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Declaration of generative AI and AI-assisted technologies in the writing process

In preparing this paper, the author(s) used generative AI tools to review the structure and enhance the clarity and readability of the text. All content was subsequently reviewed and edited by the author(s), who take full responsibility for the final version of the publication.



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Abbreviations and Acronyms

Acronym	Description
PED	Positive Energy District
IA	Innovation Atelier
AIA	Amsterdam Innovation Atelier
BIA	Bilbao Innovation Atelier
M&E	Monitoring & Evaluation
ULL	Urban Living Lab

Contributions of Partners

The following table depicts the main contributions from project partners in the development of this deliverable.

Partner short name	Contributions
TNO	Overall Lead author, structuring and writing, final revising this deliverable
AMS	Alignment of Del 3.7 and inclusion of critical lessons learned in del 3.9, critical review of content, structure and examples
CEPV	Contribution and examples integrated from Bilbao Innovation Atelier, check and review on followed structure of support from CEPV including continuation strategy.
Fellow Cities	All fellow cities have contributed with illustrative examples of IA successes in cities and overview of continuation strategies per city.
COA	Corresponding the PED area in Amsterdam, contributing examples from AIA and final review of content and structure. Suggestion included for executive summary, conclusion and recommendations.
COB	Contributing descriptions and examples of specific elements from the IA approach in Bilbao and critical review of the final deliverable on stakeholders and partners involved in the setting up of the Innovation Atelier.

Table 1. Contributions of Partners

Executive Summary

The ATELIER project is a European Horizon project that aims to accelerate the development and implementation of Positive Energy Districts (PEDs) as a key strategy for achieving net-carbon-neutral transitions in European cities.

Innovation Ateliers are being introduced as a forward-thinking collaboration structure that enables various stakeholders to co-create and implement innovative solutions that help cities become climate neutral.

Within the project context of ATELIER, Innovation Ateliers have been established in Lighthouse and Fellow cities in which the local innovation eco-system cooperates to support the tailoring and implementation of smart urban solutions and interventions. By design the Innovation Ateliers are set up and organised in such a way that they will continue operating after the project's lifetime, for further upscaling and replication of solutions.

This guide provides a comprehensive methodology for setting up Innovation Ateliers, drawing from the experiences and lessons learned across the eight ATELIER cities. This document integrates the generic Innovation Atelier approach with real-world examples and structured guidance for replication in new cities and projects. Though ATELIER focused on creating PEDs, these Innovation Ateliers can be used as collaboration structure for any sustainable innovation, be it in energy, food, mobility or any other domain.

The primary objective of this document is to equip cities, policymakers, urban planners, decision-makers, and stakeholders with a step-by-step approach to establish their own Innovation Ateliers. It serves as a key instrument for further dissemination and replication, enabling Innovation Ateliers to be adopted in new city districts, cities, regions, and even international settings.

Taking the initiative for starting up an Innovation Ateliers, could come from different directions, from actual project partners in the execution phase, by the local city authorities, or by R&D organisations, for facilitating the innovation process. For securing successful implementation or the Innovation Atelier approach, and its long-term continuation, the collaboration and commitment of all relevant stakeholders is required.

This document serves as a practical handbook for stakeholders interested in transition management and climate-neutral urban development. It provides applicable methods and materials to guide the establishment of Innovation Ateliers across various governance contexts. Building on partnerships with the public sector, private sector, academia, and society, this guideline supports cities in creating systemic change mechanisms. Recognizing and adopting the Innovation Atelier framework ensures sustained collaboration, multi-disciplinary coordination, and the effective implementation of smart urban solutions for long-term sustainability goals.

The impact of these efforts extends beyond the successful realization of demonstrator sites in ATELIER's Lighthouse Cities Amsterdam and Bilbao. Insights from expert meetings and deep-dive sessions have influenced policies at city, national, and European levels, providing recommendations on regulations, energy communities, energy-sharing mechanisms, and sustainable funding strategies. Reflective monitoring activities have been crucial in shaping Innovation Atelier development, tailoring lessons learned, and informing replication efforts in

Fellow cities. These activities have been embedded in coordination meetings, knowledge sessions, deep dives, and cross-city learning events.

ATELIER encourages cities and involved stakeholders to share their knowledge, experiences, and best practices to further advance urban innovation. The Innovation Atelier approach is designed to be adaptable and replicable, offering a roadmap for new cities seeking to establish similar initiatives. By fostering collaboration and building a shared knowledge base, cities can collectively drive the transition toward more sustainable, innovative, and resilient urban environments.



1. Introduction

Cities are at the forefront of the fight against climate change. They have a critical role in driving the transition towards climate neutrality and hold huge potential to develop integrated sustainable innovations across various domains. As such, cities all over the world are taking action to implement effective decarbonization strategies. In practice, however, progress often takes a long time, due to fragmented decision-making, regulatory hurdles, financial constraints, and the challenge of aligning diverse stakeholders. For swift, efficient and inclusive co-creation and implementation of sustainable solutions there is a need for structured collaboration models that foster innovation and accelerate action.

The Innovation Atelier framework provides this by bringing together stakeholders to co-create, test, and implement breakthrough solutions. An Innovation Atelier is a forward-thinking collaboration structure that enables various stakeholders to co-create and implement innovative solutions that help cities become climate neutral. Throughout the ATELIER project, the Innovation Atelier has proven its efficiency as governance structure to facilitate collaboration and learning across multiple domains and actors to facilitate the creation of solutions addressing sustainability challenges.

This guide is developed in the context of the ATELIER project implementation, and it includes practical insights and real-life examples from eight different cities, demonstrating how to establish Innovation Ateliers to accelerate transitions. The goal of this guide is to provide innovation practitioners a step-by-step set of instructions on how to set-up successful governance structures, to organise complex innovative projects addressing urgent transitions together with multiple stakeholders. Instructions, guide lines and real-life examples are provided along the development stages of an Innovation Atelier:

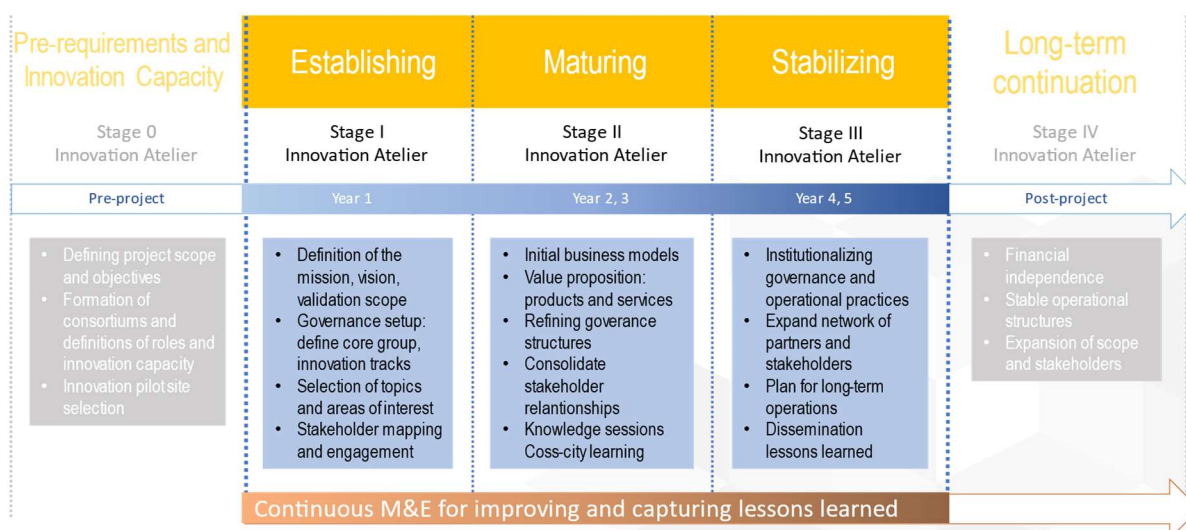


Figure 1: The stages in setting up an Innovation Atelier

This guide is for anyone interested in setting up a governance model that helps navigate the complexity of working together with different stakeholders, with the objective of organising innovation in sustainable transitions. While the Innovation Ateliers in the ATELIER project have focused on setting up Positive Energy Districts, the method is applicable to other innovations and/ or transitions as well. The formula for organising innovation remains consistent; only certain ingredients and specifics change corresponding to the specific context. Whether you are organising a sandbox project on food systems, a mobility hub, or a decentralized energy

system, this guide provides you step-by-step instructions for setting up Innovation Ateliers as a means to do so.

The initiative for starting up an Innovation Atelier could come from various directions, from a dedicated project (execution) team working on realization of a strategic innovation project, from the municipal or regional government driving the sustainable transition or an R&D partner, supporting the systemic innovation process and facilitate learning. Regardless where the first initiative started, for ensuring further sustaining of the Innovation Atelier effect and impact, it is considered essential to include representation of the Quadruple Helix in the early stage. For example, the commitment and long-term contribution to the sustainable transition is primarily the focus of the public domain, and required for the involvement of local or regional government. Whereas the successful local project execution will only succeed with the dedication and participation of the project partners on the ground (developers, contractors, engineers and service providers).

1.1 The ATELIER project

Through the EU project ATELIER, Positive Energy Districts (PEDs) were developed using the Innovation Atelier method. A Positive Energy District is an urban area or cluster of interconnected buildings designed to produce more energy than it consumes on an annual basis. This energy surplus is primarily generated through a combination of enhanced energy efficiency, local renewable energy generation, and flexible energy systems that balance supply and demand.

Within the scope of the ATELIER project, two demonstrators - located in 'Lighthouse cities' Amsterdam and Bilbao - have been designed, implemented, and tested. Additionally, six partnering, 'Fellow cities' (Bratislava, Budapest, Copenhagen, Kraków, Matosinhos, and Riga) explored the potential for replicating the Innovation Atelier model, assessing their scalability and adaptation to diverse urban environments.

Throughout the ATELIER project, the Innovation Ateliers have been critical in driving innovation and knowledge-sharing, tailoring smart energy solutions to each city's specific PED development needs. In each participating city, a diversity of partners representing the quadruple helix (government, industry, academia, and citizens) have been identified and invited to participate in the activities of the city's Innovation Atelier. As part of the Innovation Ateliers, knowledge and policy co-creation sessions have been organised on specific topics and challenges supporting the realization of the PED projects.

Parallel to the ATELIER project, a near sister project MOVE21 (Horizon Europe, 2021-2025) implemented and supported a similar approach with so-called Innovation Co-Creation Partnership (ICCPs). ATELIER and MOVE21 have exchanged and collaborated regularly, ensuring that the insights and lessons learned from both projects led to mutual benefits. For this reason, some specific references to the MOVE21 project are included in this document.

During the course of the ATELIER project, a number of deliverables have been published that outline the process, theoretical backgrounds and lessons learned in more detail. For more information we refer to these deliverables, specifically those listed in the references list. Next to the publication of this guide, the detailed collection of steps and elaborated approach will be also become available to a wider audience through the Smart City and Community networks, training modules for practitioners (DIHnet.EU), and through academic publications.

1.2 How to read this document

This guide is designed to be used as a collection of steps, accompanied by real-life examples from Innovation Ateliers that have been set up in the context of the ATELIER project. It targets municipalities, policy makers, academics, innovators, and change agents involved in climate-related urban planning, urban refurbishment, or neighbourhood development. The guide includes practical suggestions and recommendations, as well as examples and experiences from the existing Innovation Ateliers.

The guide adopts an action perspective and provides an overview on how to establish, mature and stabilise an Innovation Atelier as collaboration structure. It outlines the steps needed to develop an initial idea up to a stabilised Innovation Atelier with concrete plans for contingency, upscaling and/or replication. As these steps have already been implemented in the context of the ATELIER project, the guide offers practical advice, success formulas, and points out potential pitfalls, illustrated by examples. It reflects on how the method was approached in the 'Lighthouse cities' Amsterdam, where strategic coordination and unexpected developments in the grid capacity posed challenges, but yielded good outcomes, and Bilbao, where the approach from the start was strongly connected to the local eco-system. The six 'Fellow cities' in the ATELIER project, serve as valuable early replication examples for empowering the local eco-systems for designing, planning and implementing successful innovative projects.

The guide is structured as follows. Chapter 2 describes the Innovation Atelier approach, outlining the underlying concepts and building blocks. Chapter 3 describes the *Pre-requirements stage*, chapter 4 describes the *Establishment stage*, Chapter 5 is on the *Maturation stage*, Chapter 6 on the *Stabilising stage*, Chapter 7 describes the *Long-term continuation* after the end of a specific innovation project. Chapter 8 includes a reflection on the Innovation Atelier approach, and in Chapter 9 you will read the conclusion. In a number of appendix, you will find practical tools, templates and rich illustrations of examples from the ATELIER cities.



2. Innovation Ateliers concept

The Innovation Atelier framework accelerates innovation by fostering innovative public-private collaboration within cities' local innovation eco-systems. This chapter will describe the Innovation Atelier methodology, including the underlying concepts and elements.

INNOVATION ATELIERS FOR SUSTAINABLE INNOVATIONS

The importance of Innovation Ateliers lies in their ability to support the transition to climate-neutral cities. They play a crucial role in facilitating cross-sector collaboration, which is essential for integrating various urban solutions. By bringing together different stakeholders, these ateliers help identify and remove legal, financial, and social barriers that might hinder the implementation of smart solutions. This collaborative approach ensures that the solutions developed are not only innovative but also practical and tailored to the specific needs of the local context. Moreover, Innovation Ateliers are designed to be self-sustaining. The aim is that they continue to function and drive innovation even after the initial project funding ends. This sustainability is further achieved through the connection with networks and partners in the wider surrounding environment, benefitting from the prolonged access to project results, experience and lessons learned.

Establishing an Innovation Atelier can be initiated from various angles. For example, from a pre-existing partnership including participation of public, private and civil organisations, willing to deepen and formalise their collaboration to remove barriers and smooth the path towards the sustainable transition. This requires a long-term commitment and dedication of partners. In order to prevent this type of collaborations to remain talking and planning, real down to earth projects are required too. The function of demonstrator type of projects in the actual city context, make that real lessons are to be learned, and illustrate at the same time the real hick ups and barriers project partners are running into while executing. Actual project partners (real estate developers, contractors, installers, architects etc) do have a more focussed stake in these type of collaboration networks, as their main objective is to successfully realise the actual innovation project on the ground. Well-designed Innovation Ateliers can align the long-term and more short-term stakes, and support both the innovation project objectives, bring the specific project learnings to a higher level, and enable the long-term collaboration for a climate neutral transition at the same time.

2.1 Innovation Atelier characteristics

The Innovation Ateliers are designed to enable the city's actors to develop and deploy smart urban solutions and to learn how to realize these in specific contexts. The main characteristics of the Innovation Atelier are:

- I) Stimulating open innovation in the Quadruple helix,
- II) Co-creation of solutions and supporting measures,
- III) Sustaining partnerships,
- IV) Multilevel strategic governance exchange.

Stimulating open innovation in the Quadruple helix

Quadruple helix collaboration is a collaboration model in which public and private sector, knowledge institutions and users or citizens are represented. By bringing together stakeholders from the quadruple helix, including their different views, interests, roles and dynamics, it facilitates innovation processes. These processes are also known as 'open innovation' structures. Participants in the Innovation Ateliers actively support the implementation of new solutions in the PED project. Together they identify hurdles, share expertise from other projects or cities, and enhance the innovation and learning capacity of individual entities and wider urban networks through cross-city exchange sessions.

Since the turn of the century, open innovation has rapidly gained traction, transforming the way organisations approach technological and societal advancement. No longer confined to closed, siloed models where companies strictly guard innovation and its financial benefits, open innovation embraces a collaborative paradigm. It recognizes that critical resources for innovation-such as venture capital, intangible assets, and expertise- are often better positioned *outside* the boundaries of a single organisation or company.

Jointly creating value is at the core of the concept of open innovation. The benefits of the jointly developed innovation must be equitably distributed among the various parties. This requires adequate business models, in which internal and external ideas to market the innovations and technologies are included.

Open innovation blurs the traditional divide between research and practice, or practice and policy. Previously disconnected actors are now cooperating in recognition that wicked societal problems require cooperation in solving them.

In the Innovation Ateliers that have been established within this project, expertise and skills are optimally combined, resulting in innovations that have been co-developed and implemented by city administrations, industries, businesses, SMEs, network operators, energy providers, utilities, NGO's, knowledge institutes, representatives from civic organisations, and citizens.

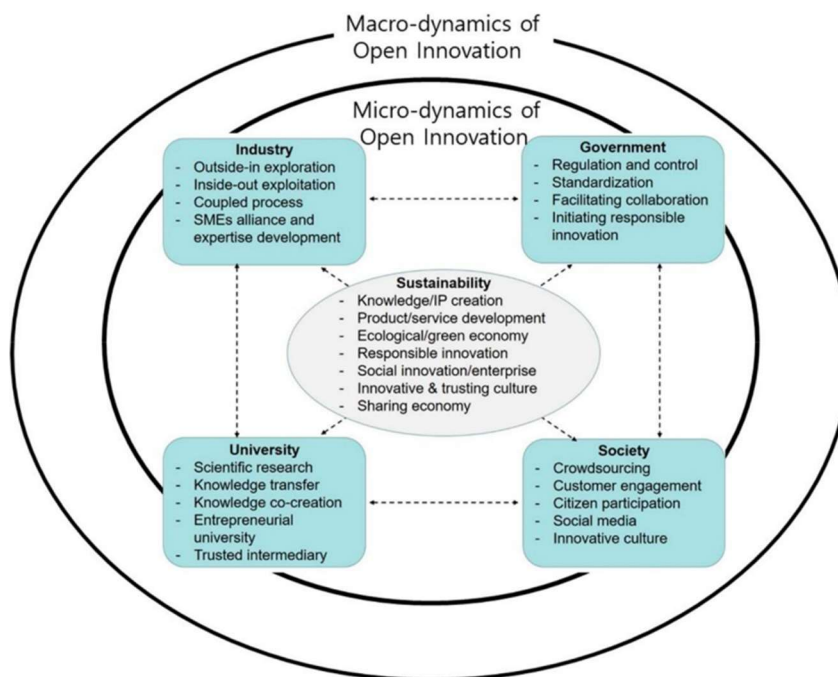


Figure 2: The quadruple helix in an open innovation system (Yun and Liu, 2019)

Co-creation of solutions and supporting measures

The Innovation Atelier is more than a testing ground or a collaboration platform. It supports actively initiatives to dismantle outdated structures that hinder innovation, creating the conditions for new institutional arrangements, governance models, business strategies, and financing mechanisms to take root.

Co-creation within the Innovation Atelier extends far beyond the technical domain. The Innovation Atelier systematically identifies and addresses structural barriers, ensuring that innovations are not only developed but also effectively implemented and scaled. It assesses societal readiness-considering regulatory, financial, and structural challenges-just as rigorously as it assesses technological readiness. Recognizing the fast-evolving landscape of innovation, the Innovation Atelier integrates continuous monitoring, allowing for early detection of emerging challenges and ensuring that solutions progress according to plan. It integrates innovations across institutions, financial instruments, and policy frameworks.

Sustaining partnerships

Innovation Ateliers are not an end in themselves. They serve as a catalyst for systemic change. A crucial precondition to contribute on the pathway towards a sustainable society, is that they should be designed to outlast a specific innovation project's lifetime. Therefore, it is crucial that the Innovation Ateliers are developed in a way that they become self-sustaining engines of innovation. The true measure of their success lies not only in the immediate realization, adaptation, and implementation of innovative solutions but in their enduring impact years down the line.

Given their experimental nature, Innovation Ateliers must actively work to dismantle legal, financial and social barriers that hinder mainstream adoption, to have a right to play in the contemporary eco-system as well. Activities and interventions should be continuously cross-

checked with the ‘real outside world’ such that the Innovation Atelier becomes a powerful mechanism for upscaling and replication, that works in the ‘normal world’ as well.

Sustaining the collaboration is one target. Upscaling is the other. Replication is the ultimate ambition. The real impact comes not just from implementing sustainable solutions but from paving the way for many more to follow. When structured effectively, Innovation Ateliers can multiply their influence-demonstrating that 1+1 can become 3 when executed correctly. This replication potential must be embedded in all activities from the outset, ensuring that the Innovation Atelier model extends beyond the ATELIER cities.

The self-sustainability of the Innovation Ateliers is vital - not only to support the continuous upscaling of innovative solutions within their cities but also to enable replication in other urban contexts. Beyond short-term business and investment plans, a long-term funding strategy is essential to secure the lasting role of Innovation Ateliers in driving the transition to a more sustainable society.

To maximise the replication potential, the Innovation Ateliers deploy a staged approach with three prime stages: establishment, maturing and stabilising. They are developed in three stages to become self-sustaining. The Innovation Ateliers will require detailed strategies and business plans for the different stages of the project. In each stage it is required to think about joint activities generating operational revenues for the Innovation Atelier, such as delivering innovations and services.

Multilevel strategic governance exchange

In this section we introduce three levels on which project learnings, best practices and lessons learned are disseminated and exchanged: cross-project, cross-city and within the local innovation eco-system. These levels continuously interact with each other and hold the potential to increase project impact through knowledge exchange. In addition, they can support capacity and skills development, enhance expertise in its respective contexts and be a catalyser of collaborations and new initiatives. This multi-level knowledge exchange brings in line the support for project partners to realise a successful innovation project on the one hand and stimulate the cross project and cross city learning required for supporting the sustainable transition at the larger scale.

In the ATELIER project, this multilevel strategic governance exchange was strong as ATELIER is an EU funded project with sister projects all over Europe. But also, for those interested in setting up an Innovation Atelier, without being involved in an EU project, this model is a useful capture of the various levels knowledge exchange is happening and effective in supporting the collective learning and collaboration.

