

EXPLORING PILOT POTENTIAL

Rethinking Amsterdam's Municipal Engagement in
Collaborative Governance

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PREFACE & ACKNOWLEDGEMENTS

I am excited to share the result of the last months of my educational journey. Before we start delving into the contents, I would first like to take you along in a short background of the forthcoming of this master thesis. My path toward this research has not been straightforward. I began my student career at the TU Delft, where I completed the Bachelor Industrial Design Engineering. I then started the master Design for Interaction and even considered switching to Architecture, by doing a premaster but neither felt like the right fit. Eventually I found my place in the MADE master's programme, a collaboration between TUDelft and Wageningen University And Research. MADE, with its interdisciplinary projects and mix of backgrounds and nationalities, brought both frustrations and inspiration. Having to collaborate across disciplines was often challenging, but it also taught me more than anything else about how collaboration works in practice.

The motivation for this thesis grew out of a sense of curiosity I experienced at an international conference for smart cities in Barcelona in November 2024. Countries proudly presented their latest technologies at impressive stands, yet I saw little exchange between them. I may have been naïve, but I hoped for change and for more knowledge sharing at such remarkable events. That desire for exchange shaped my interest in how organisations and cities can learn from one another.

What began as an attempt to translate the lessons of ATELIER into something usable quickly turned into a deeper question: why is such learning so difficult? That question guided the direction of this thesis. I entered this process with little prior knowledge of the subject. Almost everything in these pages I had to learn along the way. Beyond the theories and the case material, I learned how complex collaboration becomes when ambitions, responsibilities and expectations are not fully aligned. In retrospect the conclusions may seem obvious, but they are rarely addressed in the literature. I hope this thesis makes a modest contribution in that respect.

For practice, I hope the findings and recommendations can support EU departments and other municipal teams starting similar projects, helping them to prepare for the demanding and often less familiar way of collaborating. For the literature, I aim to show that while research on collaborative governance rightly focuses on inter-organisational dynamics, it tends to overlook whether actors themselves have a the right things in place to join the collaboration. This thesis shows how fragile that assumption can be.

I want to thank my supervisors. **Marina**, your constructive criticism pushed me to strengthen my arguments and keep my work focused. At the same time, your patience and understanding created the space to work without unnecessary stress, which I value greatly. **Ellen**, your knowledge on this topic and clear guidance gave me both confidence and direction, and your own publications sparked much of the interest that carried me through this thesis.

My gratitude also goes to the entire **ATELIER** team, with particular thanks to Juanita, for introducing me to this subject, and Jeroen, for your thoughtful input and inspiration throughout the process.

I could never have reached the results of this thesis without the support of the many people I interviewed and the interesting conversations at the events I attended. They not only shared their knowledge but also made the process much more enjoyable. A special thanks goes to **Mimi**, whom I met as a representative of the municipality of Amsterdam. Her understanding of my personal situation, her encouragement to be critical of what is not working in the Municipality, and the many moments of informal exchange gave me both inspiration and motivation. If the municipality were filled with more people like Mimi, this research might have been far less necessary.

I also wish to thank my family and friends, whose encouragement carried me through the more demanding stages of this work. Finally, I want to thank my fellow MADE students for the inspiring and genuinely enjoyable time we shared. They made this master's programme fly by and left me with no doubt that I had made the right choice.

I have really enjoyed my master thesis project, and I hope that comes across in the reading of it.

Inés van der Klip

Amsterdam has committed to ambitious climate targets and is looking for ways to innovate its energy infrastructure. To support these ambitions, the municipality of Amsterdam participates in European pilot projects that test new technologies and new forms of collaboration. These pilots create opportunities for innovation, yet they also expose governance challenges and raise questions about how lessons from these project can be integrated in the municipality.

Municipalities are expected to take an important role in pilot projects, connecting experimental initiatives to long-term strategies and public responsibilities. This role is demanding, as municipalities are large organisations with many tasks and internal layers. Coordinating across departments while working with external partners makes pilots an important but also challenging instrument. Research often describes how collaboration between public, private, civic and academic actors takes shape. Less is known about how the public actor navigates these collaborations and how their position influences the way pilots function.

This thesis explores that through the Horizon 2020 project ATELIER in Amsterdam, which develops Positive Energy Districts in collaboration between public, private, academic and civic actors. The study investigates how coordination was organised and how the municipality engaged with and recognised the knowledge produced during the project.

The research is based on a qualitative single-case study design. It combines three sources of data: project documents, semi-structured interviews with municipal officials and consortium partners, and observations during an internship at the Municipality of Amsterdam. This combination made it possible to do a qualitative analysis of how coordination and learning were experienced in practice. The analysis draws on 2 main theories. The first is the collaboration dynamics from the Collaborative Governance Regime framework from Emerson et al. (2012), which looks at how collaboration is sustained through engagement, trust and joint capacity, and the second is absorptive capacity's first step on how organisations recognise and take up external knowledge. Together, these concepts were used to examine both the organisation of coordination and the conditions for municipal learning.

