided in this guide, your input is essential to shaping the next volume. Together, let's continue building a vibrant knowledge-base that empowers cities to achieve their climate goals. Join us in co-creating a future where sustainable urban transformation is accessible and achievable for all.

### ***WANT TO TO CONTRIBUTE?***

If you would like your work to be featured in the next edition, please reach out to us at [contact@craft-cities.eu](mailto:contact@craft-cities.eu).

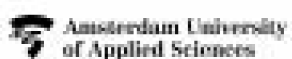




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