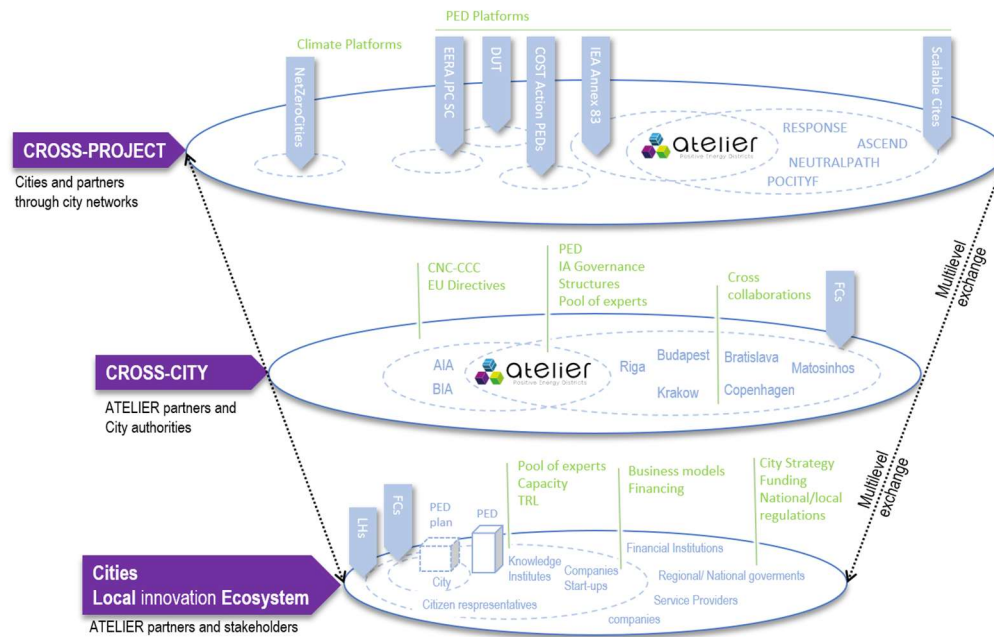


Figure 3 Multilevel strategic governance Exchange in the ATELIER project

LOCAL ECO-SYSTEM

A successful Innovation Atelier implementation is rooted in local decision-making, ensuring relevance and alignment with the strategic agendas of key local stakeholders, city-specific needs, policies, and sustainability goals. This level is place-based and seeks to link the Innovation Atelier to innovative processes, structures, collaborations that are already 'in-house' in the particular city. At this level, local project partners are collaborating with municipal authorities (like policy makers, urban planners, decision makers) and R&D or academics, to put knowledge and experience to work.

CROSS-CITY

An Innovation Atelier can facilitate a structured exchange of knowledge, solutions, and resources across cities. Sharing good practices and learnings with other cities (within one country, and/ or across many other countries) that are involved in doing similar things in different urban contexts is valuable as they bring in their collective experiences and learn from others how to accelerate impact together. Although it is never a 'copy-paste' from one city straight to another, these knowledge and resource exchanges serve agenda-setting, and inspire other cities. Together, cities can develop ways in which the innovations can be tailored to their local contexts.

CROSS-PROJECT

Establishing connections between different projects, networks and initiatives to align objectives, share results, and optimize the use of complementary resources is a must. This is typically done by joining and participate in platforms (e.g. Smart City and Community marketplace), initiatives (e.g. Scalable Cities, NetZeroCity portal) or city-networks of projects working in similar domains and goals. Building coalitions of the willing and showing that wicked problems must be solved together ignites an impact far greater than the separate projects would be able to realise individually.

2.2 The building blocks of the Innovation Atelier

An Innovation Atelier is built on six essential components that ensure the three characteristics *open innovation*, *co-creation* and the *sustainability of the partnerships* as described above are included in a profound manner. These components ensure the impact and lasting change, each playing a crucial role in aligning innovation efforts with needs, mobilizing stakeholders and scalability of solutions. Taking these six building blocks and their according activities into account effectively enables an Innovation Atelier to sustain for the long term. This section explains the six components in more detail. The chapters that follow describe the stages in setting up an Innovation Atelier method, continuously referring to these six components and practical tips on how to implement them accordingly.

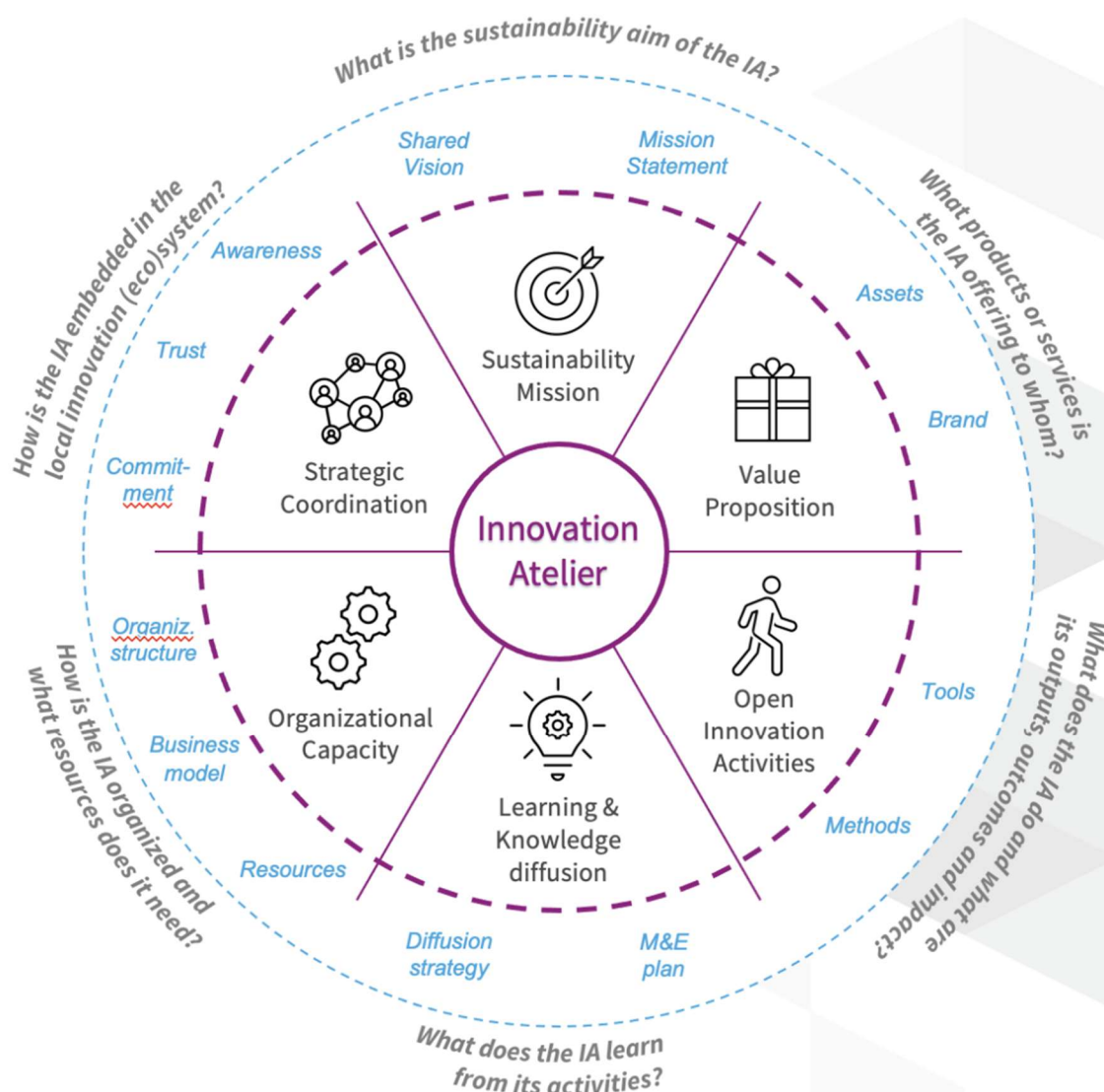


Figure 4: Illustration of the 6 key elements to build up an Innovation Atelier

1. Sustainability Mission

A *vision* is the dream, whereas a *mission* inspires to action. Both help to define the Innovation Atelier's contribution to sustainable change.

With a vision, the members can communicate what they believe in, their dream for the Innovation Atelier. The vision statements are short phrases that convey hopes for the future, what the partners believe the Innovation Atelier can be capable of. It clarifies the beliefs for those directly involved in the Innovation Atelier itself, but also for the wider community. It describes how the innovation would be developed under the perfect circumstances.

A *mission statement* is the vision in more practical terms: it describes *what* is to be done to achieve the vision. They are more action-oriented, by referring to a problem or an objective, and hinting at how the Innovation Atelier might solve the problem or reach the goals.

Finally, a *strategy* focuses on the efforts to achieve the goals that are set in the mission and vision. It provides an overall direction, opportunities for resource and funding, as well as social support and inspiration. The strategy describes how it will be done, and they consider the possible barriers and opportunities how to navigate these. Before laying out a strategy, an inventory is needed to see what obstacles and opportunities exist.

2. Value Proposition

The value proposition defines the products and services offered by the Innovation Atelier and the target audience, recognizing that value varies across stakeholders. It identifies a gap and provides a solution, considering societal and environmental as much as financial returns. These products and services are interdependent and necessary for driving systemic innovation (Hekkert et al., 2007).

It consists of the revenue generated through products and services. The key services of an Innovation Atelier can for example consist of knowledge sharing, access to an expert knowledge pool, resource mobilization, and legitimacy creation. The proposition focuses on creating value for the local eco-system through collaboration, knowledge exchange, and access to expert networks, while ensuring long-term sustainability and adaptability.

3. Strategic Coordination

The embeddedness of the Innovation Atelier to the broader eco-system is pivotal for successful implementation and meaningful impact in sustainable transitions. Successful strategic coordination integrates local, cross-city and cross-project perspectives to effectively implement sustainable innovations. Strategic coordination is about *how* the IA is effectively embedded and connected with key actors from the quadruple helix.

This involves knowledge exchange, decision-making, and optimal usage of resources. It is also about aligning with strategic agendas of stakeholders, including those of public authorities, such as municipalities, regional and national governments, and the sustainability objectives and agendas of the EU, but also with the strategic agendas of stakeholders from the private sector.

4. Open Innovation Activities

Open innovation activities are collaborative actions where stakeholders co-create and test solutions to local challenges, such as workshops, ideation sessions, or real-world experiments. They facilitate innovation, iterative learning, co-creation, and user-involvement among the stakeholders. Successful implementation ensures broad participation and fostering an ongoing

core group of engaged actors. The results of these activities should produce tangible outcomes - such as real innovative demonstrators, policy recommendations or new strategies - that support the scaling and replication of solutions across cities or regions and builds stakeholder consensus on the way forward. Open innovation activities can generate a variety of outputs, including enhanced capacities, actionable knowledge, accountability, and positive changes in both physical and social urban structures.

5. Learning & Knowledge Diffusion

This component is about how the Innovation Atelier captures insights from its activities and shares them within local, regional, national, and international innovation eco-systems. Effective learning strategies include internal reflection, local knowledge exchange through events, and cross-project and cross-city communication via webinars or joint workshops. The goal is to ensure that lessons are actionable and accessible, enabling replication and scaling of successful solutions in other contexts or regions.

6. Organisational Capacity

Organisational capacity refers to the structures, operational resources, and governance mechanisms the Innovation Atelier needs to operate successfully. To sustain and scale its operations effectively, clear leadership, defined roles, and robust collaborative frameworks is required to ensure it can adapt to new challenges. Given the complexity and novelty of the challenges addressed by Innovation Atelier, the organisational capacity should focus on integrating key actors in the organisation, empowering the innovation capacity of partners, facilitating the knowledge exchange between the project activities and supporting iterative co-creation processes. A strong organisational structure enables effective coordination, allows for the integration of citizen perspectives, and ensures the Innovation Atelier has the flexibility to scale and sustain innovative solutions long-term.

In Chapters 3 to 7, we describe each of the six building blocks for every stage. For every stage, we describe why and how the building block must be taken into account. For every building block, we provide a checklist to quickly assess the sufficiency of the approach.

2.3 Innovation Tracks

Innovation Tracks serve as dedicated extensions of Innovation Ateliers, bringing together specialists, experts, and practitioners to address critical challenges and or knowledge questions in a particular field or domain. By integrating technical, regulatory, financial, and governance expertise, Innovation Tracks enhance collaboration and accelerate the development of innovative and sustainable solutions.

Sustainable innovation requires a structured approach to knowledge exchange and expertise-sharing. Complex challenges - such as energy transitions, mobility solutions, and circular economy models - demand a mix of technical, regulatory, financial, and governance expertise. However, local innovation projects often lack all the necessary in-house knowledge. Innovation Tracks bridge this gap by connecting specialists, researchers, and practitioners across different projects, cities, and sectors. They ensure that emerging solutions are not developed in isolation but instead benefit from collective insights, reducing redundancies and accelerating progress.

Innovation Tracks tent to support not only individual projects but also serve as knowledge bridges between different cities and initiatives. By fostering collaboration beyond a single local

context, the Innovation Tracks help to do comparative studies between specific regions and countries on domains (economy, law, culture) and they contribute to scaling innovative solutions, refining best practices, and transferring insights across regions. The real value of Innovation Tracks emerges as projects move from theoretical planning to on-the-ground implementation, where unexpected barriers, such as regulatory constraints or financial challenges, require immediate expert input to keep projects moving forward.

Innovation Tracks in the ATELIER project

Within the context of ATELIER project proposal, the four Innovation Tracks were carefully defined based on their critical contribution for realizing the PED ambitions in cities. The co-creation of innovations thus extends beyond the technical realm, integrating innovations in institutional frameworks, financial instruments, data systems, and policy. These four Innovation Tracks, which drive the co-creation of solutions to support the development of PEDs, focus on the following key domains:

Innovation Track 1: **Integrated Smart Energy Systems and Electro-mobility**

Innovation Track 2: **Governance, Integrated Planning and Law**

Innovation Track 3: **New Financing Instruments**

Innovation Track 4: **Data, Privacy and Data Platforms**

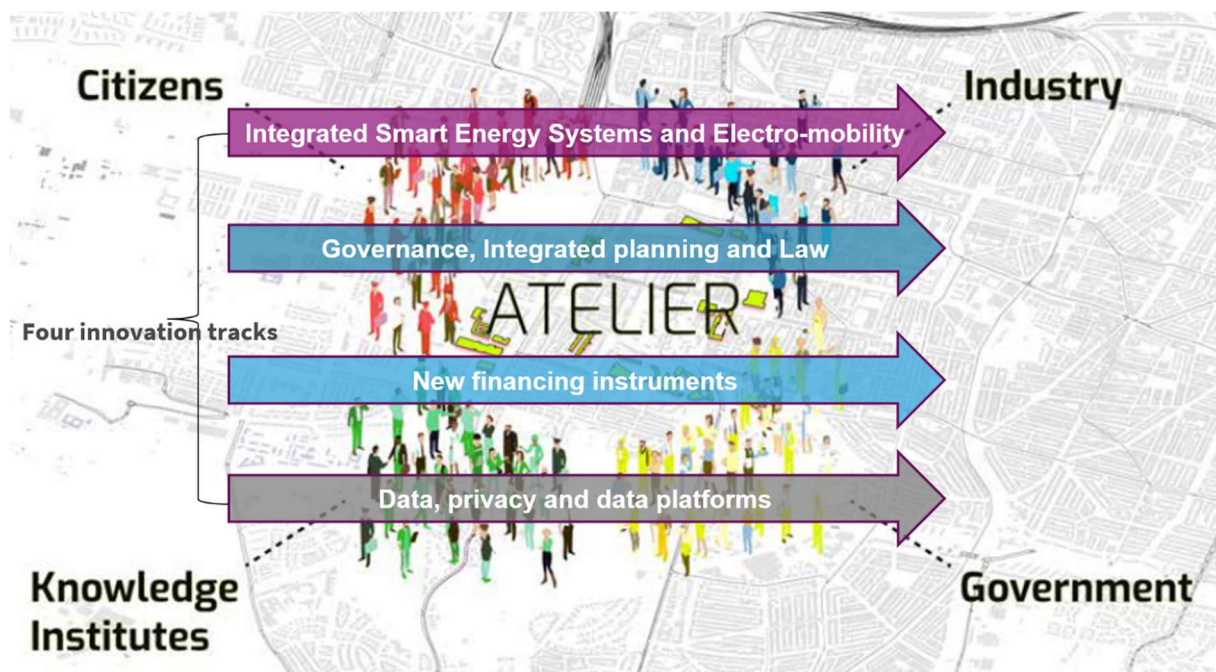


Figure 5: Illustration of the four Innovation Tracks defined within the ATELIER quadruple helix context

▪ **Defining Innovation Tracks**

Each Innovation Atelier must determine the domains that are crucial for advancing its objectives. While some projects may need knowledge development on energy systems, governance, or financial mechanisms, others may require expertise in digital infrastructure, mobility, or circular economy models. The key is to align Innovation Tracks with the needs of the project and the broader system in which it operates. One could find good arguments to define Innovation Tracks dedicated to specific challenges or problems for instance, being encountered in the execution of the innovation project, or focussed on a common thread to multiple projects or cities working on a similar challenge alternatively. For this reason, it is important to have partners on board with relevant expertise for the specific domains.

▪ **Cross-city learning and impact**

By bringing together specialists from different projects, cities, and countries, Innovation Tracks enable practitioners to benefit from a broad spectrum of experiences. Solutions developed in one location can provide valuable insights for others facing similar challenges. This peer-to-peer exchange helps overcome project barriers, fosters inspiration, and promotes collective problem-solving.

Beyond addressing immediate project needs, Innovation Tracks play a crucial role in the wider diffusion of knowledge. Through cross-city events, network collaborations, and knowledge-sharing platforms, they help transfer insights from one project or region to another. This structured knowledge exchange strengthens the capacity of organisations and policymakers to drive systemic change, shaping policy, governance frameworks, and investment strategies.

▪ **Organising Innovation Tracks**

Innovation Tracks should bring together engineers, policymakers, financial experts, and industry leaders to co-create solutions that extend beyond state-of-the-art practices. For implementation or knowledge issues in neighbourhoods, one should also consider representation of inhabitants and local district authorities for instance to include in the innovation tracks for required support by end-users. Alternatively, when it comes to influence national regulatory powers, specific lobby representation of main stakeholders is key to include again. To determine the most relevant knowledge domains for an Innovation Atelier, organisations must assess the key factors that drive successful innovation. In most cases, both technical and non-technical elements must be considered. Public governance, regulatory frameworks, and financing structures are often essential components that must be addressed alongside technological advancements.

Transferring tacit knowledge and experience from first hand, across multiple levels of aggregation, contributes to the process of knowledge sharing and initiating a change in the way to do things now.

By strategically leveraging Innovation Tracks, organisations can foster a culture of collaboration, accelerate the development of sustainable solutions, and ensure that knowledge gained in one project contributes to the broader transition toward climate neutrality.

2.4 Monitoring & Evaluation

WHY?

Monitoring & Evaluation (M&E) is essential for ensuring that Innovation Ateliers (IAs) evolve effectively, respond to local needs, and adapt to emerging challenges. By embedding M&E across all project stages, innovation practitioners can continuously track progress, assess the impact of governance structures, innovation tracks, and activities, and refine strategies in real time. This iterative approach not only captures valuable lessons from the setup and development of IAs but also strengthens their capacity to deliver meaningful, long-term impact.

M&E supports to:

- Track IA progress and evaluate results
- Identify barriers and refine strategies
- Facilitate effective learning and adaptation across projects and IA
- Facilitates the refinement of IA activities and organisational structures to enhance long-term impact
- Strengthen the long-term impact of the co-created solutions
- Support the adoption of IAs in other contexts

In the ATELIER project, M&E enabled both Lighthouse and Fellow Cities to accelerate learning, engage stakeholders more meaningfully, and adapt strategies dynamically throughout implementation.

WHAT?

Innovation Ateliers rely on co-creation, engaging local stakeholders to develop solutions that are tailored to specific contexts. These solutions go beyond technical innovations to include new governance models, financing instruments, and policy tools. For example, IAs explore innovative governance approaches to support implementation, and design business models that enhance financial viability.

To track and support this evolving IA implementation process, a dedicated Monitoring & Evaluation (M&E) framework has been developed. This framework offers a systematic, reflective approach that captures the key conditions contributing to the success of an Innovation Atelier.

Rather than focusing on rigid KPIs, which may not capture the complexity or unpredictability of innovative solutions, the framework monitors six core components related to the IA's enabling conditions and governance structures. By tracking six key components over time, the approach provides insights into the effectiveness and maturity of their IA governance, allowing for meaningful comparisons across different contexts. This allows practitioners to assess whether the necessary foundations for success are in place, enabling ongoing learning, adaptation, and meaningful comparison across different contexts.

For a detailed overview of the framework's development and application, see Chapter 4 of (D3.6 Lessons Learned and Experiences with PED Innovation Ateliers, 2023).

CONCEPT OF INNOVATION ATELIER

Key Components

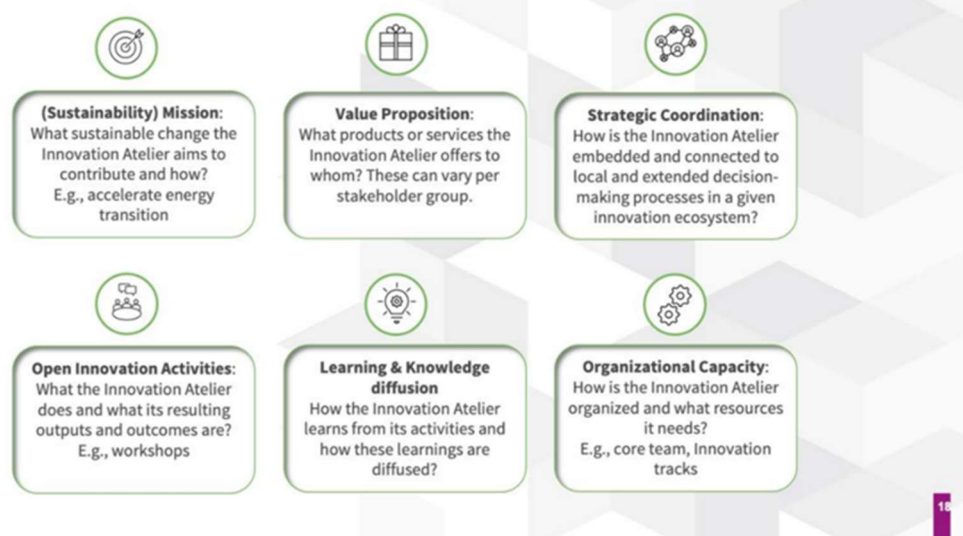


Figure 6: Key components for monitoring progress of Innovation Ateliers (D3.6)

How?

Monitoring in Innovation Ateliers should be embedded in the project activities and closely aligned with its co-creation processes. Rather than functioning as a separate reporting task, M&E should support real-time reflection, learning, and adaptation. Practitioners are encouraged to apply *Reflective Monitoring in Action* approach that captures evolving insights through regular meetings, workshops, and collaborative touchpoints. The M&E framework should be used flexibly, focusing on six core components to assess whether the right conditions for IA success are in place. Monitoring should prioritize learning over compliance, be tailored to the project's pace and local realities, and foster knowledge exchange across cities to boost collective impact.