The results show that Amsterdam's role in ATELIER lacked clear institutional anchoring. Responsibilities were unclear, leadership

improvised, and coordination often relied on informal arrangements and motivated individuals. Engagement was inconsistent, staff turnover disrupted continuity, and mechanisms for transferring knowledge across departments were absent. As a result, lessons on collaboration and governance risk staying within the consortium and can't easily reach the performances of municipality of Amsterdam.

The thesis concludes that municipal readiness is a decisive condition for effective participation in pilots. Clear purpose, defined responsibilities, and internal structures are necessary for municipalities to translate pilot lessons into practice. The study exposes the fragility of pilot scalability and provides a checklist of organisational conditions that can strengthen the role of public actors in future collaborative projects. The theoretical contribution is that, while current frameworks mainly emphasise relational factors of collaboration, this research shows the need to also account for the readiness of public actors.

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AI statement

During this research, AI tools were used in a supporting role. For the literature review, Consensus was applied to efficiently search and screen academic publications. This accelerated the process of identifying which sources were most relevant for the research questions. For interview data, transcripts were read in full by and then condensed into short summaries with support of ChatGPT. This step made it easier to quickly recall who had said what.

Term	Definition
Absorptive Capacity	An organisation's ability to recognise, assimilate, transform, and apply external knowledge (Cohen & Levinthal, 1990).
ATELIER	Horizon 2020 project in Amsterdam and Bilbao, focused on developing Positive Energy Districts.
Capacity for Joint Action	One of the dimensions of the collaboration dynamics, refers to the organisational arrangements, leadership, knowledge, and resources that enable collaboration (Emerson et al., 2012).
Collaborative Governance	Structured processes in which public, private, and civic actors work across institutional boundaries to achieve a public goal that none of them could accomplish alone (Emerson et al., 2012).
Consortium	A group of organisations from different sectors that jointly apply for and implement a project. In this project it is the core group of the ATELIER project.
Dissemination	The process of sharing and communicating project results within and beyond the consortium.
Follower City	Cities that are not pilots themselves but adopt and test solutions developed by lighthouse cities.
H2020 (Horizon 2020)	European Union Research and Innovation programme (2014–2020) funding projects like ATELIER.
Innovation Atelier	A governance framework developed within ATELIER to organise collaboration and guide experimentation with multiple stakeholders.
Institutional Anchoring	The process of embedding projects, roles, or lessons into the permanent structures of an organisation.
Institutional Learning	The process through which organisations change their routines, practices, or policies based on new knowledge gained from projects.
Lighthouse City	In EU pilot projects, a city that develops and demonstrates innovative solutions that other cities (follower cities) can adopt and replicate.
Living Lab	A real-life environment where stakeholders co-create and test innovative solutions under real urban conditions (Dijkstra, A.M. & Joore, Peter, 2025)
Mandate	The formal authority or decision-making power given to actors to act on behalf of an organisation.
Positive Energy District (PED)	A district that produces more renewable energy than it consumes, central to ATELIER's technical ambition.
Principled Engagement	Processes in collaborative governance where stakeholders identify, deliberate, and build agreement on shared goals (Emerson et al., 2012).
Quadruple Helix	Collaboration model involving four actor groups: public sector, private sector, academia, and citizens (Carayannis & Campbell, 2009).
Shared Motivation	A component of collaborative governance that refers to trust, mutual understanding, legitimacy, and commitment among actors (Emerson et al., 2012).
Work Package	ATELIER had 10 work packages, each focusing on a different theme such as citizen engagement, governance, and technical development. A work package is a part of an EU project, with its own tasks, deliverables, and a responsible partner.

1.1 National and local ambitions

The Netherlands has committed to be climate-neutral by 2050 and aims to reduce greenhouse gas emissions by 55% by 2030 (Rijksoverheid, 2021). Recent reports doubt the attainment of these targets (PBL, 2024). The built environment plays an important role in this, with a stake of approximately a third of the overall energy demand. Since there needs to be a retrofitting of seven million existing homes, one million non-residential spaces and also the construction of almost one million new homes by 2030 (Ministerie van BZK, 2021; PBL, 2024). This construction task will increase the overall energy demand, adding extra pressure on the national climate goals and creating a challenge between ambition and implementation. These developments are expected to increase electricity demand, due to the planned phase-out of natural gas in the built environment after 2040. This creates additional planning and coordination at the local level.

National policy assigns responsibility to municipalities in managing this transition. The 2017 coalition agreement formalised the decentralisation of the heat transition, asking municipalities to be the coordinators of local implementation (Ministerie van AZ, 2017). Under the 2019 Climate Agreement, municipalities are expected to make neighbourhood-level heat plans in collaboration with housing associations, grid operators and residents (Klimaataakkoord, 2019). This approach requires local governments to have or develop the capacity to coordinate in an integrated manner between different sectors. Several recent policy evaluations suggest that this approach is not without challenges. The Climate and Energy Outlook (PBL, TNO, CBS, & RIVM, 2024, 2024) notes that municipalities experience difficulty fulfilling the coordination role expected of them. The 2023 Climate Policy Progress Report (Klimaatnota) adds that local authorities are expected to scale up implementation while also developing governance approaches for long-term transition, despite the absence of clear institutional frameworks (Ministerie van EZK, 2023). The energy transition also interacts with other urban policy domains, including housing shortages, affordability, grid congestion and environmental targets. This creates dependencies across departments and complicates implementation in practice.