Recommendations:

- **Integrate monitoring and evaluation into project activities:** Use IA project meetings, updates, and events to reflect on progress.
- **Host reflection meetings** and workshops during IA project events, possibly in person.
- Integrate M&E throughout all stages of the Innovation Atelier, supporting iterative reflection, knowledge exchange, and necessary adjustments.
- **Use Reflective Monitoring in Action:** Capture insights in real time and adjust collaboratively.
- **Facilitate cross project and IA learning:** Share practices between IA and use frameworks that facilitate comparison and cross learning across IA
- **Focus** your Monitoring and evaluation workshops and **reflection meetings** on the **content** rather than on the frameworks.
- **Communicate regularly:** Share lessons and findings regularly across IA teams and facilitate real-time learning for continuous adaptation.
- **Leverage insights from past sessions** and collaborative learning (both locally and across cities) to refine implementation strategies, focusing on key challenges

- **Operationalize monitoring** across the six components of the Innovation Atelier (detailed in the annex), ensuring that key elements like innovation capacity, reflective monitoring methods, and lessons learned are systematically captured.

In ATELIER, by integrating M&E reflection meetings into project activities like cross-city events, cities were able to compare their progress, learn from the best practices of other cities, replicate successful practices and reflect on their ongoing challenges.

Having secured and integrate a dedicated monitoring and evaluation task in your Innovation Atelier will benefit both the internal organisation and learning capacity of the partners and stakeholders involved, as well will it provide valuable output and extensive practical experience for other cities, stakeholders and potential partners outside the local eco-system. A well-structured monitoring and evaluation activity will significantly increase the potential for replication and further dissemination of the Innovation Atelier practice and approach.

The following chapters describe the step-by-step instructions per stage in setting up an Innovation Atelier. As described above, monitoring and evaluation is a continuous process that forms a common thread throughout all the stages.

2.5 The stages of setting up an Innovation Atelier

One of the key aspects of the Innovation Atelier method is the step-by-step approach for developing a stable Innovation Atelier organisation and development. This deliverable describes the process and building blocks of each development stage of the innovation Ateliers (see figure 1).

STAGE 0: PRE-REQUIREMENTS & INNOVATION CAPACITY

This stage is the preparation for setting up an Innovation Atelier. It is about all that needs to be 'in place' in order to set up an Innovation Atelier effectively. There are three types of conditional elements to prepare for an Innovation Atelier: 1) practical and organisational prerequisites; 2) conceptual understanding of the Innovation Atelier and stakeholder support; and 3) understanding and strengthening 'innovation capacity'.

STAGE 1: ESTABLISHMENT STAGE

This stage sets the foundational structures for the Innovation Atelier. The goal of the establishment stage is to foster a collaborative environment where diverse actors can align on their goals. It starts by bringing together all relevant stakeholders and partners to discuss the objectives, aim and organisation of this new network and partnership. Inherent to this stage is that the partners and stakeholders are required to discuss in depth, the mission, vision and strategy of the network, and how it is ultimately supporting the realization of the innovation project.

STAGE 2: MATURATION STAGE

During the maturation stage the focus shifts towards the wider expansion of the network, the professionalization of operations and finetuning of business models. It refines and improves the branding of the Innovation Atelier, works on familiarising across the greater innovation eco-

system, showcasing the examples of knowledge sessions and deep dives, and illustrating the added value the Innovation Atelier has for the direct eco-system.

STEP 3: STABILISING STAGE

During the stabilising stage the Innovation Atelier has already established a profound way of operating and working. The organisational model is standing, with dedicated roles and responsibilities for partners. Specific attention should be addressed to the continuation of activities, also in case some of the (core) partners or individuals are being replaced or leave the network. Clear description of roles, responsibilities, mission and vision will help to onboard new people to the Innovation Atelier team. Meanwhile, replication and upscaling potential is being explored with municipal authorities and other stakeholders, to identify and allocate new projects, neighbourhoods, or even other cities to apply the Innovation Atelier approach too.

STEP 4: LONG TERM CONTINUATION

To ensure long-term continuation of the Innovation Atelier and enhance its impact, a continuation plan is set up that includes (1) strategies on replicating and upscaling to other contexts or activities, and (2) plans for maintaining the current partnership and sustaining its activities. Identifying ideas for upscaling, or replicating the approach to other transition projects, neighbourhoods, or even cities should be a combined effort of all partners involved in the Innovation Atelier. This effort will increase the impact potential of the Innovation Atelier approach, by further supporting successful implementation of innovative and smart solutions in cities transformation towards climate neutrality.



3. Stage 0: Pre-requirements & Innovation Capacity

This chapter deals with the prerequisites for a successful deployment of an Innovation Atelier in any given transformation challenge.

For the successful development of Innovation Ateliers, several key conditions must be in place: understanding the added value of innovation capacity, participant engagement, commitment, trust, and a well-functioning governance structure.



Figure 6: The stages of setting up an Innovation Atelier

3.1 Understanding and Strengthening Innovation Capacity

Firstly, there must be a willingness to build innovation capacity. Innovation capacity can be defined as the set of conditions that support, facilitate, or actively encourage innovation. Working on an innovation project or a new, innovative collaboration scheme requires different ways of working, thinking, and acting compared to a 'business-as-usual' project. Innovation capacity is considered an important, sometimes implicit, type of knowledge and work that supports these kinds of innovative projects and collaborations.

According to the OECD, "innovation capacity includes the human, financial, and institutional resources and skills that can catalyse, implement, and advance cutting-edge, inclusive, long-term, and bottom-up problem solving" (2019). Thus, developing and strengthening innovation capacity is a critical precondition for developing, stimulating, and embedding new ways of working through the Innovation Atelier.

Therefore, it is important to:

1. Understand what makes working on innovations/innovative practices difficult and/or different.

2. Design your ecosystem and project scope to enable fruitful collaboration and meaningful project results.
3. Understand how to strengthen the innovation capacity of the Innovation Atelier ecosystem during the project's lifetime.

A practical approach and instruments to strengthen innovation capacity are described in Annex A1.

Before considering the establishment of an Innovation Atelier, clearly state the objective to innovate, collaborate, and learn from this experience, and build innovation capacity together. Building such innovation capacity can start with identifying and selecting a (first) project or site. However, it is important to broaden the scope of the network beyond the project's timeline.

3.2 Long-Term and Short-Term Ambitions

Innovation Ateliers can be supportive in different ways. The innovation capacity of the Innovation Ateliers can support individual project developments and secure knowledge development, dissemination, and/ or the retention over a longer period. Important acknowledgement is that in this pre-establishment stage, the design of the Innovation Atelier is strongly related to the objective and ambition of the Innovation Atelier. This can be focused on a local innovation project at first, but also shift over time to a longer supporting action for helping the municipal or regional authorities to foster the adoption of innovation in multiple cases or project. Each objective requires the involvement of different stakeholders, who may have different roles to play in the Innovation Ateliers.

3.3 Innovation Atelier Partners

In the preparation phase, collaborations are explored. Partners need to acknowledge and understand the added value of the Innovation Ateliers. The preparation phase requires thorough stakeholder mapping to identify relevant stakeholders for the network, considering the different activities organized by the Innovation Ateliers and the corresponding roles required.

Working with various stakeholders, each with their own organizational background, specifics, interests, and goals, can be challenging. Creating meaningful collaboration in a diverse group can be more effortful than bilateral collaborations or in-house projects. However, the promise of such a collaboration structure-with its dynamic and open innovation process, testing, creating, deploying, and upscaling innovations in real-life conditions-might be worth the effort. This proof of concept must be widely shared among the members of the Innovation Atelier, along with the challenges encountered.

When scoping the Innovation Atelier, it is valuable to identify the types of stakeholders needed to support individual projects during the project lifetime and those whose involvement or support could be pivotal in building a long-term innovation capacity network. During the lifetime of the Innovation Ateliers, new partners might be involved due to changing projects and environments. This could be a new partner or pre-arranged commitment or support from another department in one of the organizations involved. It is important to frequently revisit this stage to ensure all relevant stakeholders are involved.

Another step is to identify key partners willing to drive the collaboration efforts. This should be an organization or individual committed and motivated by the project's strategic goals. These

key partners must invest in creating a feeling of shared ownership, accountability, commitment, trust, and support.

3.4 Commitment

Active participation in the Innovation Ateliers requires time investment from all involved partners. For some stakeholders, such as developers and (energy) service companies, this commitment may be limited to the project's development duration. However, for others with a long-term stake, such as public authorities, grid operators, research institutes, and citizen organizations aiming to foster an innovative ecosystem, sustained, long-term commitment is essential. Long-term commitment should also include financial contributions to support administrative tasks, agenda-setting, and organizing meetings and events.

Moreover, for open innovation to thrive, local governments must commit to these initiatives over the long term. This commitment helps integrate the initiatives into the community beyond temporary experiments, ensuring they are accountable and aligned with public interests. Participants in such collaborative schemes may be motivated by external factors like access to funding, networking opportunities, and increased visibility, as well as internal factors such as the desire to contribute to public goals and create a positive societal impact. Structured and purpose-driven collaboration fosters ongoing engagement and investment in the collective goals of initiatives (van Genuchten *et al.*, 2019).

3.5 Trust

Another important prerequisite for starting a successful Innovation Atelier is mutual trust between partners. Within the Innovation Ateliers, the focus is on innovation and exploring new ways forward. It is important that partners can openly discuss their problems and challenges. This can feel vulnerable, as sensitive (business) information may be shared.

Therefore, it is essential to build and maintain a strong foundation of trust among all involved parties, ensuring shared information is handled with care and partners engage constructively in the joint search for solutions. Agreements on making lessons learned available, ownership, and decision-making regarding innovations developed by the partners or a group of partners are also key considerations in this context.

3.6 Governance

Given the wide array of stakeholders and organizations represented in the Innovation Atelier, the design of the Innovation Atelier should include an organizational structure with governance that allows these diverse stakeholders to co-create and collaborate. This involves aligning strategic goals, understanding stakeholder interests, distributing tasks, agreeing on decision-making structures and roles within the project, and formalizing commitment to both the collaboration and the goals.

The organization does not need to be the exclusive domain of the city authority. It should include land or building owners, project developers, contractors, suppliers, and map the ecosystem of potential partners and stakeholders. This stage includes exploring and drawing up preliminary collaboration structures that will be further formalized in the following development stages of the Innovation Atelier.

The above prerequisites are elementary for critical awareness and considering, over the course of the following stages too. When over time certain objectives might change, or partners will step in later.

4. Stage 1: Establishment stage

This chapter describes the establishment stage in setting up an Innovation Atelier. This stage spans approximately one year and sets the foundational structures for the Innovation Atelier. The goal of the establishment stage is to foster a collaborative environment where diverse actors can align on their goals. Below we describe how the six building blocks of the Innovation Atelier should ideally be adapted in the establishment stage.

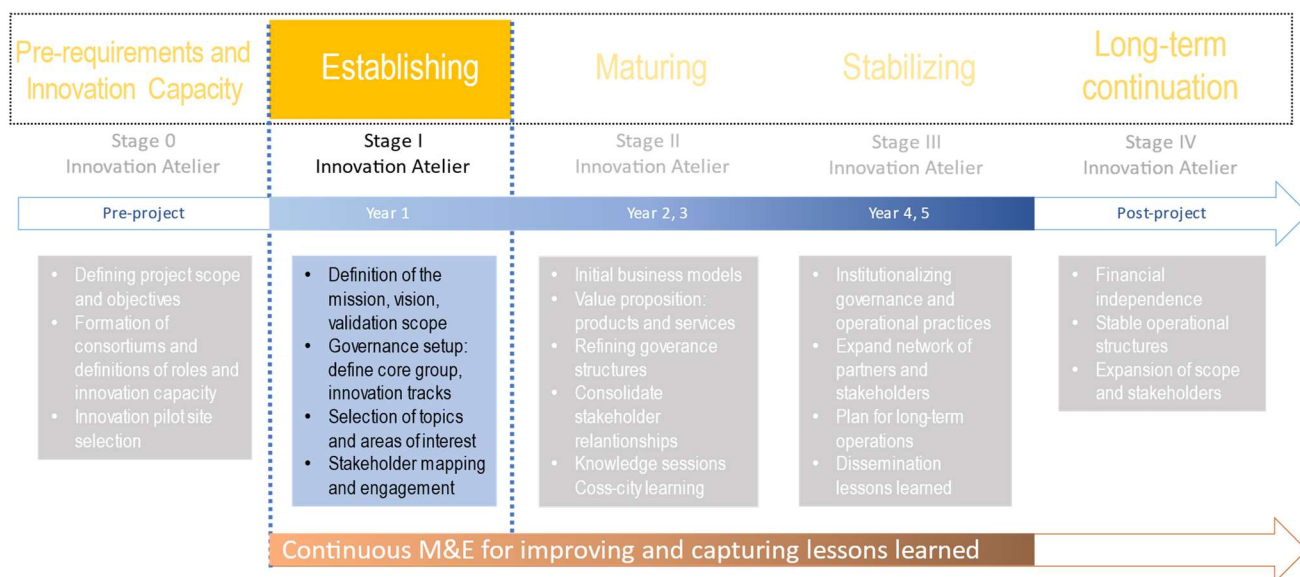


Figure 7: The stages of setting up an Innovation Atelier

1) Vision, mission and strategy setting

The vision and mission clarify the role of the Innovation Atelier, inspire the local innovation eco-system to support and co-create the technical and non-technical innovations for the local district and city, and serves to guide the further development of the Innovation Atelier in the following stages. It furthermore describes to what sustainable change the Innovation Atelier aims to contribute and how it aims to do this. Vision (dream) and Mission (action) statements formulate the purpose of existence of the Innovation Atelier.

WHY?

Establishing a shared vision is crucial for societal readiness and sets the key principles guiding its implementation. An ideal helps to attract and bind future partners to the organisation. It also helps to align the participation and ambitions of the contributing organisations. An endorsed vision is a crucial step towards societal readiness and the key principles of this mission/vision setting.

How?

- Through vision statements

The Innovation Atelier describes the beliefs and governing principles for I) the Innovation Atelier itself, and II) for the smart urban solution and the wider community.

- **Through vision-setting brainstorming sessions**

During these sessions, process trumps the outcome. The discussions on values and drivers while formulating a mission is often more worthwhile and uniting than the mission statement itself. Refrain from specifying actors, sectors and domains and thereby limiting the scope or involved partners.

- **The official launch of the Innovation Atelier**

The launch (or any dedicated follow up meeting) can be used to reach consensus on the vision. Once the partners of the Innovation Atelier have developed their vision and mission statement, the community and stakeholders can make suggestions for improvement.

CHECKLIST FOR A VISION STATEMENT IN THE ESTABLISHMENT STAGE:

- ✓ Is it inspiring and outcome oriented, clarifying the fundamental goals the Innovation Ateliers are working to achieve?
- ✓ Does it describe the what and why of the Innovation Atelier?
- ✓ Is it iteratively refined by core group and stakeholders?

EXAMPLE: vision from a Fellow City

Contributing to a cleaner, healthier and greener city for next generations by realizing a positive energy balance through using social and technological innovations.

CHECKLIST FOR A MISSION STATEMENT IN THE ESTABLISHMENT STAGE:

- ✓ Is it action-oriented, clarifying the goals the Innovation Ateliers are working to achieve?
- ✓ Does it describe the 'how' of the Innovation Atelier?
- ✓ Does it include the goals and participants who may become involved in the Innovation Atelier, also of those that are not yet involved, especially the local perspectives?
- ✓ Iteratively refined by core group and stakeholders

EXAMPLE: mission from a Fellow City

The mission is to further the members' development and demonstration of sustainable energy solutions in the North Harbour district (Living Lab) and thus contribute to developing and keeping this district one of Europe's leading and most visible city labs for sustainable solutions.

AMSTERDAM

Making a difference starts with determining what is the Unique Selling Point of Innovation Ateliers.

From ambition & vision to Innovation Atelier

Sustaining Amsterdam's Innovation Atelier operational model

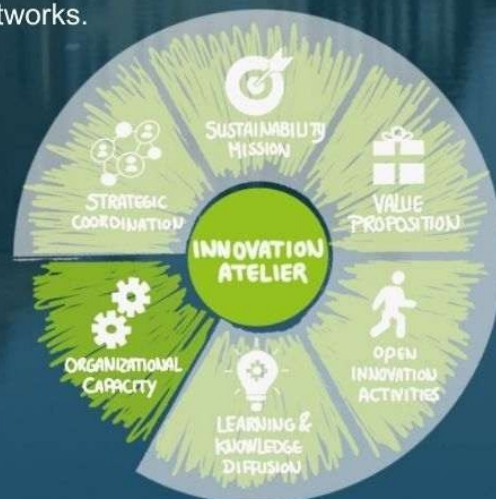
The Amsterdam Innovation Atelier supports innovations in the Amsterdam Positive Energy District by fostering dialogue, co-creation, and sharing knowledge from other projects. To ensure these insights remain available for future sustainable energy and urban projects, the network aims to stay operational beyond the ATELIER project. For the Atelier to continue, a clear right to operate must be established, defining the client, the offered product or service, and the required organizational capacity (partners, time, knowledge, infrastructure).

To ensure the Amsterdam Innovation Atelier's continuation, core members and partners organized a series of strategic sessions led by Maurits Butter (TNO), an expert in setting up digital innovation hubs and public-private collaborations across Europe. These sessions aimed to develop a shared mission and vision for the Atelier. Using business canvas methods, they identified customers, defined products and services, and established market channels. They also assessed competitors and existing networks to map the field of operation. Inspired by the Bilbao Innovation Atelier and the Cluster Energia model, they decided to merge efforts with the Amsterdam InChange platform, leveraging these insights to strengthen their approach.



Lessons learned:

- A shared mission, vision and strategy definition is the foundation for collaboration.
- Take time to bring all relevant stakeholders together in the formation process.
- Have an external chair guide the formation process to ask tough questions, challenge ideas, and maintain objectivity.
- Focus on customers' pains, the offered products/services, and value creation through unique selling points and assets.
- Observe and learn from others' examples and experiences.
- Be open to learning and collaborating with successful existing initiatives and networks.



Municipality of Amsterdam, SPECTRAL, AMS, HvA, WAAG, TNO, existing platform Amsterdam InChange

March 2022 - November 2024

2) Value Proposition

The value proposition in the establishment stage describes what products or services the Innovation Atelier offers to whom. It focuses on results or outcomes that are also valuable for the outside world, and potentially establishes a revenue model.

WHY?

It is important to look beyond the conventional business models, and seek for elements of Sustainable Business Model Innovation, in which the revenues are not solely financial, but include also societal and environmental returns. The value proposition enables the Innovation Atelier to act as a catalyst for sustainable urban transformation, driving positive change in both the economy and the community.

How?

▪ Business model canvas

The value proposition of the Innovation Atelier can be captured through a business model canvas (as shown in Annex A2), outlining the services and activities provided by the Innovation Atelier that create value for partners, participants, and the broader community are mapped.

▪ Direct contact

By offering valuable insights and actionable solutions that are tailored to the specific needs of stakeholders. An essential requirement for a good value proposition is direct contact with those responsible for the physical innovation implementation, to identify what knowledge issues, unclarity, questions or doubts the project is confronted with during its realization process.

▪ Long term strategy

It includes developing a long-term business plan and funding strategy for the Innovation Atelier, creating the initial business model, and exploring various business models for the innovations. Workshops can be held to facilitate this process. Additionally, a multi-annual budget plan will define the income streams for the Innovation Atelier (through products or services) and the operational costs required to maintain its activities.

CHECKLIST FOR VALUE PROPOSITION IN THE ESTABLISHMENT STAGE

- ✓ Is there direct contact with stakeholders to tailor the value proposition to their needs?
- ✓ Does the value proposition deliver tangible outcomes?
- ✓ Does the value proposition demonstrate that the Innovation Atelier creates value through knowledge sharing?
- ✓ Does the value proposition highlight that the Innovation Atelier provides access to expertise?
- ✓ Does the value proposition show that the Innovation Atelier fosters collaboration and networking opportunities?
- ✓ Does the value proposition emphasize that the Innovation Atelier ensures long-term sustainability and scalability of solutions, making it clear that it is not just a one-off project but has a lasting impact?
- ✓ Does the value proposition align with the strategic needs of existing partners while also attracting new key stakeholders?

3) Strategic Coordination

Strategic coordination is about embedding and connecting the Innovation Atelier to local, cross-city and cross-project decision-making processes in a given innovation eco-system.

WHY?

The engagement of the existing local eco-system is key in addressing a complex sustainability challenge. Strategic coordination embeds the efforts in the broader eco-system, thereby supporting the exchange of knowledge, relevant project outputs and learnings between the various projects. It recognizes that reaching of a common goal calls to consider more each individual stakeholder's interests. Furthermore, it facilitates the development of individual solutions that integrate the learnings of other projects and that contribute to a shared goal. If not aligned with the goals of the eco-system there is the risk of developing solutions that need to overcome known challenges and do not have an impact outside of the project scope.

This also comes with the understanding on what are the needs, strategic agendas and ongoing initiatives of the potential contributors. Often there is no direct budget in place for them, therefore engagement may happen only on the basis of perceived value. The level of engagement must therefore not be overestimated

How?

- **Stakeholder mapping**

In the establishment stage, a thorough stakeholder analysis is essential-mapping key actors, their objectives, and their potential positive or negative influences on the PED organisation. A transparent engagement strategy ensures appropriate involvement of each stakeholder group. This includes assessing what type of involvement fits with what type of stakeholder.

- **Inviting participants**

As initiator of the Innovation Atelier, a stakeholder takes the initiative in establishing a core group of participants from the local authorities and industries that will take the initial "ownership" of the Innovation Atelier. Together, they are to take the necessary actions to initiate the Innovation Atelier in this stage. This core group will decide which parties from the local innovation eco-system will initially be invited to participate in the Innovation Atelier. This can range from policy makers from different departments (urban planning, urban mobility, energy, etc.), local agencies, real estate developers, construction companies, network operators, utility companies, brokers, consultants, to local knowledge institutes, academies, local NGOs, citizens collectives, energy communities, citizens, and more.

- **Strengthen the link between local Innovation Ateliers and Innovation Tracks**

To ensure that knowledge exchange remains effective, it is essential to maintain a strong connection between each city's Innovation Atelier and the corresponding Innovation Tracks as described in Chapter 2.3. The Innovation Tracks provide valuable input for knowledge questions or issues that arise. Only during the execution of real projects, feet on the grounds, will demonstrate the real pains, barriers and challenges these innovation projects run into. Dedicated representatives should act as intermediaries, transferring knowledge needs from local projects to the broader Innovation Track network.

CHECKLIST FOR STRATEGIC COORDINATION IN THE ESTABLISHMENT STAGE

- ✓ Are quadruple helix actors (public sector, private sector, academia, and society) adequately represented?
- ✓ Are decision-makers actively involved in the Innovation Atelier?
- ✓ Have you aligned goals and strategic agendas between stakeholders?
- ✓ Is the added value of the Innovation Atelier clearly communicated to stakeholders?
- ✓ Is the Innovation Atelier framed in the context of other projects and embedded within existing organisations?

COPENHAGEN

IA MISSION: The mission is to further the members' development and demonstration of sustainable energy solutions in the North Harbour district (Living Lab) and thus contribute to developing and keeping this district one of Europe's leading and most visible city labs for sustainable solutions.

The EnergyLab Nordhavn Association

Creating a forum for innovation leveraging old project partners

Innovation efforts are often confined to the project period and the given funding timelines as many initiatives are individual projects relying on e.g. EU or national funding. In order to tackle the complex societal and technical change that the strive for sustainability requires, more ad hoc and formal exchange and dialogue between all types of stakeholders is required.

The EnergyLab Nordhavn Association was founded in March 2020 and served as a forum for regular meetings to present and discuss latest ideas, findings and news relating to smart city solutions across different types of stakeholders.

The Copenhagen Innovation Atelier started in the collaboration between two EUDP projects in the North Harbour – however, only with part of the collaborating entities. The reason for this choice is that the collaboration was quite successful not only in achieving the project goals but also in branding their activities and district locally, nationally, and internationally. It therefore made sense to try to build on this foundation and develop a structure for collaboration on innovation – a structure with a longer lifespan just a single project period.

We built on the foundation and developed a structure for collaboration on innovation – a structure with a longer lifespan just a single project period. The collaboration between the two projects proved quite successful not only in achieving the project



The Innovation Atelier kick-off workshop in 2020

Lessons learned:

- Setting up an IA as an organizational structure for regular informal meetings helps create trust and opportunity to innovate. However, the forum loses relevance in people's busy work lives if it does not lead to specific collaborations, activities or projects.
- Citizen engagement in such an Innovation Atelier could be stronger in an existing built-up area together with inhabitants.
- Even a minimal secretariat function helps to avoid burdening members with administrative tasks, allowing them to focus on the content of discussions instead.



Copenhagen Municipality Climate Secretariat, CPH City & Port, HOFOR Greater Copenhagen Utility, Solution developers, Technical University of Denmark, Private citizens

March 2020 - February 2023

Open innovation activities can establish feedback loops to track the effectiveness of innovation activities. Regular evaluations, stakeholder feedback, and iterative improvements should be built into the process. The open innovation activities can focus on:

- **Co-creation**

Organise structured workshops where stakeholders collaboratively define challenges, explore innovative solutions, and co-design potential interventions. Tools such as design thinking and scenario planning, competitions and collaborative design challenges to engage local stakeholders have proven worthwhile in the cities.

- **Living labs & real-life experimentation and evaluation**

The innovations that are implemented in the cities collect feedback to refine and scale successful innovations. In the Amsterdam and Bilbao Innovation Ateliers workshops have facilitated knowledge exchange on energy efficiency, digitalization, and regulatory compliance, engaging companies, knowledge partners, and external cities.

- **Knowledge sharing & capacity building**

Develop deep dives, training programs, webinars, and knowledge-sharing platforms to disseminate insights and best practices. Facilitate cross-sector learning by connecting academia, industry, and government stakeholders. These events are integral in bringing together partners to address specific challenges in the local context.

CHECKLIST FOR OPEN INNOVATION ACTIVITIES IN THE ESTABLISHMENT STAGE

- ✓ Is a dedicated core group consistently participating in all activities?
- ✓ Are you targeting the right audience?
- ✓ Are you framing the open innovation activities around topics that are relevant to the broader community working on the same sustainability challenge?
- ✓ Are the activities leading to concrete outputs and outcomes (such as prototypes, policy recommendations, knowledge on specific aspects), and are these shared with the wider community?
- ✓ Are the outcomes that can contribute to the scaling and replication of solutions across cities or regions captured?
- ✓ Are you summarizing the outcomes and sharing these with the IA core group to ensure reflections and actionable next steps were captured?
- ✓ Is there a common thread in the open innovation activities so they are not all one-off activities?
- ✓ Are the activities linked with other Innovation Ateliers and/or related projects, amplifying reach, impact and buy-in of key actors in the local eco-system?

BRATISLAVA

Should the architect trust the engineer? He should and he has to get along with him from the first study to the final design.

A Sustainable, Architectural, Urban, and Energy Concept

PED Janikov Dvor

Bratislava is developing its first Positive Energy District (PED) from scratch, without integrating it into the existing urban structure. This required creating a comprehensive architectural-urban concept, considering site potential, building positioning, volume, orientation, storeys, functions, parking, and mobility. These aspects were discussed with relevant stakeholders.

The development process was divided into two phases. In the first phase, the IA core team introduced PED principles to students through lectures. Under supervision, students collaborated with their teachers to develop initial district designs, leveraging academic creativity and fresh perspectives.

In the second phase, student designs were reviewed by IA stakeholders. Viable solutions were selected, and professional architects from the Slovak Chamber of Architects finalized the concept. Energy experts and technology industry professionals reviewed the energy concept, ensuring it was efficient and sound. The final design was prepared for stakeholder comments.



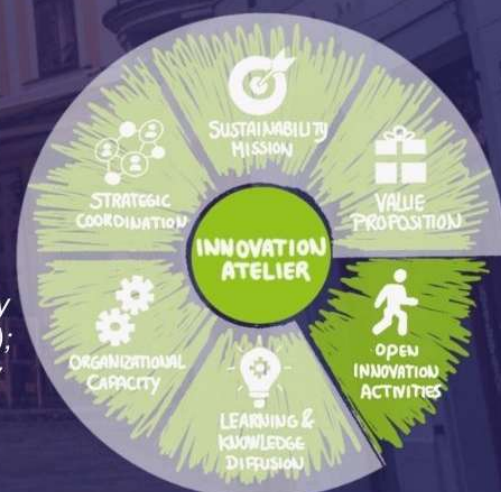
Lessons learned:

- The first phase, involving academic cooperation, brought creativity and initial energy efficiency calculations for the PED. However, the students' work didn't fully align with the master plan or feasibility in all contexts.
- In the second phase, architects from the Chamber of Architects finalized the design, ensuring it adhered to land-planning documents and was grounded in the city's reality. Focused group work with architects, urban planners, energy engineers, and technology providers proved successful.



Faculty of Architecture and Design of the Slovak University of Technology (Institute of Urbanism and Spatial Planning); Slovak Chamber of Architects; energy experts, technology industry

September 2022 - April 2025



MATOSINHOS

Achieving climate neutrality is not just a municipal goal—it is a shared responsibility.

Civic Lab for Climate Transition in Matosinhos

Achieving climate neutrality requires a collective effort beyond municipal actions alone. In Matosinhos, it was estimated that direct municipal interventions could only address up to less than 10% of the decarbonization goal. To bridge this gap, citizen and organizational engagement was crucial. However, there was a lack of structured spaces for communities to co-create solutions and actively participate in climate policies. Recognizing this need, the municipality sought to mobilize citizens, businesses, and local organizations in the transition to a low-carbon future. The challenge was to ensure meaningful public participation in climate action through a structured, inclusive, and innovative approach that would accelerate the 2050 carbon neutrality target to 2030.

Matosinhos launched Portugal's first Civic Lab for Climate Transition, co-developed with the University of Aveiro. This initiative engaged citizens in hands-on climate action through open, collaborative sessions. Participants submitted 56 proposals, leading to 12 pilot projects on mobility, energy, circular economy, and biodiversity, fostering local solutions for a carbon-neutral city.

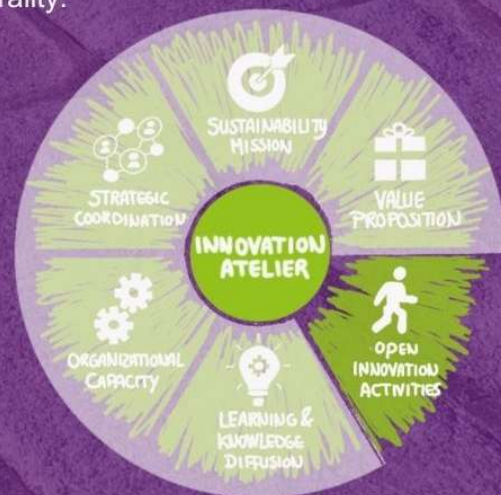
Lessons learned:

- One of the key takeaways from the Citizen Lab was realizing that communities are eager to participate in climate action—they have ideas, motivation, and a willingness to engage. However, they often lack the necessary resources, knowledge, or platforms to turn their ideas into reality.
- By providing a structured space for co-creation, access to expertise, and support for pilot initiatives, the Lab bridged this gap. This experience, leveraged by the ATELIER project, reinforced the importance of fostering participatory processes that empower citizens, demonstrating that collective action is a powerful tool for accelerating the transition to climate neutrality.



Municipality of Matosinhos, University of Aveiro, Local community members, NGOs and environmental groups, Businesses and industries

April 2023 - ongoing



5) Learning & Knowledge diffusion

This component describes how the Innovation Atelier learns from its activities and how these learnings are disseminated in the wider local (and regional, national and/or international) innovation eco-system(s).

WHY?

Effective learning and knowledge diffusion ensure that insights from the Innovation Atelier (IA) are shared within the local, regional, national, and international innovation eco-systems. This exchange of knowledge enhances cross-project learning, strengthens stakeholder collaboration, and supports the replicability of successful approaches in other contexts. Furthermore, integrating the IA's work into a broader portfolio of open innovation activities fosters long-term impact and systemic change.

How?

Establish a structured knowledge diffusion strategy to capture insights but also actively shape future innovation efforts in sustainable urban transformation. The strategy should include:

- **Internal communication**

Use internal reports, core meetings, and reflections to discuss the outcomes of IA activities. Encourage the authors of deliverables and reports to present their findings and next steps, ideally through reflection meetings that enable further elaboration and actionable outcomes.

- **Local eco-system communication**

Use existing events on relevant topics to organise expert sessions, communicate lessons learned, and frame innovations within a broader context that engages all key partners working on a given transition.

- **Cross-project and cross-city communication**

Establish connections between stakeholders from different cities, organise joint webinars or shared events, and collaborate with similar projects (e.g., GA, Cross-city events).

- **Innovation Tracks**

In the Innovation Tracks, the focus of discussion and knowledge session is centered on themes or topics that are identified relevant for the success of the innovation project, or Innovation Atelier partnership. It enables to bring in crucial experience and knowledge from outside the innovation atelier or innovation project, to support the co-creation process of unique solutions tailored to the specific challenges and or problems encountered. As innovation projects evolve over time, new and unforeseen challenges arise. Innovation Tracks should remain flexible and responsive to these challenges, organising workshops, deep dives, and expert sessions tailored to the specific needs of the innovation projects. An Innovation Track coordinator should be appointed (from the Innovation Atelier core team) to ensure representation and knowledge brokerage of the specific track domain.

In Amsterdam and Bilbao, the PED Innovation Ateliers have appointed a specific local track coordinator who serves as the primary point of contact within the network. This role involves identifying specific knowledge needs, challenges, opportunities, or risks within the PED project and or Innovation Track. The track coordinator also plays a key role in advancing these requests, assessing what is needed, selecting partner organizations, and preparing tailored knowledge sessions and/ or workshops. Coordination of international collaboration and alignment across the different Innovation Tracks is managed by a dedicated ATELIER partner.

Example of ATELIER Lighthouse cities Bilbao and Amsterdam

Figure 12: Organising Innovation Tracks in Amsterdam and Bilbao

CHECKLIST FOR LEARNING & KNOWLEDGE DIFFUSION STRATEGY IN THE ESTABLISHMENT STAGE

- ✓ Have you emphasized the importance of structured monitoring, learning, and knowledge management from the very beginning?
- ✓ Are learnings being integrated across projects, organisations, and cities?
- ✓ Are the key knowledge gaps collectively defined and covered in Innovation Tracks?
- ✓ Is there a representative for each Innovation Track?
- ✓ Is communication tailored to distinct actor groups, using appropriate formats and channels for different stakeholders?
- ✓ Are various communication channels, such as press releases, social media, and project websites, being utilised to increase engagement and disseminate key learnings?
- ✓ Are all key stakeholders involved, particularly those directly engaged in the development and implementation of the sustainable innovation?
- ✓ Is the focus concrete and centred on a specific theme or domain, while remaining broad enough to be applicable beyond a single project or city?

6) Organisational Capacity

Organisational capacity describes how the Innovation Atelier is organised and what resources it needs. It is about the internal structure of the Innovation Atelier and the resources and capabilities it needs to sustain and scale its operations effectively.

WHY?

To effectively address complex urban challenges, the Innovation Atelier needs a flexible and well-structured organisation that integrates key actors, supports knowledge exchange, and enables iterative co-creation. A strong organisational capacity ensures adaptability, collaboration, and long-term sustainability.

How?

The organisational model should facilitate the creation of an agile local network that is adaptive in order to support the tasks of the Innovation Atelier optimally. In the establishment stage, this includes the formalisation of the partnership and choosing the right organisational model.

- **Formalising the Innovation Atelier**

- Establish a formal or informal partnership based on local needs. It can involve municipal departments (e.g., urban planning, mobility, energy), businesses, research institutions, and citizens. But it could also be shaped for instance as a less formal, collaborative network.
- Define roles and responsibilities within the network to ensure clear coordination and accountability. Form a core group that meets regularly and takes on an active role in the organisation and activities of the Innovation Atelier.

- **Choose the right organisational model**

Assess different models based on key criteria such as governance style (flat vs. hierarchical) and decision-making processes. Determine the organisational capacity on the network needs: resources, contributions, strategic agenda's and end-users. A framework is developed to support the selection of the best fit organisation model, for example a virtual collaborative network, public-private partnership, or institutionalized entity (see Table 3 in the Annex A2, and D3.1).

CHECKLIST FOR ORGANISATIONAL CAPACITY IN THE ESTABLISHMENT STAGE

- ✓ Have you established a core group?
- ✓ Are you appointing clear leadership and ensuring roles in the core group are clearly defined and aligned with the overall mission of the IA?
- ✓ Are the needed resources and capabilities available?
- ✓ Are you investigating strategies to integrate citizens' perspectives into the core group, ensuring their input is considered in decision-making?
- ✓ Have you defined specific Innovation Tracks that address key challenges within the transition process?

5. Stage 2: Maturation stage

The second stage of the Innovation Atelier (IA) development spans approximately two years and focuses on refining operational methods, strengthening partnerships, and enhancing local innovation capabilities. Following the initial establishment stage, this stage is where ideas are tested, networks expand, and the foundation for long-term self-sustainability is laid. It includes the first implementation and evaluation of pilot or innovation project(s), such as Positive Energy Districts (PEDs) in the case of the ATELIER project.

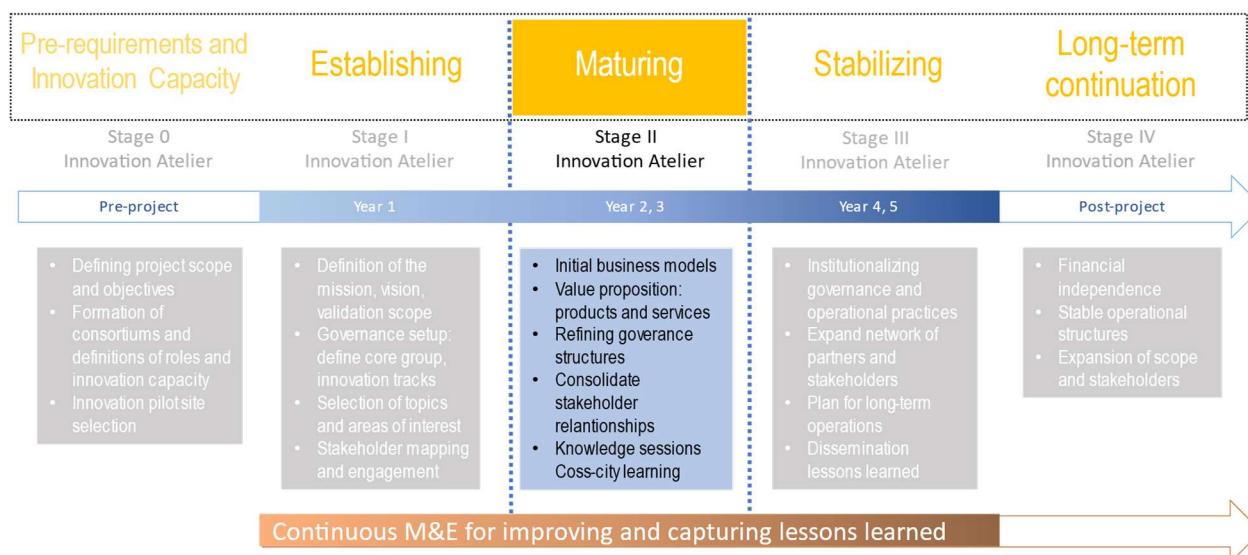


Figure 13: The stages of setting up an Innovation Atelier

As the Innovation Atelier matures, its governance structures, stakeholder engagement, and strategic coordination are fine-tuned to support scaling and long-term impact. This involves recalibrating the business model, value proposition and maturing the governance structure by extending the network. Impact increases through knowledge dissemination and cross-city learning.

As such, the focus shifts to operational refinement, deeper stakeholder engagement, and scaling up activities. Governance structures improve, and collaboration intensifies through knowledge-sharing and best practices. A robust monitoring & evaluation framework ensures teamwork and results remain effective as the initiative grows.

A crucial aspect of this stage is showcasing milestones and the impact of implemented innovations. This strengthens local motivation and support while broadening outreach beyond test sites, engaging additional sectors.

The following sections outline how to achieve this across the six building blocks.

1) Vision, mission and strategy setting

To remain relevant and impactful, the IA's vision, mission, and strategy should be iteratively refined, keeping track of evolving goals and priorities.

How?

- **Align mission in long-term strategy**

It is encouraged to align the IA mission and value proposition with the implementation of the sustainable innovation and integrate them into the city's long-term strategy. In this stage it is important to reflect on whether the IA is fulfilling the established objectives that were set in the previous stages.

- **Utilise the monitoring & evaluation (M&E) framework**

It is recommended to keep tracking the progress on established goals and milestones. Relatedly, it is important to regularly assess and refine operational activities, reporting mechanisms, and strategic approaches to ensure they remain aligned with real-world challenges and opportunities.

CHECKLIST FOR MISSION-SETTING IN THE MATURATION STAGE:

- ✓ Is there a process in place for iterating and refining the IA's strategy based on insights from the M&E framework?
- ✓ Is the IA's vision and mission clearly defined and endorsed by key stakeholders?
- ✓ Are the IA's goals aligned with local implementation and long-term plans of the city?

2) Value Proposition

Going forward, the Innovation Atelier is continuously supporting the innovation process, delivering knowledge, expertise and know-how to the project and their partners, to help overcome the barriers and challenges that potentially hamper the full implementation of smart urban solutions.

In the maturation stage, the focus of the value proposition is on refining and safeguarding these processes to ensure that the IA remains a valuable driver of innovation.

In this stage, it is crucial to fine-tune the IA's value proposition to support scalability while aligning with both local priorities and national and EU-wide initiatives. A key challenge in this stage is addressing discrepancies between initial design expectations and real-world implementation.

How?

- **Refine financial strategies**

In the maturation stage, partnerships should shift from early-stage collaboration to a more structured approach, where mutual benefits are formalised into sustainable revenue models. For this, it is required to refine operational processes, reporting mechanisms, and governance structures to optimize efficiency, financial viability, and eventually scalability. This means it's recommended to:

▪ Promote the value of the network

In Innovation Ateliers the value proposition focuses on engaging and delivering value to the local eco-system by promoting knowledge sharing and collaborations, disseminating IA progress and results, sharing best-practices and frameworks to implement and upscale solutions, and by providing access to a network of experts, for example in support for funding strategies and business models.

Demonstrate the IA's added value to key partners and the broader innovation eco-system. Define the IA's value creation process by mapping out the services it provides and their benefits in both financial and non-financial terms. Shift from concept-level financial strategies (focused on partnerships and mutual benefits) to sustainable revenue models. Promote the IA brand by showcasing impact.

Initial business models are tested and refined to fit local contexts, drawing from experiences in the establishment stage and culminating in a comprehensive investment plan for each partnership. Essential element in the business model is to test its robustness for potential survival without the prime subsidy. In Innovation Capacity, this element is called the Pilot Paradox, which clearly states that certain preconditions will be in place during the real pilot phase (like this prime subsidy), but this will most likely not be the case for any future follow up projects.

Given the shared elements across different IAs, there is strong potential for replication in other cities and for further upscaling within IA cities. Therefore, showcasing key milestones and innovation impacts not only boosts local motivation but also enhances outreach beyond pilot sites and into additional sectors.

- Adapt the business model to local context, drawing from experiences in the establishment stage and culminating in a comprehensive investment plan for each partnership.
- Meanwhile, identify potential funding sources by securing public or private funding, such as EU public subsidy schemes or crowdsourcing. Organise joint meetings with regional policymakers to explore funding opportunities. Identify diverse funding sources, including debt financing, equity financing, and philanthropic support.

CHECKLIST FOR VALUE PROPOSITION IN THE MATURATION STAGE:

- ✓ Are you communicating the expertise and added value of the Innovation Tracks to the wider network to promote its role as channel for knowledge exchange?
- ✓ Have you conducted a structured financial assessment, identifying gaps and potential funding sources?
- ✓ Are you participating in ongoing discussions with policymakers and funding bodies with the objective to secure long-term financial sustainability?
- ✓ Are you in the process of establishing operational strategies so the IA can function independently post-project?

RIGA

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*Investments enable next investments,
new investments amplify former
investments.*

”

Integral Energy Assessment

With TNO and CARTIFF

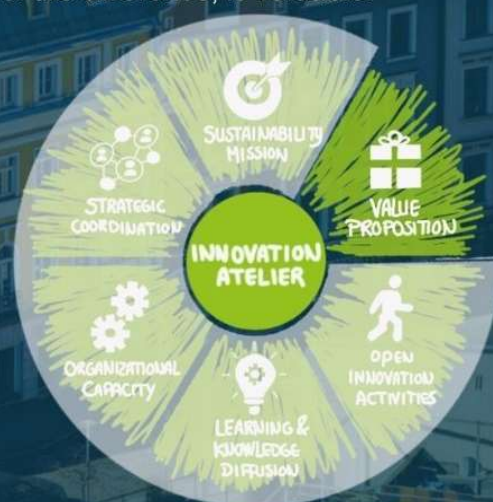
Fellow City Riga has a district with many characteristics of a Positive Energy District. Owners, users, suppliers, consultants and employees of the municipality are working on measures such as insulation, solar panels and charging stations. Cartiff has calculated the business case of various measures, TNO has looked at the financing. This should help solve the problem of what are meaningful next steps. Scaling up is an obvious option, for example more solar panels. In addition, integration is a possibility, such as better integration between the production of solar panels and charging stations, and perhaps the batteries of the cars that are connected to these stations. What is the business case for this and what is the financing?

On April 24, 2023, the municipality organized a workshop with all parties involved in the PED. Cartiff and TNO both gave a presentation, after which questions were asked by the attendees. After discussion about this, all attendees discussed meaningful next steps and how they can help each other with this.



Lessons learned:

One investment triggers the next, such as solar panels that trigger the arrival of charging stations. The next investment can make the previous one more valuable. Such as charging stations that give solar panels extra value. In this way, a transformation of a district can take place with a different than usual investment strategy. Do financiers value this strategy? Do they see the difference between investments that simply follow each other and investments that make each other possible and strengthen each other? Discussing this with all parties involved in a district, and making each other aware of the difference, is valuable.



The city of Riga, TNO, Cartiff, all workshop attendees



April 2023 (excluding prior preparations)

3) Strategic Coordination

WHY?

During the maturation stage, the Innovation Atelier (IA) strengthens and formalises strategic coordination to enhance its long-term impact. This stage focuses on developing a structured dissemination and outreach strategy to actively promote the IA's brand and the innovations it supports. Additionally, the local network expands to include stakeholders with significant influence in key sectors, ensuring flexibility to adapt to emerging opportunities and challenges. Most of these actors will already be engaged through existing partnerships, but new collaborations are established to strengthen governance and knowledge-sharing mechanisms.

The multilevel strategic governance approach (Figure 3) is essential to connect the IA to the local eco-system, other cities, and cross-project collaborations:

- **Local level:** embedding the IA into the local eco-system where the IA operates, lasting impact and alignment with urban development strategies.
- **Cross-city level:** sharing best practices, facilitating knowledge exchange, and engaging with external experts helps cities accelerate climate and energy efforts.
- **Cross-project level:** linking IAs with EU initiatives, platforms, and related projects fosters learning, helps identify common challenges, and streamlines governance structures.

Collaboration becomes more structured, tailored to local contexts, and involves key stakeholders across sectors. Cross-city knowledge exchange plays a crucial role, enabling cities to share experiences and best practices. A strong monitoring and evaluation (M&E) framework help manage the growing complexity of activities, ensuring that the IA's collaborative processes and value creation become more integrated and effective over time.

How?

By expanding stakeholder involvement through thematic workshops, expert sessions, and participatory activities, IAs reinforce collaboration and ensure broad engagement across governance levels. This approach also helps refine innovation processes, adjust strategies based on findings, and enhance the IA's overall capacity to drive long-term urban transformation.

Partners and knowledge institutes contributing to the Innovation Tracks, are generally less connected to the project execution itself, and in most cases less frequently involved in participating in knowledge sessions or deep dives. The Innovation Tracks could be considered as the connection to the outside world, a network of knowledge institutes, experts, specialists, researchers and academics. In some situations, also practitioners, planners or policy makers can be invited and part of the knowledge creation activities.

To establish a solid strategic coordination, IAs should:

- Expand the local network to include all relevant actors, ensuring flexibility to adapt to emerging challenges and opportunities.
- Reach out to wider networks of practitioners, innovators, residents, authorities or even projects to connect with, to exchange knowledge and lessons learned.
- Actively promote and support the IA brand to reinforce credibility and increase visibility among key stakeholders.
- Implement an open and transparent stakeholder engagement strategy, defining clear roles and levels of involvement for different stakeholder types.

- Align governance structures with local decision-making processes to embed the IA into city planning and policy frameworks.

CHECKLIST FOR STRATEGIC COORDINATION IN THE MATURATION STAGE:

- ✓ Does the IA engage with **cross-city and cross-project** networks to facilitate knowledge-sharing and governance improvements?
- ✓ Is the IA embedded in **local decision-making structures** to ensure long-term alignment with city strategies?
- ✓ Is there a clear dissemination and outreach strategy to promote the IA's brand and innovations?
- ✓ Are you creating strong connections with knowledge institutes and experts, or including these actors in the core group?
- ✓ Have key stakeholders been identified, and is their involvement to maximise impact?

4) Open Innovation Activities

WHY?

Open innovation activities are central to the Innovation Atelier (IA) as they ensure effective collaboration, knowledge-sharing, and stakeholder engagement. Sharing knowledge is pivotal in the energy transition and other climate neutrality efforts. At this stage, ideas meet reality—designs are tested, challenges emerge, and solutions need adjusting. It also answers the question of how to adjust if the original plans set up in the establishment stage do not work out as expected?

Workshops play a crucial role in this process, gathering input from stakeholders, identifying additional needs and opportunities, and drawing insights from other, similar projects. These activities not only enhance the IA's innovation capacity but also strengthen collaboration among partner organisations. The goal of open innovation activities is to strengthen the Innovation Atelier, through ensuring collaboration leads to real impact. They are also a means to showcase the relevance of the activities and innovations to other cities, projects and stakeholders.

How?

At this stage, engagement must be strengthened and research and practice should be connected. To do this, it is recommended to:

- **Facilitate knowledge exchange through the Innovation Tracks**

Once Innovation Tracks have been established and aligned with specific domains, they become the primary channels for operationalizing open innovation activities. At this stage, their role evolves from merely identifying knowledge gaps to actively facilitating structured knowledge exchange and problem-solving. The connection between local Innovation Ateliers and their respective Innovation Tracks becomes even more crucial. This ensures that real-world challenges encountered in innovation projects are efficiently addressed by leveraging external expertise and cross-city collaboration.

- **Expand stakeholder involvement**

- Organise expert-led workshops on key topics like finance, governance, and energy solutions to help local projects succeed.
- Offer consultancy services to support partners in overcoming funding, legal, and policy challenges.
- Connect researchers with businesses and policymakers so that new ideas are practical and ready for implementation.
- Involve citizens through co-creation sessions, making the energy transition more inclusive and community-driven.

- **Leverage cross-city learning**

Despite contextual differences, cities share challenges-particularly in citizen engagement and energy community development-which present valuable learning opportunities. These opportunities could be created by:

- Host joint events and case study exchanges to learn from other cities and avoid common pitfalls.
- Focus on shared challenges, like citizen engagement and energy community development, and develop solutions together.
- Create a knowledge hub that collects best practices, lessons learned, and real-world implementation insights.
- Help local governments make informed decisions by providing expert guidance, data, and proven strategies.

CHECKLIST FOR OPEN INNOVATION ACTIVITIES IN THE MATURATION STAGE:

- ✓ Are the workshops organised around topics that are also relevant to other cities and projects?
- ✓ Are there resources allocated for unforeseen circumstances (e.g. delays, additional knowledge needs, hiring specialized staff, etc.)?
- ✓ Is there time and space dedicated for (informal) interaction?
- ✓ Are insights and follow-up actions clearly communicated?

BUDAPEST

“

Inviting the right people to the workshops and encouraging engagement is an important step, however meaningless if the workshop itself does not take advantage of them being there

”

ClimatePlatform as Stakeholder Group

The use of an existing, “modular” stakeholder group as the Innovation Atelier Budapest team

It is a common issue with recurring meetings and workshops that attendance and engagement tend to diminish over time. For each project, a new consortium is formed, bringing together new partners and requirements. With numerous projects running concurrently in the city, experts often find themselves attending an excessive number of workshops on varied topics, leading to a dilution of their focus. Consequently, they may begin to perceive these workshops as redundant and unproductive.

To maintain high attendance and productivity, we utilize our Climate Platform. This stakeholder group comprises numerous partners, but attendance at specific workshops is not fixed. Participants are selected based on their connection and relevance to the topic. This approach prevents the overburdening of less critical experts while ensuring that relevant individuals remain engaged, resulting in productive workshops and high attendance rates. For each workshop, we adjust the participant list to best align with the topic at hand.

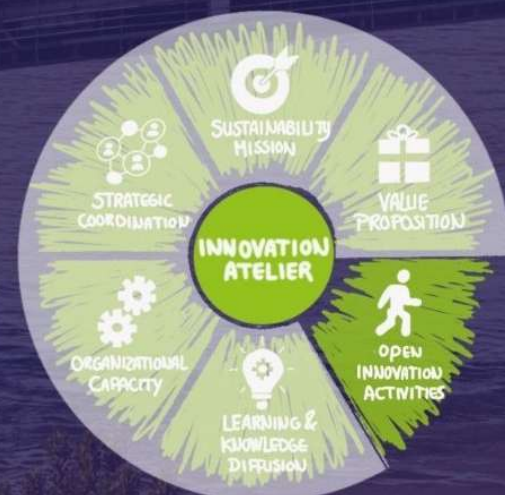
Lessons learned:

- Have a clear workshop objective: “how does it generate the information you need in order to contribute to the relevant part of the project?”
- Only invite relevant participants with meaningful knowledge by asking the question “who are the experts that can help generate this data?”
- With meaningful participation, experts will feel the importance of their contribution and hopefully keep up the morale for further joint work.



Climate Platform; Municipal departments (Climate and Environment; Urban Development)

June 2023 - December 2024



5) Learning & Knowledge diffusion

WHY?

At this stage, the Innovation Atelier (IA) focuses on refining communication channels and building a strong knowledge base to share insights across local, regional, and international networks.

A key part of this process is creating a culture where learning from mistakes is valued. Innovation is rarely a straight path-some solutions take longer to implement, some don't work as expected, and others require adjustments. Being transparent about these challenges, and even anticipating on them, allows the IA and its partners to improve strategies without fear of losing funding, partner engagement, motivation and responsibilities. It would be good if the burden of evidence is relieved (at least) within close circles of the IA. It is necessary to be open and transparent of the things that did not work or took longer/more effort. In fact, 'failing forward' - learning from mistakes - should be a key component of the learning strategy.

The ultimate goal is to ensure that innovations are evidence-based and adaptable. By actively diffusing lessons learned in the wider local (and regional, national and/or international) innovation eco-system(s), the IA helps not only its own partners but also other cities and projects, enhancing overall innovation capacity and impact.

How?

To strengthen learning and knowledge diffusion, the Innovation Atelier should focus on structured reflection, active knowledge exchange, and strategic communication. Internally, core meetings and reports should document insights, track progress, and refine strategies, ensuring that lessons learned are actionable and contribute to ongoing improvement. Externally, engagement with stakeholders should be tailored to their needs through targeted communication channels, such as press releases, social media, and dedicated websites. Events like webinars, workshops, and cross-city knowledge-sharing sessions help accelerate implementation, allowing cities to learn from each other's successes and challenges while avoiding common pitfalls.

Mistakes and unexpected developments should be seen as valuable learning opportunities rather than setbacks. Adapting innovations based on real-world feedback ensures that solutions remain relevant and effective. A culture of "failing forward" should be encouraged, where obstacles lead to stronger, more resilient approaches rather than lost progress. By openly sharing both achievements and challenges, the IA can support other projects and cities facing similar challenges, reinforcing a broader culture of continuous learning. Showcasing milestones and the impact of innovations is equally important, as it highlights progress, builds credibility, and motivates stakeholders to stay engaged in the process.

CHECKLIST FOR LEARNING & KNOWLEDGE DIFFUSION IN THE MATURATION STAGE

- ✓ Have you clearly defined what you want to learn from each activity?
- ✓ Are you reporting the successes, failures and the lessons learned?
- ✓ Are the workshops and sessions properly facilitated and documented?
- ✓ Is there a knowledge database where lessons learned and best practices are documented?
- ✓ Is there a dedicated person responsible for knowledge dissemination?
- ✓ Are you learning from other cities and projects, not just your own experiences?
- ✓ Is communication tailored to different stakeholder groups to maximise engagement?

- ✓ Are you using various communication channels?

6) Organisational Capacity

WHY?

Once the establishment stage turns into the maturation stage, it could be that the initial excitement and energy subsides. In this stage, it therefore becomes crucial to ensure that the team working within the Innovation Atelier (IA) remains supported and integrated. This stage is about embedding the members in the ongoing activities of the IA while maintaining their enthusiasm.

In practice, this means the organisation must be adaptable to change. Personnel shifts and shortages are inevitable, especially in cross-organisational projects where participants may have different strategies and priorities. The focus of organisational capacity is not on keeping the team or structure static as it is, but rather ensuring that the organisational framework can evolve in response to changes in energy, time, and personnel.

A strong organisational structure fosters effective coordination, incorporates citizen perspectives, and ensures the IA can scale and sustain innovative solutions over the long term. It involves creating robust collaborative frameworks that allow the IA to adapt to emerging challenges.

How?

Professionalise and fine-tune governance

- **Professionalise** the IA's structure to ensure the organisation operates at its full potential. The core group should see if the organization needs further professionalisation; and the building blocks can guide as points to look at regarding the possible needed professionalisation. The IA's activities should become integral to the work of participants rather than additional tasks to check off, besides the daily activities of their own job.
- Ensure the **IA's structure is adaptable** and aligns with both local needs and broader EU initiatives.
- Careful further **selection of local partners** based on their commitment and interest is crucial. Funding should be allocated to engage them effectively, and municipal human and financial resources should align with project expectations.
- Secure that leadership of those in the core team (could be public/private/civic/academic) supports the efforts of the IA. Sometimes, municipal teams struggle to dedicate time to open innovation, so addressing this gap is key in creating a robust collaboration for the remainder of the project.

Adjust the organisational structure as necessary

As the IA works on complex, system-level solutions. This requires adaptivity and understanding for shifts in the roles and tasks. For instance, restructuring within the Amsterdam Innovation Atelier helped improve coordination and created stronger connections with knowledge institutes

- Make sure to invest in **retention** of project staff (indeed keep them motivated, keep investing in building trust, talk about things that might frustrate them, try and spend time on pinpointing underlying issues and solving them).

- On the other hand, since staff changes are also inevitable, make sure that your **knowledge management** is adequate. In case of changes, you should be able to continue work as smooth as possible after someone leaves. So, redistribute tasks, make sure the knowledge and skills are shared and resourced within the new/existing project team, and potentially hire new adequate staff and spend time to bring them up to speed.
- **Mitigate capacity concerns as early as possible.** A high turn-over in personnel can be expected at any (large) organisation, and also with project-based hires. This is also one of the challenges that is in the list of the common challenges for innovation capacity. This means two things for this stage;

CHECKLIST FOR ORGANISATIONAL CAPACITY IN THE MATURATION STAGE

- ✓ Are roles and tasks are clearly defined?
- ✓ Are you addressing the potential concerns related to partner capacity and contributions?
- ✓ Have you created an effective onboarding strategy for new team partners?
- ✓ Did you check if resources or capabilities need to be adapted or addressed, using reflective monitoring to identify the changes needed?
- ✓ Have you dedicated time for a knowledge transfer in case of personnel changes? Or, in case new hires are not an option/not available timely, are you onboarding existing partners that take up (parts of) a new role?
- ✓ Have you considered having duo-functions for the more strategic positions in the project team, so in case of illness, longer leave, and people leaving the project, there are always multiple people who can take up (part of) the work and are knowledgeable about what is happening in the project on that specific subject?

The next step is to build on this progress, strengthen coordination among partners, and plan for lasting impact of the partnership for the long-term perspective. The following chapter describes how to achieve this across the six building blocks in the stabilising stage.



6. Stage 3: Stabilising stage

In the stabilising stage the Innovation Atelier's processes and governance are fully embedded and operational. The six building blocks in this stage revolve around developing strategies for continued operation and scaling. In this stage, the Innovation Atelier is working towards two key priorities:

1) **Self-sustainability:** the emphasis is on standardizing practices, consolidating gains, and ensuring long-term sustainability. New stakeholders are invited to contribute, and the scope is expanded to include their needs, including business models and financial plans. The goal is to establish a self-sustaining, replicable model that can generate long-term impact, while continuing to foster cross-city collaboration and innovation.

2) **Replicability:** IAs focus on developing strategies on how to scale and replicate the developed solutions to maximise innovation impact. It also disseminates the handbook for setting up Innovation Ateliers as a collaboration structure for these innovative pilot projects. That is what you are reading right now.

For both of these, continuous reflection on the organisation of the IA and fine-tuning the operational aspects of the IAs to increase impact in each of the local eco-systems is a must. The M&E framework continues to be deeply integrated into ongoing activities, ensuring continuous progress tracking and real-time adjustments and supporting long-term impact.

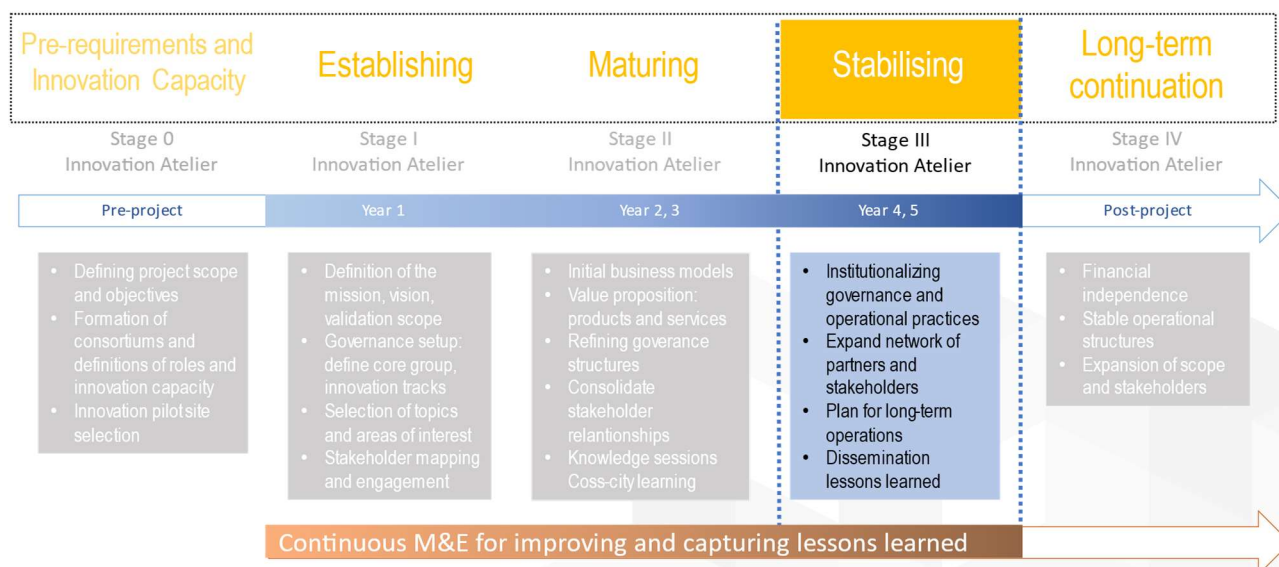


Figure 16: The stages in setting up an Innovation Atelier

1) Vision, mission and strategy setting

WHY?

In the stabilising stage, the vision, mission, and strategy of the Innovation Atelier evolve based on the progress and insights gained over the past years. The original mission may expand to address a broader range of sustainable transitions, ensuring continued relevance and impact. While the Innovation Atelier remains committed to driving engagement and knowledge exchange, its focus may shift beyond the specific innovative pilot projects implemented in the designated city.

HOW?

By broadening the mission, the Innovation Atelier can better align its activities and structure with the needs and strategic priorities of key stakeholders for the long term. Findings and lessons learned can be linked to ongoing initiatives that share similar values and objectives, creating stronger synergies and extending the reach of its impact.

At the same time, it is also possible to stay committed to the original mission while deepening relationships with local stakeholders, strengthening partnerships, and further embedding the Innovation Atelier into the local and regional innovation eco-system.

CHECKLIST FOR VISION, MISSION AND STRATEGY IN THE STABILISING STAGE

- ✓ Have you refined the vision, mission and strategy, using the reflective monitoring outcomes?
- ✓ Have you reflected on the changes in the vision, mission and strategy and what that meant for those involved in the Innovation Atelier?

EXAMPLES OF ACTIVITIES THAT EXPAND THE MISSION:

- The Amsterdam Innovation Atelier supported the city's candidacy and submission for the EU 100 Climate Neutral Cities initiative.
- It also played a role in assisting the EU and Dutch government in advancing energy-sharing regulations.
- The Bilbao Innovation Atelier engaged stakeholders in co-creating the Bilbao City Vision 2050.

2) Value Proposition

At this stage, products, services and value propositions of the Innovation Atelier are ready for the market. In connection with the identified networks surrounding the innovation projects eco-system, focus in the stabilising stage should be on independent continuation of the provision of services to the wider environment.

Attention to widespread dissemination of results, project outcomes and lessons learned, through EU networks, conferences and publications will further motivate replicators to orient, initiate and/or experiment with setting up Innovation Ateliers in transition projects themselves. As the Innovation Atelier (IA) enters the stabilising stage, its role should shift from being solely an innovation driver to becoming a knowledge hub and long-term enabler of the sustainability transition. At this stage, refining the value proposition is essential to ensure that the IA remains strategically relevant to its existing partners while also attracting new key stakeholders. A refined value proposition not only secures long-term engagement from key stakeholders but

also strengthens the IA's position as a leading knowledge and innovation platform in urban sustainability.

By strengthening its role and securing essential partnerships, the IA can establish itself as a sustainable and influential force in energy transition and urban innovation. This refinement enhances the IA's long-term impact beyond single (pilot) project execution, ensuring continued relevance and effectiveness in accelerating sustainability efforts.

A well-defined and targeted value proposition in this stage helps the IA:

- Solidify its position as a long-term partner in sustainable urban development.
- Ensure ongoing stakeholder engagement by addressing their strategic needs.
- Facilitate knowledge transfer and collaboration across regions and projects.
- Secure funding and policy support to sustain operations and scale successful initiatives.

How?

The refined value proposition in the stabilising stage should focus on six key elements. Specific attention should be given to contingency plans to manage operations after the lifetime of a single (pilot) project. This includes identifying funding sources and demonstrating the added value of continued operations to justify potential subsidies and financial contributions. By focusing on these key elements, the IA ensures its continued relevance, influence, and effectiveness as a driving force in the sustainability transition.

1. **Access to a pool of experts**
2. **Adaptable framework for development of urban innovative pilot projects**
3. **Integrated funding strategies**
4. **Knowledge and capacity building**
5. **Innovation Atelier workshops and stakeholder engagement**
6. **Dissemination and international collaboration**

CHECKLIST FOR VALUE PROPOSITION IN THE STABILISING STAGE

- ✓ Have you refined the value proposition?
- ✓ Is the value proposition tailored to diverse stakeholders?

BILBAO

Overall, these workshops allowed the participants gaining first-hand insights into the primary lessons learned from home rehabilitation for enhanced energy efficiency, engaging in a constructive dialogue about the main challenges linked to funding home rehabilitation projects and identifying key success factors for such projects and initiatives.

Sharing best practices of Public-Private Collaboration

Sharing experiences and best practices for funding projects and initiatives on energy efficiency

When addressing projects aimed at improving energy efficiency and promoting Positive Energy District (PED) development at the city level, funding instruments and mechanisms pose a challenge. Relying solely on public funding is insufficient, necessitating additional support from the private sector. In Bilbao City and the Basque Region, several key players and successful stories have been identified, but knowledge on this topic remains fragmented. There is a clear need to consolidate these experiences, shared first-hand by their main actors, to disseminate best practices and derive key findings. These insights will be invaluable for the Municipality in defining its implementation strategy of Bilbao's energy transition.

In this context, Bilbao Innovation Atelier emerged as an ideal meeting forum for stakeholders involved in these activities from various perspectives, including municipalities and other public authorities, companies/developers, banking institutions, cooperatives, and beneficiaries. The Atelier Core Team organized a series of workshops, each focusing on different aspects of the main topic:

1. Financing energy savings and CO2 emission reduction projects
2. Best practices in the rehabilitation of residential buildings in Zorrotzaurre
3. Success stories of public-private collaboration for housing rehabilitation in vulnerable neighborhoods
4. The role of ESCOs, one-stop shops, and private initiatives in energy savings



Workshop Attendees

Lessons learned:

- Collaborative public-private efforts are imperative to achieve the cities' decarbonization goals. The challenges set for 2050 involve an intervention in nearly 1,100,000 homes in the Basque Country.
- Financing is a key issue, part of the solution and must be 1) Easy to access 2) Affordable and 3) Fair and should generate 4) Trust.
- Trust plays a critical role in home rehabilitation projects. Instilling confidence in residents is pivotal for success in these initiatives.
- ESCOs can be a catalyst for the energy transition process. New financing formulae through PPAs services, energy cooperatives for self-generation and self-consumption projects are growing fast.
- Innovative business models such as offering a centralized service to streamline decision-making for residents embarking on rehabilitation projects can make a difference.



Bilbao Innovation Atelier Core Team, Deusto Business School, Municipality of Bilbao (COB), Basque Energy Agency (EVE), Iberdrola, Basque Government, Greenward, Stratenergy (Velatia Group), Triodos Bank, GoiEner, SURBISA, GNE Finance, Deutsche Bank, Giroa (Veolia Group), BIDEBI, Fundación Europace, Viviendas Municipales de Bilbao, MUGABI

December 2020 - September 2023

3) Strategic Coordination

WHY?

In the stabilising stage, strategic coordination is crucial for embedding the Innovation Atelier (IA) within the local innovation eco-system and ensuring its long-term sustainability. By aligning the IA with local decision-making processes and broader EU initiatives, you can secure political backing, institutional support, and access to necessary resources. This integration helps in creating a cohesive and coherent transition towards innovative solutions, ensuring that the IA's activities are aligned with local and regional goals.

How?

- Embed the Innovation Atelier into municipal structures:
 - Formalise the IA's role: secure political backing and long-term institutional support by formalising the IA's role within city governance. This ensures that the IA is recognized as a key player in the local innovation eco-system.
 - Align the IA's efforts with local innovation policies and the city's goals. Engage key stakeholders by providing access to expert pools from organisations in your network.
- Strengthen cross-project & cross-city synergies:
 - Connect with regional and national initiatives to cooperate on reaching national sustainability goals
 - Connect with EU initiatives: enhance the IA's impact by connecting it with EU initiatives and projects. In the case of ATELIER various IA's have successfully connected to initiatives such as the EU Mission for Climate-neutral and smart cities and other EU-funded projects (a.o. ASCEND and EXPEDITE). This helps in leveraging broader EU goals and resources.
- Align with local policies and engage stakeholders:
 - Workshops and sessions: conduct workshops and sessions on national and EU directives, laws and regulations and their impact on the transition that the sustainable solution is focused on. This engagement helps reinforce the IA's role in the local eco-system around sustainable solutions.
 - Quadruple helix representation: continuously represent the quadruple helix (academia, industry, government, and civil society) in the IA's activities. Ensure that the voices of the community are considered in decision-making processes.

CHECKLIST FOR STRATEGIC COORDINATION IN THE STABILISING STAGE

- ✓ Is the Innovation Atelier embedded into municipal structures?
- ✓ Is the quadruple helix represented?

BILBAO

The interdisciplinary and interactive working group increased awareness of the energy transition within the City Council, leading to the formation of the new Bilbao Energy Agency, BilboEner.

City Vision Development and SECAP Definition

The contribution of the Innovation ATELIER

The City of Bilbao has previously focused on collaborative methods, emphasizing public cooperation and institutional alignment as key elements for successful urban regeneration over the past decades. However, the initial lack of energy expertise and competence required a new approach to promote energy transition, specifically for the creation of City Vision 2050.

The development of the City Vision was coordinated by the municipality through a step-by-step approach, establishing the Smart City Planning Group (SCPG). Originating from the Mobility and Sustainability Commission, SCPG's primary role was to manage municipal assets and ensure compliance with the Basque Energy Sustainability Law. The Innovation Atelier created a comprehensive ecosystem, involving various municipal entities and external stakeholders such as research institutions, energy agencies, universities, and private enterprises, fostering a more flexible and open environment. A series of workshops were organized, engaging numerous local sector agents and leading to productive discussions:

- Workshop #0: SWOT Analysis
- Workshop #1: Narratives – Vision Energy
- Workshop #2: Vision 2050 and Master Scenario
- Workshop #3: Master Scenario Evaluation



Co-creating in COVID-times

Lessons learned:

- We explored advantages of collaborative working ways, considering alternative inputs from representatives.
- We learned that the importance of the energy field in the City Vision cannot be understated
- It is difficult to establish thorough and well-represented citizen involvement.
- The interactive working group benefited from the inclusion of not only municipal technicians but also those of other agencies and organisations.



Tecnalia, Innovation Atelier, Cluster de la Energie, EVE

2019 - 2024

BUDAPEST

“

Involving the same experts from Atelier in the processes of Ascend greatly accelerated work communication processes and progress in general.

”

PED replication: ASCEND

The role of Innovation Atelier in PED replication, knowledge dissemination, and integration of results in new PED project ASCEND

Budapest is in the unique situation, where there is an ongoing 'sister project' of ASCEND called ATELIER. It is the first endeavour of Budapest in the topic of PEDs and energy communities within this setting. Therefore, it was obvious, that this unique connection must be utilised. Innovation Atelier tasks and invited professionals were formulated in a way, to allow for the generated knowledge to inform the future ASCEND project.

Through an IA the participating experts formulated a sort of 'initial replication strategy' for PED development in Budapest, in preparation for the 'replication deliverable' in the project. We aimed to generate replication data that is more qualitative and localised in nature. This way we thought to expand on the more technical and larger scope results of the project deliverables and reach an in-depth study as a result.

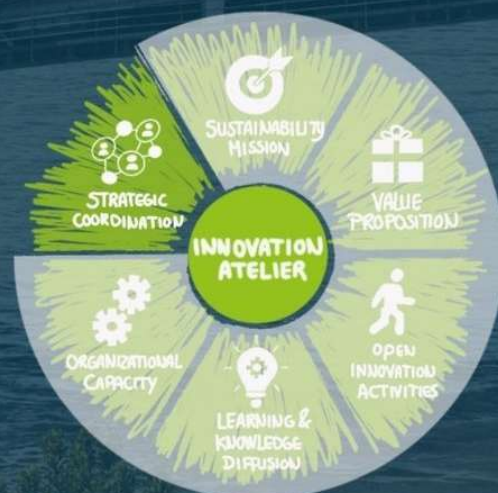
Lessons learned:

As stated before: involve actors who previously participated/contributed. The benefit cannot be overstated. The accumulated knowledge, the connection with partners in the field, and the general familiarity with main and related topics can accelerate initial uptake of the project immensely. In addition, it can lead to more accurate and meaningful project goal articulation. However, new faces and experts are always key to involve, in order to keep the ideas and approaches innovative and fresh.



Innovation Atelier core team, Cartiff, ATELIER project, ASCEND project

June 2023 - December 2024



4) Open Innovation Activities

WHY?

During the stabilising stage, open innovation activities evolve from focusing solely on the local eco-system to explicitly meeting the upper two levels of multilevel strategic governance exchange model: cross-city, and cross-project. Open innovation activities are the means through which the goal of a central role for the Innovation Atelier in the energy and climate transition is met. These activities are still central to IA operations, focusing on workshops, expert sessions, and knowledge-sharing. By strengthening collaboration and facilitating knowledge exchange through targeted events and inter-city discussions, open innovation activities broaden the scope to embed learnings from specific implementations into the broader landscape. It focuses more and more on tailoring the IA's work and outputs not only to key local stakeholders but also to the knowledge gaps of governmental organisations, other cities, and similar projects.

How?

- Organise expert sessions: The workshops not only facilitate knowledge exchange knowledge but also engage companies, knowledge partners, and external cities to tailor to the needs of the eco-system. For example, the grid congestion question played a big role in the Amsterdam Innovation Atelier, but its questions were relevant for other national and sub-national stakeholders as well.
- Integrate activities into existing events: there is a big chance that you are not the only group working on sustainable solutions in the city. Therefore, find collaborations with strategic partners to strategically connect the Innovation Atelier to the various levels. The open innovation activities crucially follow the needs of the stakeholders and are adaptive to relevant themes at the time.
- Collaborate with strategic partners: Also, IA activities expanded beyond ATELIER through collaborations with broader EU initiatives and networks. In the case of ATELIER, the different Innovation Ateliers connected with initiatives such as the EU Mission on Climate Neutral and Smart Cities, ASCEND and EXPEDite to enhance the impact.

CHECKLIST OF OPEN INNOVATION ACTIVITIES IN THE STABILISING STAGE

- ✓ Are you integrating activities into existing events?
- ✓ Are you combining efforts with strategic partners, in order to maximise collective impact?

EXAMPLES FROM ATELIER PROJECT:

Within ATELIER, open innovation activities in the stabilising stage included:

- A session on experiences and best practices of public-private collaboration for energy efficiency, where private sector stakeholders shared insights.
- A session for all cities in the region to discuss regulatory challenges and opportunities, and how the IA can address local engagement needs in tackling and lobbying for better critical energy and climate policies.
- A session on using digital tools to manage urban infrastructure.

- Engaging local businesses and citizens in energy-sharing models.
- PED replication workshops.
- A workshop on demonstrating the benefits of energy group contracts.
- In the Amsterdam Innovation Atelier workshops focused on critical themes such as energy-sharing, grid congestion, and new financial instruments as these proved relevant



AMSTERDAM

Collaborative Solutions to Grid Congestion

Innovation Atelier creates space for collaborative solutions to grid congestion in Amsterdam

In Amsterdam, during the realization phase of developing the PED, it became apparent that the electricity grid lacked sufficient capacity to meet the transport needs. The area was suddenly designated as a congestion zone, threatening the progress of the project and raising questions about how to address grid congestion challenges efficiently. This brought up the question of what the Innovation Atelier is capable of in times of challenges like grid congestion to keep things moving forward?

The Innovation Atelier network has been supportive in finding the right expertise to tackle this problem. From the expertise, for example, people have developed a digital twin and conducted market analysis. Due to the short communication lines and the in-depth knowledge available in the network, a solution was found to connect the housing units despite the grid limitations. Knowledge sessions were also organized with that network (including the grid operator), which led to more innovative agreements between the developer and the grid operator.

Two sessions were organized: One on digital twin and contract calculations, and another that looked at broad scalable solutions. The bundling of transport capacity over the public grid. This led to a complete solution within the area: a smart connection and transport agreement. But it also led to a better understanding of how to solve these types of problems on a larger scale, and smart group contracts.

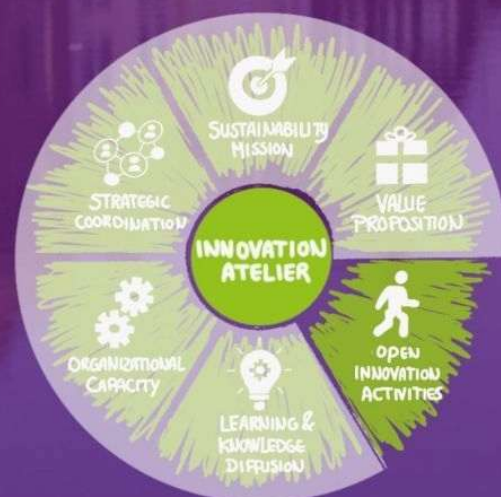
Lessons learned:

- Involve stakeholders who have the knowledge, power, and impact on the problem.
- Ensure short lines of communication and easy switching over problems.
- The Innovation Atelier can be used in various ways, for researching direct solutions, but also for scaling and standardizing these solutions.
- Better understanding of how to solve such problems on a larger scale and more insight into smart group contracts



Alliander, Binkbouw, Ban-lieu, TNO, SPECTRAL, ACM, Netbeheer Nederland, KGG, Energie Nederland, Energie samen

2019 - 2021



BILBAO

Opportunities for Energy Communities

In the framework of the energy transition in Bilbao

The Basque Energy Sustainability Act sets ambitious objectives for 2030, including a 30% reduction in energy consumption within Public Administrations and a target for 32% of consumed energy in urban areas to come from renewable sources. Therefore, the Municipality of Bilbao is actively promoting clean, emission-free energy generation in municipal buildings by integrating innovative technologies to assess their feasibility and measure their performance. However, there remains limited knowledge and experience in deploying energy communities—an area that holds significant potential to support the Municipality in achieving its energy transition goals.

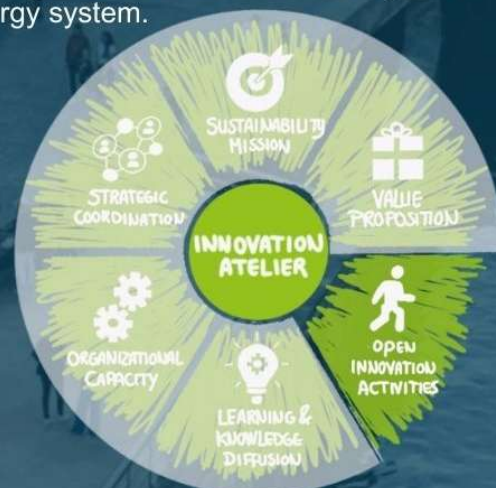
In this context, Bilbao Innovation Atelier was deemed as a good meeting forum for the stakeholders involved in this matter: The Atelier Core Team designed a workshop - led by the Basque Energy Cluster (CEPV) – that disseminated experiences and best practices in the deployment of Energy Communities by Public Administrations and explored the technological developments that may facilitate the implementation, operation and management of these Energy Communities, fostering open dialogue among the panellists and the attendees about the main lessons learned, the challenges still unsolved and recommendations for the deployment of Energy Communities in Bilbao potentially promoted by the Municipality, based on the experience in neighbouring areas. The workshop was held face-to-face with 42 representatives attending from 29 companies and entities.

Municipalities play a vital role in enabling Energy Communities, not only by assigning municipal land plots or rooftops for PV installations, but by fostering citizen participation and building trust in collective self-consumption initiatives.



Lessons learned:

- Municipalities play a crucial role in success.
- Protective regulations (access and connection rights) delay processing and hinder Energy Communities.
- Citizens prefer promoter assistance over legal structure details.
- Managing an Energy Community is easier with a single retailer.
- Current energy retailer contracts may be unappealing; ad-hoc retailers are created.
- Promoters should stay as minority partners for ongoing support.
- Subcontracting management tasks to the promoting company is an option.
- The main tech challenge is providing aggregated services and balancing the energy system.



Bilbao Innovation Atelier Core Team, Municipality of Bilbao (COB), The Basque Energy Agency (EVE), Iberdrola, Municipalities, Operators, Energy service managers, Technology developers, Provincial Council of Araba, Edinor, Gira, R2M Solution

2019 - 2024

6) Organisational Capacity

WHY?

As the Innovation Atelier (IA) enters the Stabilising stage, ensuring strong organisational capacity is crucial for long-term sustainability and impact. A well-structured IA enables effective coordination with local authorities, stakeholders, and funding bodies, securing its role as a key driver of urban sustainability.

Strengthening organisational capacity helps to:

- Ensure continuity and stability beyond a single (pilot) project.
- Secure financial sustainability by diversifying funding sources.
- Formalise governance and leadership structures to enhance decision-making and stakeholder engagement.
- Integrate into municipal and institutional frameworks to solidify political and operational support.
- Build resilience by managing transitions and mitigating risks associated with leadership and funding changes.

For an Innovation Atelier, securing long-term institutional backing, reinforcing leadership, and embedding within local ecosystems is critical to sustain innovative practices and maximise impact.

How?

To establish a stable and resilient organisational structure, the IA should explore on the following key strategies:

- **Integrate IA into municipal structures**

Formalise the IA's role within city governance to ensure political backing and institutional support. Align IA activities with ongoing urban sustainability projects to reinforce relevance and impact. If beneficial, consider a functional merger with a well-established network to ensure continuity and strengthen the IA's position.

- **Ensure financial sustainability**

Develop a strategy for sustaining operations beyond the current project, including funding mechanisms and governance models. Identify and secure diverse funding sources (e.g., municipal budgets, EU grants, private investments). It is recommended to develop a financial model balancing stakeholder contributions (financial and in-kind) to ensure equity and engagement.

- **Continuation of a strong and resilient core group**

Define clear leadership roles and responsibilities within the Innovation Atelier. Ensure a structured approach to onboarding and knowledge transfer, preventing disruptions in progress due to (inevitable) personnel changes. Engage knowledge institutions (e.g., universities and research centers) to provide expertise and maintain strategic direction. Assess potential risks, such as leadership transitions, funding gaps, and shifting policy priorities, and create mitigation plans.

CHECKLIST FOR ORGANISATIONAL CAPACITY IN THE STABILISING STAGE:

- ✓ Are you sustaining a cohesive core group with well-defined roles and responsibilities?
- ✓ Are long-term funding sources and align financial structures secured?
- ✓ Are personnel transitions effectively managed by bringing new team partners on board.
- ✓ Have IA governance structures, leadership roles, and institutional support been formalised?
- ✓ Are you aligning with municipal and regional sustainability strategies to ensure relevance?
- ✓ Has a contingency plan been developed to manage risks and secure future operations?
- ✓ Are opportunities for functional mergers or collaborations with established organisations being explored?

EXAMPLES:

- **Amsterdam (AIA):** Integrated into AmsterdamInChange (AiC), ensuring long-term sustainability through a formal agreement with core partners and the City of Amsterdam.
- **Bilbao (BIA):** Maintained its structure under the framework of the Basque Energy Cluster Working Groups, ensuring operational stability, financial sustainability and extending its coverage beyond the Municipality towards a Regional level.
- **Copenhagen:** Institutionalized its IA in a number of formal (city) initiatives, similar to the ELN Association, securing long-term governance and structured decision-making.
- **Matosinhos:** Secured municipal backing and sustained citizen participation through the Matosinhos Innovation Hub.
- **Budapest:** Leveraged EU projects like ASCEND to integrate financial and regulatory expertise.
- **Krakow:** Adopted an IT-driven governance model to enhance data-driven decision-making.
- **Riga:** Developed a multi-project cooperation framework, ensuring scalability and adaptability of its IA operations.

7. Stage 4: Long-term continuation

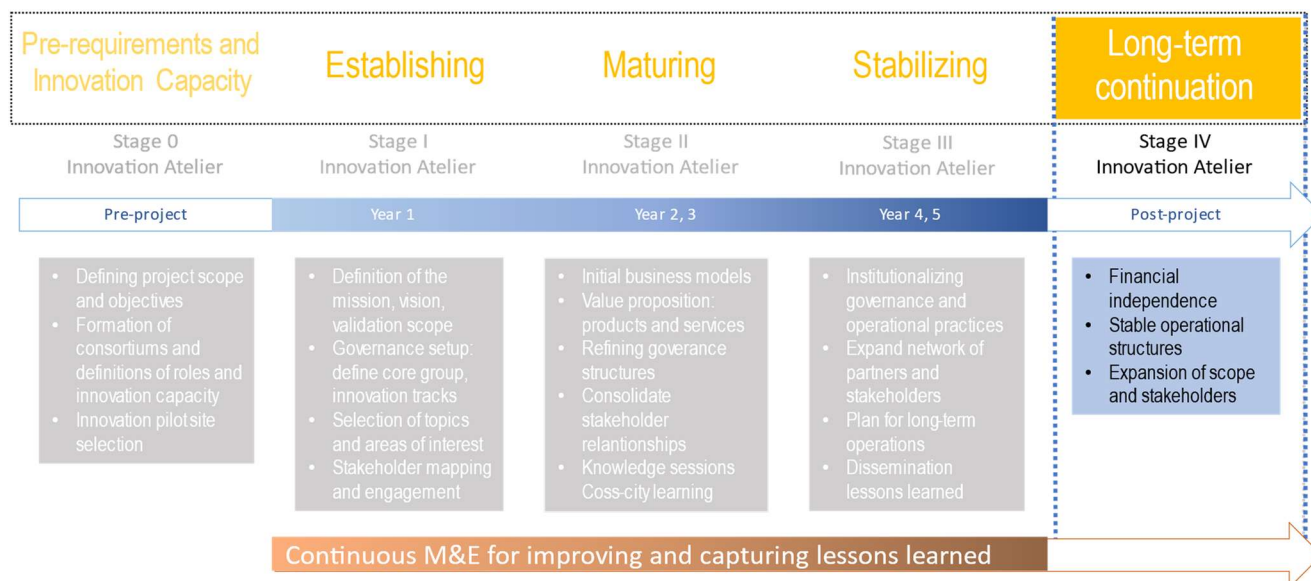


Figure 22: The stages in setting up an Innovation Atelier

WHY?

The long-term continuation stage ensures that the Innovation Atelier (IA) remains an active enabler of innovation beyond the project's formal duration. This stage focuses on the continuation of a stable governance structure, securing financial sustainability, and embedding the IA into broader city and regional strategies and governance structures. The IA should evolve from a single project-based initiative into a long-lasting partnership that embraces new projects and initiatives. As a self-sustaining entity it can continue to drive innovation, collaboration, and impact across multiple urban and thematic areas.

How?

At this stage, the IA's role expands beyond its initial (project) scope, tackling emerging challenges and supporting long-term urban transitions. Replication and upscaling become key priorities, allowing the IA model to be adapted to new districts and challenges, and to scale to other cities. To maintain its relevance and effectiveness, the IA must actively engage with local, regional, and international stakeholders, ensuring adaptability and continuous growth as a leading force for sustainable innovation.

Replication and upscaling should be embedded in the IA's vision and mission, ensuring that knowledge gained during the innovation projects' life shared with new sustainable innovative developments elsewhere, and that the IA serves as a model for other cities or challenges. Ideally, local authorities should recognize and support this role, reinforcing the IA's long-term viability. Establishing a strong network of committed stakeholders will help align efforts and define clear objectives for the IA's sustained operation.

To function as an independent entity, the IA must align with the city's broader development strategies, ensuring that its goals and benefits are well understood and integrated. A well-structured replication strategy should include activities such as raising awareness among

stakeholders, sharing relevant data, exploring financing alternatives, and fostering to focus on the broad scope of urban transition

Key steps to secure long-term continuation include:

- **Integrating long-term sustainability into project planning:** Integrate a framework for testing how the IA operates post-project under different institutions, initiatives, and governance models, while also expanding access to external experts.
- **Ensuring financial sustainability:** Moving from project-based funding to long-term institutional support, public-private partnerships, and regional/national funding models is essential. A diverse financial strategy can include stakeholder contributions, municipal backing, and service-based revenue.
- **Expanding the IA beyond city limits:** Some IAs can evolve into regional or national platforms, aligning with larger policy objectives and supporting broader innovation ecosystems.
- **Replicating and scaling the IA model:** The IA approach can be adapted to new urban challenges and themes, supporting ongoing collaborative projects and ensuring continuous innovation and impact.

For an IA to continue independently, all involved stakeholders must recognize its value and integrate it into broader development plans. This requires raising awareness among city teams, policymakers, and urban stakeholders, sharing relevant data and insights, exploring diverse financing options, and facilitating the creation of communities.

ATELIER EXAMPLE

The ATELIER cities have formulated their views on the long-term continuation of their Innovation Ateliers. Learning from the cross city exchange and discussion amongst the ATELIER cities on the 7th Fellow City event in Amsterdam (March 25th - 27th), all 8 cities have expressed the added value of the Innovation Atelier approach, presented unique city plans (see annex A3, and below for example) for long term continuation of the Innovation Ateliers, and strongly supported the suggestion to consider a way to maintain also a city network environment, where the cities can continue to learn peer to peer, to access a pool of experts potentially, and keep updated with the latest state of affairs and results coming from other cities.

In most cases, the ATELIER project has initiated the development of a more robust portfolio of energy efficiency projects, climate plans and initiatives, fostering a strong coalition of city representatives, business and research partners, to exchange, inspire and learn from others. The initial scope of developing a PED has extended over time, and moved along towards climate neutral city initiatives, including strategies to combatting energy poverty and or increasing energy independency. We have also seen actual replication taking place in cities, with new partnerships, different goals and visions.

MATOSINHOS

Long-term continuation IA in cities



Figure 23: Matosinhos Innovation Atelier long term continuation plan

8. Reflecting on the Innovation Atelier method

Innovation Ateliers (IAs) thrive on collaboration, bringing together academia, industry, government, and civil society to co-create sustainable innovations. While some IAs operate as voluntary networks, fostering openness and inclusivity, others adopt formalised structures to ensure accountability and long-term commitment. Regardless of their setup, six key elements determine their success:

1. Vision, Mission and strategy setting
2. Value proposition
3. Strategic coordination
4. Open innovation activities
5. Learning and knowledge diffusion
6. Organisational capacity

Vision, Mission and strategy setting

Clear and mutually important goals being formulated as the vision, mission and strategy are essential for the success of any Innovation Atelier. When all participants agree on a shared vision and well-defined mission, it becomes easier to align efforts and mobilize resources. A strong common objective not only fosters commitment and trust but also ensures that collaboration remains meaningful and focused. Without this common vision and mission, initiatives risk becoming fragmented, leading to disengagement and inefficiency.

Value proposition

A well formulated value proposition offers not only tangible benefits for all partners but moreover offering also a unique service or product to the eco-system and participants of the Innovation Atelier activities. Recognition of the tangible benefits for partners and participants is necessary for maintaining engagement and to ensure continued involvement. These benefits can be *economic*, such as securing profitable investments and launching financially viable projects; *social*, by increasing visibility, enhancing reputation, and strengthening professional networks; or *normative*, where actors gain satisfaction from contributing to sustainability and climate action. The way these benefits manifest will vary for different stakeholders, but typically, a combination of at least two types of benefits is needed to keep participants motivated and committed over time.

Strategic coordination

Trust is the foundation of any successful collaboration and must be carefully built and maintained. In voluntary partnerships, where there are no formal enforcement mechanisms, participants rely on mutual confidence in each other's contributions. In more structured collaborations, trust enables productive agreements and smooth coordination. Transparency plays a crucial role in fostering trust, ensuring that all partners have access to information about activities, decisions, and progress. Demonstrating small but consistent successes reinforces the perception that the collaboration is moving in the right direction. Establishing a code of conduct or, in formalised collaborations, defining expectations in mutual agreements, helps to provide stability, commitment and shared understanding. Clear agreements on how value is

created together and how that value is shared also contribute to strengthening mutual trust within the network.

Relevant reflections received back from the cities that applied the method in ATELIER, is that the Innovation Ateliers are helping to break the siloed way of working in municipalities for instance. It reinforces integral analysis and discussion for effective planning of climate neutrality or actual execution of sustainable innovations. It provides a structure for bringing together several departments and experts from various fields, from urban planning, mobility and public transport, to climate, energy and sustainable environment areas. Other cities report the Innovation Ateliers as activator of effective consultation with private companies, knowledge institutes and civil agencies, to be able to ask for their contribution and participation in developing new city policies and plans.

Open Innovation Activities

Maintaining the open innovation character of the Public Private collaboration in the Innovation Atelier seems evident but doesn't come naturally. It is essential for building the trust and commitment of all partners and stakeholders in their endeavour to make the transformation project succeed. Being reflected in all knowledge and innovation activities organised within the Innovation Ateliers, but also through the tools and methods being applied in their use, the openness to collectively share, to be vulnerable, daring to take a risk and ultimately, to learn from each other, from the interaction, experience and integration that is taking shape in the protected environment of the Innovation Ateliers. Attention and support to increase partners innovation capacity and secure open innovation activities is fuelled through several stages in the Innovation Atelier approach.

Learning & Knowledge diffusion

Bringing outcomes of the Innovation Ateliers to a wider audience, through effective communication strategy. Sharing insights and results of the knowledge sessions and open innovation activities taken place in the context of one Innovation Atelier project, with a wider network of cities, is key to increase effective knowledge dissemination and accumulation. Every Innovation Ateliers' success is mutually dependent and relying on the availability and willingness of others to share learnings, knowledge, experience and knowhow. To master this dependency and facilitate the knowledge exchange between cities and projects is evidentially crucial for the successful transformation towards net zero cities, now and in the future. A leading role from a supra national organisation like the European Commission is considered of critical importance.

Organisational Capacity

Minimizing costs and risks is essential to encourage active participation in the Innovation Atelier. Well-structured operations ensure that collaboration is efficient and does not place unnecessary burdens on participants. Clearly defining roles, responsibilities, and workflows creates predictability and accountability, helping to establish a structured yet flexible environment. Having a clear organisation structure that allocates partners into thematic groups (like Innovation Tracks) allows for a focused approach, distributing tasks effectively and ensuring steady progress toward specific objectives. Combining voluntary engagement with professional support can further enhance the Innovation Atelier's effectiveness. Dedicated professionals-whether appointed from within the collaboration or recruited externally-can help

coordinate activities, track learning outcomes, and manage key tasks, ensuring that the initiative remains well-organised and impactful. Professionalizing is of key importance in the stabilising and long-term continuation stages of Innovation Ateliers evolution.

By embedding these six key success factors into their structure and operation, Innovation Ateliers can create a sustainable, transparent, and mission-oriented environment. This approach ensures that collaborations remain resilient, impactful, and capable of driving meaningful innovations, supporting the cities to climate neutrality.



9. Conclusions, recommendations and reflections

If cities endeavour to combat climate change and make an inclusive transition towards a prosperous and sustainable future, they rely heavily on transformative systemic innovations across various sectors. Achieving climate neutrality in industries, built environment, transport and mobility, or energy production requires well-developed plans and strategies to implement sustainable activities. By combining forces of the quadruple helix, cities can foster innovations and implement new breakthrough solutions in this pursuit.

ATELIER project has demonstrated the strength of combining the powers of public, private, science and civil initiatives, through the realization of two eminent Positive Energy Districts in Amsterdam and Bilbao. The project showcased the technical, social and economic reforms and innovations required to unlock the transformation towards energy positive and climate neutral built environment.

The Innovation Ateliers have been developed through three stages, which allowed for a structured and systematic evolution of organisation, value creation and coordination. In line with the ambition to make this approach applicable and useable for other cities and districts too, we have complemented the initial three stages with two more stages. The first is a pre-conditional set of elements to prepare ground *before* establishing. We further added a new, *fourth stage* at the end that focuses on the aspects of continuation, upscaling, and further replication of the approach, practice and lessons learned.

An essential contribution has been provided by establishing Innovation Ateliers in Amsterdam and Bilbao, to support and facilitate the adaptation and innovation processes of realizing the PED projects. This development has kickstarted the planning and implementation for fellow cities in Bratislava, Budapest, Krakow, Riga, Copenhagen and Matosinhos. These Innovation Ateliers bring together the public, private, science and civil partners and stakeholders, to collectively identify the knowledge needs, initiate co-creation initiatives to overcome challenges, and generate a base of knowledge creation and lessons learned accessible for other projects, cities and networks.

This report is building on the learnings of over 5 years of establishing, maturing and stabilising Innovation Ateliers in cities. It offers a practical guide to enable the next generation of initiatives to setup, establish, mature and stabilise a dedicated Innovation Atelier for supporting the adaptation and innovation processes of relevant sustainable transformation project, now and in the future. Practical methods, tools and examples of the ATELIER demonstrator cities have been added to this guideline document, to make the implementation of Innovation Ateliers in their unique local innovation eco-system viable and realistic.

In the context of ATELIER, the main authors have been involved in supporting, guiding and further developing the Innovation Atelier approach in direct connection with the key stakeholders and partners in this project. It is with proud that we can conclude that the supporting mechanisms of Innovation Ateliers are there to stay and will continue to organise their innovation activities to foster wider disseminations of results and lessons learned, thereby creating greater impact

The ATELIER R&D organisations are welcoming new project collaborations. They are open to offer any support and guidance in setting up and applying the Innovation Atelier approach in new areas and fields, or new cities, with the objective help realize transformation projects.

Innovation Ateliers have proven effective in fostering stakeholder engagement, facilitating open innovation activities, and promoting multi-level knowledge exchange. Findings strongly support the conclusion that these Innovation Ateliers have played a crucial role in realizing sustainable solutions in Lighthouse cities and in shaping concrete implementation plans for Fellow cities as part of their broader climate and energy transition strategies.

Lastly, the cities, together with their partners and stakeholders, that built and realized the Innovation Ateliers in this EU funded project, have underlined the tremendous value of the cross-city exchange of knowledge, expertise and lessons learned. Through activities like cross city learning events, and city network gatherings, cities and partners have gained valuable insights and experience of peers and have adopted learnings and practice from their fellow cities. It is beneficial for all participating cities, and many others beyond, to maintain an active city network. This network facilitates cross-city learning across various domains, knowledge areas, and fields of expertise.



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Annex

A1 Innovation Capacity

A1.1 Framework of innovation capacity

In the MOVE21 project, an operationalization of Innovation Capacity was given by providing 5 elements of innovation capacity and offering some initial indicators for assessing them. This is an integrated framework that combines research of Gieske et al. (2016), Timeus & Gascó (2018), Lewis et al. (2018) and the OECD (2019). The framework, as was published in the recent MOVE21's deliverable on improving cities' capacities for innovations, is shown below in Table 2.

Element of innovation capacity	Explanation	Indicators
Leadership	Transformational, engaging leadership plays an important role in the realization and institutionalization of innovations.	• Presence of an innovation strategy • A leader (or management) with a clear vision • Inspiring, motivating and supporting its personnel • Presence of political support in favour of innovation
Organisation	An innovative organisational climate is important for developing innovation capacity.	• Staff is not afraid to take risks and make mistakes and is encouraged to experiment • Resources (funding, staff and time) are allocated specifically towards innovation • Proper internal communication between departments and organisational levels
Knowledge management	Municipalities that have an unrestricted flow of knowledge and data are better able to increase their innovation capacity.	• Ideas and knowledge are shared across organisational boundaries • There is a system present in which knowledge is structurally disseminated
Network	The presence of strong internal and external networks has a positive impact on innovation capacity.	• Collaboration takes place with various actors and stakeholders outside the public sector (e.g. knowledge institutions, companies, citizens' initiatives and NGOs) • A participatory approach is used in the innovation process • The presence of social capital (informal social structures and trust)
Learning	Innovation cannot take place without learning. Embedding new ideas takes place in an ongoing process of action and reflection.	• A learning environment suitable for idea sharing and discussions that generate ideas is established • Presence of a reflective attitude of staff • Staff is open to change and new experiences

Table 2: The Innovation Capacity framework

A1.2 A four-step process for analysing and strengthening Innovation Capacity

During the MOVE21 project, a four-step process has been developed, tested and applied. This process however, is universally applicable to other (public) organisations or innovation collaborations, such as Innovation Ateliers. An overview of the steps, tools and methods that can be used when executing these steps are shown below in

1. Conduct a baseline assessment	Establish a clear understanding of your city's current Innovation Capacity by collecting data on its strengths and weaknesses. Distribute self-assessment surveys and conduct interviews with key personnel across various departments to gather data on perceptions of Innovation Capacity. Tools and methods: Innovation Capacity (self-assessment) Survey and Interview Protocol.
2. Identify key challenges	Review survey and interview results and identify the key challenges of your organisation in terms of Innovation Capacity. Categorise the identified challenges by their impact on your city's Innovation Capacity and by the extent to which you can address them. Focus on the challenges that are most pressing and which you can influence personally. Tools and methods: Innovation Capacity Canvas and Common Challenges Overview.
3. Identify strategies towards action	Identify strategies to address the key challenges identified using workshop tools to facilitate the discussion and planning of actions. This step can be best be undertaken with a group of colleagues. Tools and methods: Innovation Capacity Canvas and Strategies Inspiration Form.
4. Create a detailed action plan	Create a detailed action plan to address the key challenges. Start with small steps and find out what mandate and other involvement or resources are needed. Break down the broader strategies into demarcated, actionable steps with clear timelines and distribution of responsibilities. Tools and methods: Innovation Capacity Canvas and Action Plan Format.

Figure 24: the four-step process of analysing and strengthening Innovation Capacity (MOVE21, D6.8)

A1.3 Innovation Capacity in the preparation step:

Innovation Capacity is not something you can 'have', tick off the list, or something you have to 'fix'. However, it is an important concept to introduce during this preparation step of the Innovation Ateliers, since understanding what it is and why it is important can help in the design and perpetuation of successful innovation collaboration. Even better, it can help you reflect on the process of innovating collaboratively throughout the project lifetime, and provides the tools to identify barriers, challenges, and the opportunities for growth and overcoming them.

Let's sketch its value with some examples. In various projects over the years, with all kinds of different cities in Europe (amongst others the ATELIER monitoring provided input), there are 15 common challenges (not exhaustive) related to working on innovations or in innovative, new ways, that can be generalized and are widely recognized and shared.

Below, we listed five of these challenges to illustrate their contents. There is one challenge mentioned for each of the framework elements:

- **LEADERSHIP CHALLENGE EXAMPLE:**
Translating high-level, overarching visions or goals (e.g. becoming a climate neutral city) into operational measures remains difficult due to limited alignment of strategic, tactical, and operational levels within organisations. Due to the lack of alignment and lack of integration on vision-level, this sometimes also leads to conflicting interests between domains and tasks in the organisation and execution stage
- **ORGANISATION CHALLENGE EXAMPLE:**
Municipalities are still organised in strong silos. As a result, it is often perceived as challenging to work in an integrated way. Civil servants are reliant and dependent on

their personal networks in the organisation to find like-minded people to work with. Also, civil servants are dependent on management levels in steering (mandate) on working beyond siloes and stressing the importance of integrated work.

- **KNOWLEDGE MANAGEMENT CHALLENGE EXAMPLE:**
Public organisations often do not have a structured knowledge management and learning approach, therefore actual exchange highly depends on peoples' capacity and willingness to share insights, create learning objectives, monitor, reflect and evaluate. Also, capturing knowledge and lessons learned in projects is often not prioritised or standardised and translating them to the wider organisation is challenging in the regard that knowledge is context dependent and tacit.
- **NETWORK CHALLENGE EXAMPLE:**
Collaboration with private parties is challenging. First, there needs to be a level of trust between the parties to build fruitful cooperation. Second, procurement rules make it very challenging for public organisations to set-up flexible procurements and create long-term collaboration agreements. Third, building on the second, whilst collaboration in a project might be feasible, building sustained, long-term collaborations is difficult.
- **LEARNING CHALLENGE EXAMPLE:**
There is a lack of learning loops, including feedback and feed-forward loops (uptake of lessons learned from previous projects, programs, processes). Therefore, it is difficult to broadly anchor new processes and lessons learned in newly starting projects, programs, policies, within the organisation.

These are just some examples, in this context scoped to challenges in municipalities and other public organisations, but generalizable to other innovation collaborations. Knowing that working on innovation can be challenging, and has some very specific challenges (for instance working with limited and temporary financing, personnel and (political) support, only available for a pilot period makes the mission of scaling up, or sustaining collaborations and innovations beyond the pilot/project lifetime extremely difficult), it is useful to a) avoid these challenge wherever you can in the project design, b) have the ability to pinpoint what the underlying issues and barriers are once you stumble upon them, and c) to know how to work on overcoming them and strengthening the innovation capacity.

Examples of potential actions to take during this preparation step to minimize the risk of getting stuck in your project due to one of these challenges are:

- Arranging support from your management, but most of all, also from your manager's manager. Having leadership backing can be very valuable when things in the project tend to go off course, need some adjustment, or allow for some flexibility. Higher level leadership's support can provide the backing that middle management maybe cannot.
- Ensuring to involve colleagues from other departments that you might foresee needing as allies in the project later. Due to the siloed characteristics of many large organisations, interests and goals might be conflicting. Being timely in addressing potential clashes, or requests for support and/or resources from departments not primarily involved in the project, can help you in the long run.
- Discussing the need for flexibility in the organisation or partnership to acquire or build new knowledge or hire new (temporary) employees with specific expertise. An innovation project is hard to predict in its course, and thus in its required staffing and knowledge base. Anticipating this gap and ensuring that there is some room for

flexibility without getting (too) stuck in annually planned budgets and project agreements.

- Appointing boundary spanners or allow people to operate as a boundary spanner within the organisation or partnership. This bridge-function is extremely valuable and vital for innovation projects, and it requires a 'freer' role to move between boundaries of departments or different organisations (both inside and outside of the direct project partners) that can be anticipated and facilitated from the start of the project.
- Make learning an explicit, continuous part of the organisation or project culture, by structurally allocating time and budget towards learning processes and also prioritise organisational/eco-system learning. Management and leadership should also create the environment where there is room to learn and experiment, where learning from innovation projects is more important or equally as important as the success of the project, within the agreed-upon boundaries.

The resources created in MOVE21 provide a much more detailed version all the theory, tools and methods regarding Innovation Capacity, including some examples from the Living Labs of that project.

A1.4 Network recommendations for preparation stage

Identify and integrate the key stakeholders, making sure they are representing the quadruple helix (business, research, government, citizens); To increase the engagement and impact, make sure the IA is aligned with strategic agendas of the partners. Moreover, it is recommended to allocate funding or find funding mechanisms to support the active engagement of the different stakeholders (outside the core group of partners for instance).

Several recommendations can be derived to implement a successful IA. It is important to connect the mission and vision to the strategic agendas of the partners, and to link it with other existing initiatives and long-term goals. Innovation activities while focusing on the challenges encountered by the pilots, are even more effective when they are framed in a broader way so that they can support the needs of the local eco-system. Finally, it is recommended to engage key stakeholders (quadruple helix) in the Innovation Atelier core group.

Stakeholder involvement is another critical aspect of Innovation Ateliers. Regular meetings and discussions among stakeholders help in the early identification of obstacles and foster collaborative problem-solving. This inclusive approach ensures that the solutions developed are well-rounded and have broad support from all relevant parties.

A2 Organisational model

	Establishment stage	Maturation stage	Stabilising stage		
	Network	Virtual	Association Full	Association Limited	Open Innovation Platform
Non-personal liability			Yes	No	No
Eligibility to apply funds/incentives	Yes			No	
Contracting capacity	Yes		Yes		
Flexibility to add on a partner	Yes	Yes		Yes	Yes
Functional clarity	Yes	No			No
Agility against changes		Yes		Yes	Yes
Transparency among other partners			Yes	Yes	
Decision-making style			Yes	Yes	

Table 3: Framework for choosing the right organisational model (D3.1)

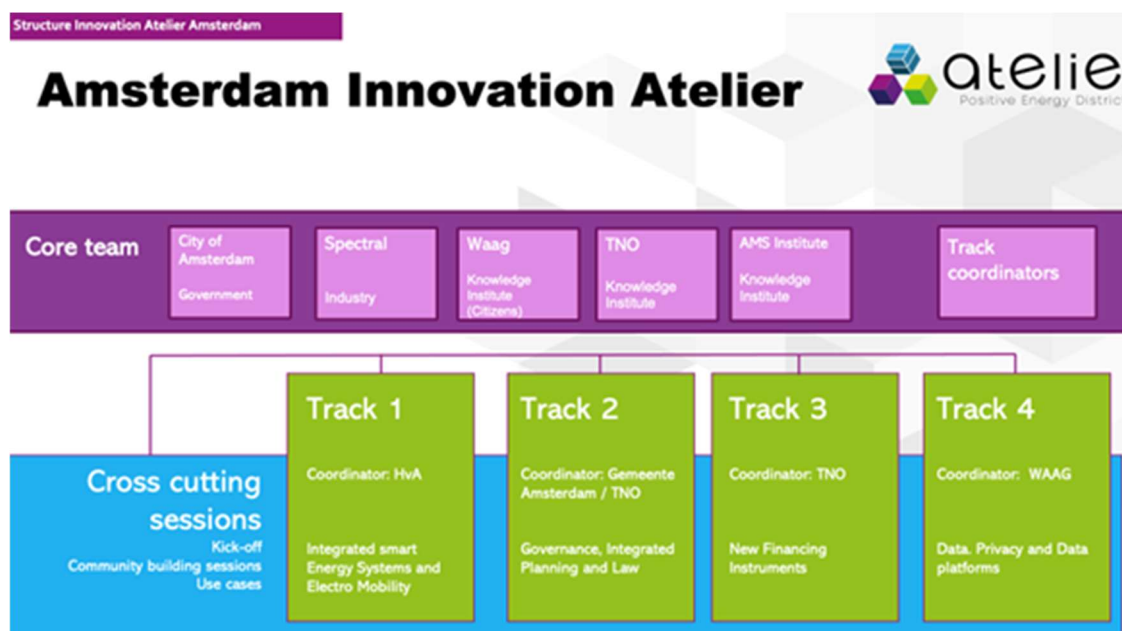


Figure 25: Amsterdam Innovation Atelier organisation

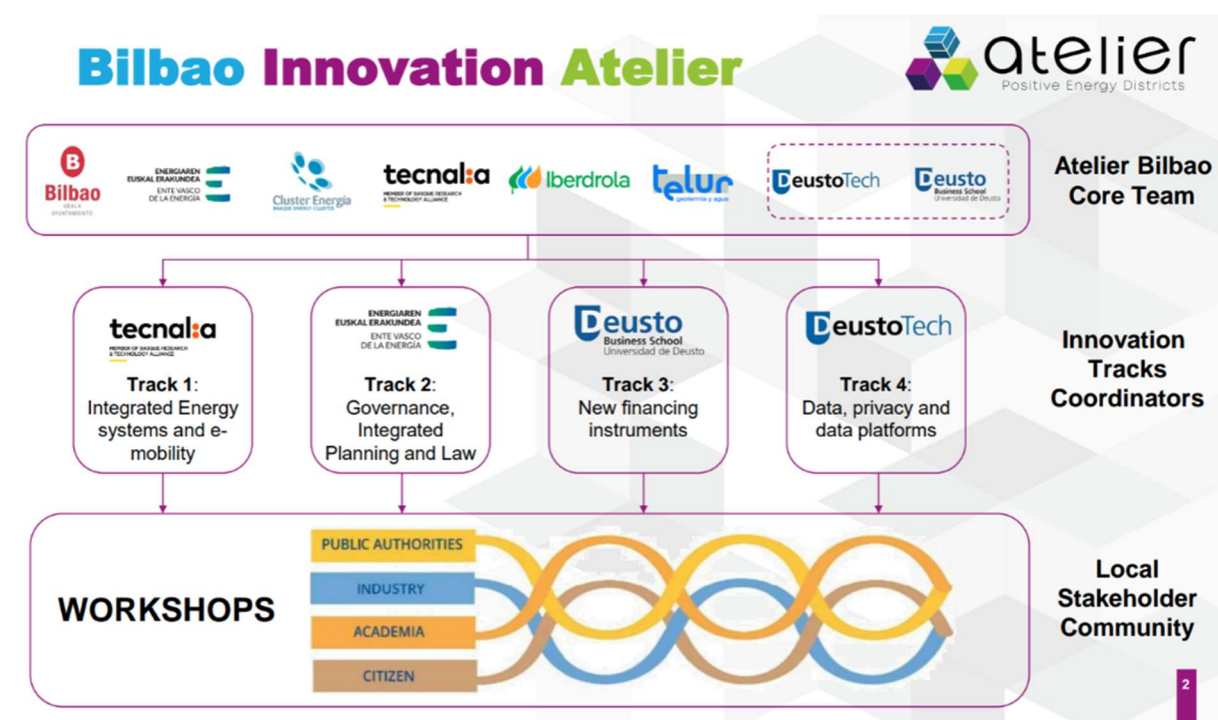


Figure 26: Bilbao Innovation Atelier organisation

	Service	Activities
Ecosystem	Community building	Scouting, brokerage, awareness creation, dissemination, ecosystem building
	Strategy development	Market intelligence, market assessments, roadmapping, technology watch
	Ecosystem learning	Workshops, seminars to share knowledge and experience
	Representation, promotion	Representing interests during meetings & conferences, organizing (country) visits, roadshows
Technology	Strategic RDI	Joint, pre-competitive R&D, secondment from companies
	Contract research	Specific R&D, technology concept development, proof of concept
	Technical support on scale-up	Concept validation, prototyping, small series production
	Provision of technology infrastructure	Renting equipment, low rate production, platform technology infrastructure, Lab facilities
	Testing and validation	Certification, product demonstration, product qualification
Business	Incubator/accelerator support	VoiceOfCustomer, market assessment, business development, legal, IPR, location, sales strategy
	Access to finance	Financial engineering, connection to funding sources, investment plans
	Skills and education	Courses, bilateral mentoring, workshops, technological infrastructure for education, secondment
	Project development	Identification of opportunities, creating consortia, development of proposals
	Offering housing	Office space and space for experimentation and pilot manufacturing

Figure 27: overview of Innovation Atelier services to offer and generate income from (DIHNet, 2019)

A3 Long term continuation

Copenhagen

Long-term continuation IA in cities

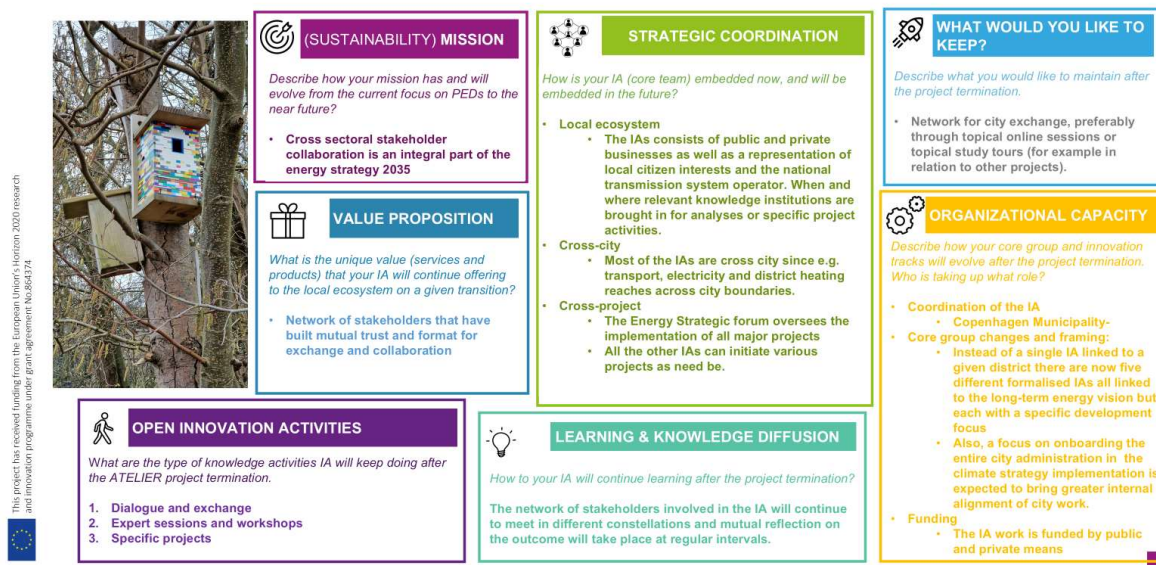


Figure 28: Long term continuation plans Innovation Atelier Copenhagen

MATOSINHOS

Long-term continuation IA in cities



Figure 29: Long term continuation plans Innovation Atelier Matosinhos

Budapest

Long-term continuation IA in cities

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.864374.

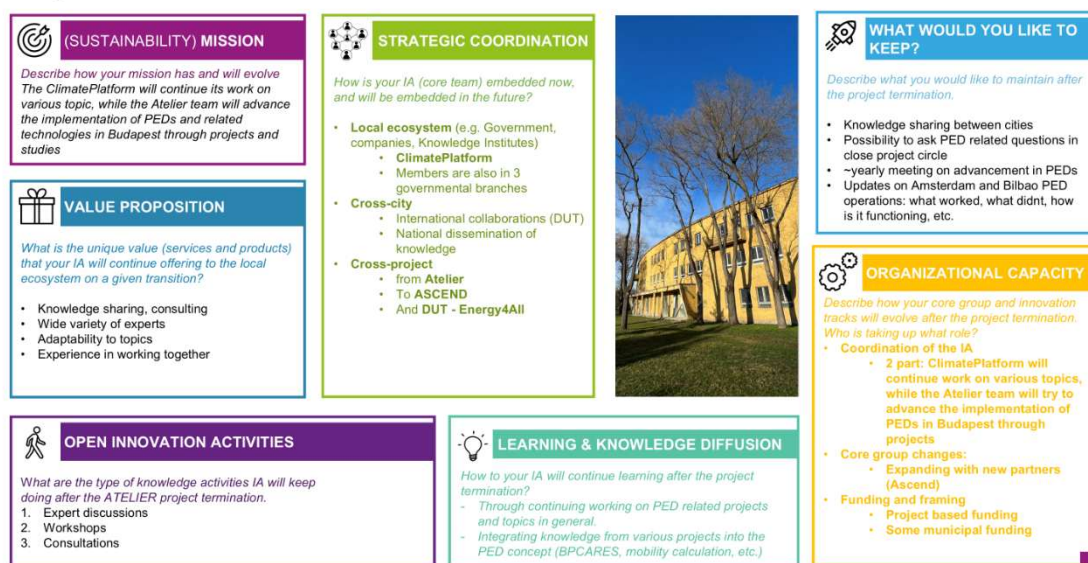


Figure 30: Long term continuation plans Innovation Atelier Budapest

BRATISLAVA

Long-term continuation IA in cities

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.864374.

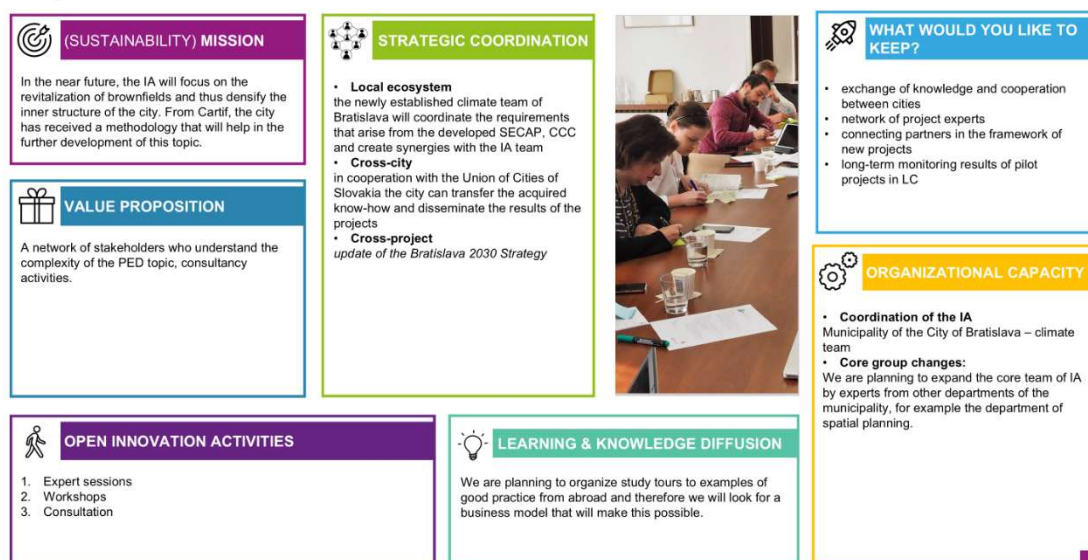


Figure 31: Long term continuation plans Innovation Atelier Bratislava

RIGA

Long-term continuation IA in cities

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.864374.



Figure 32: Long term continuation plans Innovation Atelier Riga

KRAKÓW

Long-term continuation IA in cities

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.864374.

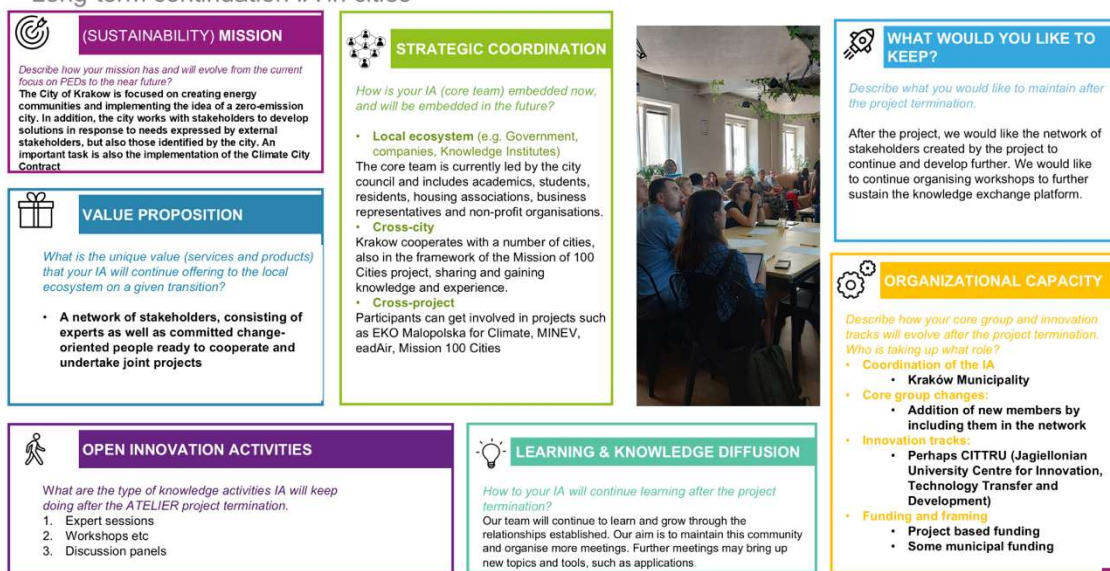
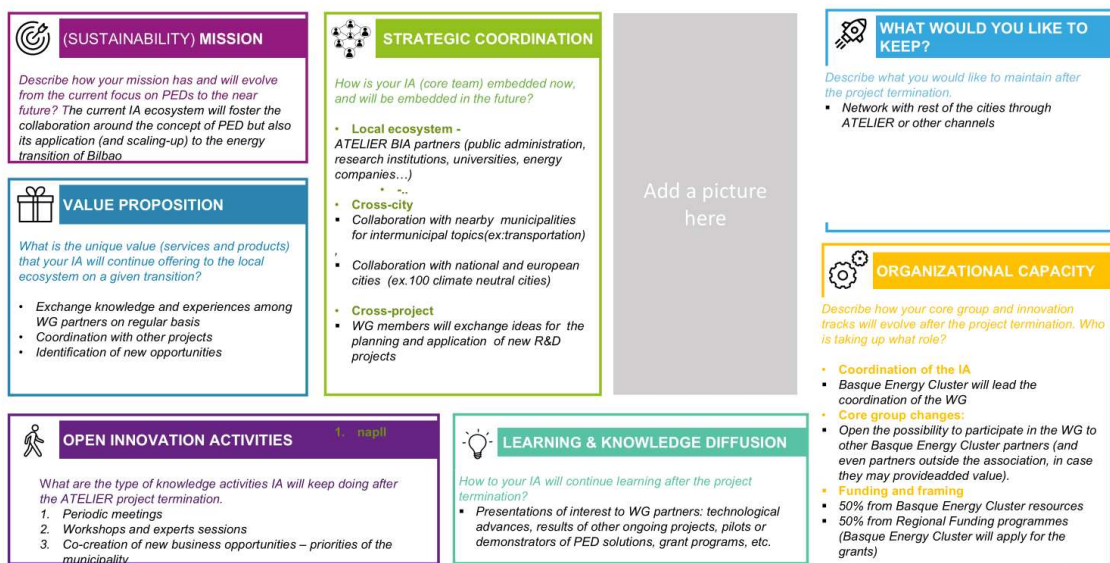


Figure 33: Long term continuation plans Innovation Atelier Kraków

BILBAO

Long-term continuation IA in cities

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 864374.



(SUSTAINABILITY) MISSION

Describe how your mission has and will evolve from the current focus on PEDs to the near future? The current IA ecosystem will foster the collaboration around the concept of PED but also its application (and scaling-up) to the energy transition of Bilbao

VALUE PROPOSITION

What is the unique value (services and products) that your IA will continue offering to the local ecosystem on a given transition?

- Exchange knowledge and experiences among WG partners on regular basis
- Coordination with other projects
- Identification of new opportunities

STRATEGIC COORDINATION

How is your IA (core team) embedded now, and will be embedded in the future?

- Local ecosystem** - ATELIER BIA partners (public administration, research institutions, universities, energy companies...)
- Cross-city**
 - Collaboration with nearby municipalities for intermunicipal topics (ex: transportation)
- Cross-project**
 - Collaboration with national and european cities (ex: 100 climate neutral cities)
- Cross-project**
 - WG members will exchange ideas for the planning and application of new R&D projects

WHAT WOULD YOU LIKE TO KEEP?

Describe what you would like to maintain after the project termination.

- Network with rest of the cities through ATELIER or other channels

ORGANIZATIONAL CAPACITY

Describe how your core group and innovation tracks will evolve after the project termination. Who is taking up what role?

- Coordination of the IA**
 - Basque Energy Cluster will lead the coordination of the WG
- Core group changes:**
 - Open the possibility to participate in the WG to other Basque Energy Cluster partners (and even partners outside the association, in case they may provide added value).
- Funding and framing**
 - 50% from Basque Energy Cluster resources
 - 50% from Regional Funding programmes (Basque Energy Cluster will apply for the grants)

OPEN INNOVATION ACTIVITIES

What are the type of knowledge activities IA will keep doing after the ATELIER project termination.

- Periodic meetings
- Workshops and experts sessions
- Co-creation of new business opportunities – priorities of the municipality

LEARNING & KNOWLEDGE DIFFUSION

How to your IA will continue learning after the project termination?

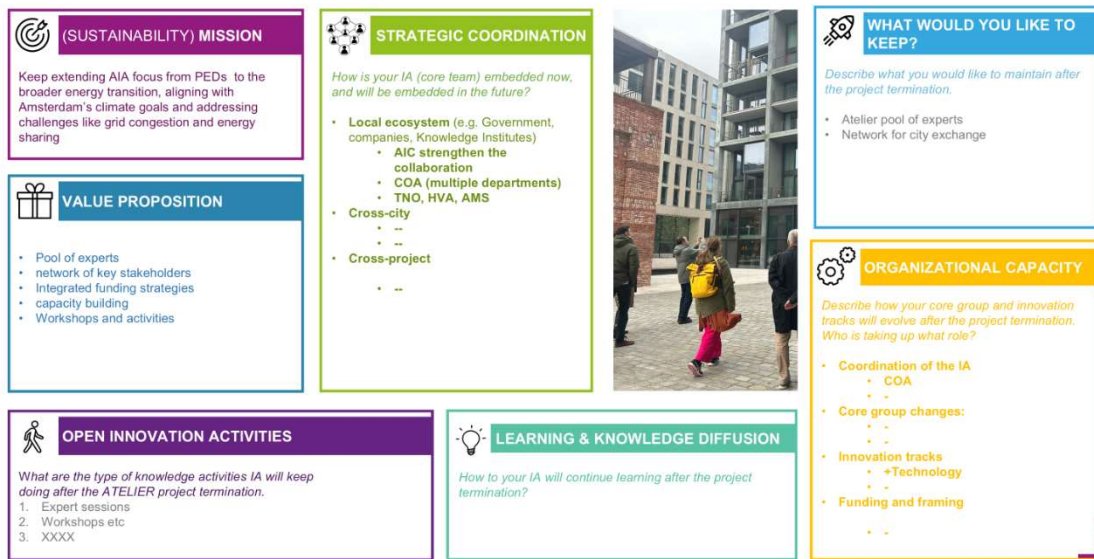
- Presentations of interest to WG partners: technological advances, results of other ongoing projects, pilots or demonstrators of PED solutions, grant programs, etc.

Figure 34: Long term continuation plans Innovation Atelier Bilbao

AMSTERDAM

Long-term continuation IA in cities

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 864374.



(SUSTAINABILITY) MISSION

Keep extending AIA focus from PEDs to the broader energy transition, aligning with Amsterdam's climate goals and addressing challenges like grid congestion and energy sharing

VALUE PROPOSITION

- Pool of experts
- network of key stakeholders
- Integrated funding strategies
- capacity building
- Workshops and activities

STRATEGIC COORDINATION

How is your IA (core team) embedded now, and will be embedded in the future?

- Local ecosystem** (e.g. Government, companies, Knowledge Institutes)
 - AIC strengthen the collaboration
 - COA (multiple departments)
 - TNO, HVA, AMS
- Cross-city**
 -
- Cross-project**
 -

WHAT WOULD YOU LIKE TO KEEP?

Describe what you would like to maintain after the project termination.

- Atelier pool of experts
- Network for city exchange

ORGANIZATIONAL CAPACITY

Describe how your core group and innovation tracks will evolve after the project termination. Who is taking up what role?

- Coordination of the IA**
 - COA
- Core group changes:**
 -
- Innovation tracks**
 - Technology
- Funding and framing**
 -

OPEN INNOVATION ACTIVITIES

What are the type of knowledge activities IA will keep doing after the ATELIER project termination.

- Expert sessions
- Workshops etc
- XXXX

LEARNING & KNOWLEDGE DIFFUSION

How to your IA will continue learning after the project termination?

Figure 35: Long term continuation plans Innovation Atelier Amsterdam