In response, the Municipality of Amsterdam has formulated specific ambitions regarding its coordinating role. The Amsterdam Climate Plan (2020) describes the need to guide the expansion of electricity infrastructure and to align grid planning with large-scale urban development and more efficient and smarter use of the electricity grid. The municipality seeks to influence energy demand and location choices for major users such as housing projects and data centres. The Climate Roadmap (2023) further emphasises integrated planning between energy, mobility and housing as well as the importance of collaboration with other actors. The Research and Innovation Agenda for the Energy Transition 2025–2030, published under the *Energie voor de Stad* programme, sets out three strategic focus areas: spatial integration, behavioural change and inclusive financing. It introduces roadmaps, Living Labs and innovation projects to test new approaches in practice. The agenda also mentions the need for coordination with grid operators and market actor and notes that many relevant tasks fall outside the municipality's formal control.

The municipality plans to collaborate with grid operators and knowledge institutions and to experiment in the form of Living Labs and innovation projects. These projects are expected to support the development of new approaches, knowledge, collaborations and can help future implementation. At the same time, the ambitions don't include concrete plans for how such projects are coordinated in practice, how responsibilities are distributed and how insights from these efforts can be used over time.

1.2 Governance in pilots

The decentralisation of the energy transition has not only shifted technical and financial responsibilities to local governments but has also introduced a governance challenge. The municipality of Amsterdam is now expected to fulfil a dual role to lead implementation through projects and to innovate, coordinate and collaborate in ways that are different from their traditional ways of working. These expectations put pressure on institutional structures that were not originally designed for cross-sectoral experimentation and adaptive learning. According to the Klimaatnota from 2023, public authorities are not only asked to scale up their implementation capacity, but to do so within complex, polycentric systems where institutional innovation and governance renewal are essential for success (Ministerie van EZK, 2023).

The Research and Innovation Agenda for the Energy Transition 2025–2030, published by the municipality under the Energie voor de Stad programme, describes how this shift is being addressed. The agenda outlines three focus areas, spatial integration of energy infrastructure, behavioural change and inclusive financing, where the municipality of Amsterdam aims to contribute. The agenda states that with more than €20 billion in investments needed for energy infrastructure and retrofits, climate targets can only be met if we work differently. It emphasises the use of pilots and Living Labs to test and develop new approaches and explicitly links innovation to organisational and institutional change. So they acknowledge that experimentation is not only about technology, but also about adjusting current processes to support implementation. The same document also recognises that the municipality does not control all the relevant resources or decision-making power. Many infrastructure choices are made by energy companies, grid operators, or regional partners. This creates a need for coordination across sectors, institutions and governance levels. Pilots are often used to explore such collaboration in practice. The Municipality of Amsterdam's innovation strategy builds on this logic. It positions pilot projects as a way to explore alternatives to standard procedures, to develop new partnerships and to identify practical solutions. These efforts are intended to contribute to implementation. Whether and how knowledge from pilots can be retained and reused across contexts remains an open question.



1.2.1 Collaboration and coordination challenges

Pilot projects in the energy transition often rely on collaboration between municipalities, private energy companies, housing associations, grid operators, and knowledge institutions. These partnerships are usually structured around project-based cooperation, in which roles and responsibilities are defined for the duration of the initiative. While this structure can support innovation, it also introduces coordination challenges.

The Amsterdam Court of Audit (2022) found that several of the city's climate and energy ambitions are formulated in general terms, such as “we want to” or “we aim to.” Responsibilities are not always clearly defined or consistently embedded in municipal programmes. As a result, strategic coordination between departments and partners can be difficult to maintain. Another challenge concerns the distribution of influence among actors. Large-scale infrastructure providers, energy companies, and network operators often make decisions based on their own regulatory and financial constraints (Hoppe and Van Bueren, 2015). Since municipalities play a key role in executing sustainability targets at the local level, their success depends on effective collaboration with national governments, private companies and communities. This limits the municipality's ability to steer outcomes. Collaborative settings often involve power asymmetries and divergent interests or goals which complicate coordination (Bridoux & Stoelhorst, 2022). Municipalities may prioritise long-term climate goals, while private actors focus on financial feasibility or legal obligations and communities may be concerned with affordability, ownership, or local control (Hoppe & Van Bueren, 2015). This increases the complexity of coordination when decisions need to be made. To address this, Amsterdam's innovation agenda promotes collaborative governance models that involve market actors, knowledge institutions, residents, and the public sector (Municipality of Amsterdam, 2025). The Research and Innovation Agenda refers to this as a triple or quadruple helix model. It emphasises the creation of “innovation ecosystems” in which diverse forms of expertise and responsibility are brought together. These models aim to increase inclusion and shared ownership of solutions (KabWeyi & Olanrewaju, 2022). Their effectiveness depends on how well coordination is organised throughout the project lifecycle.

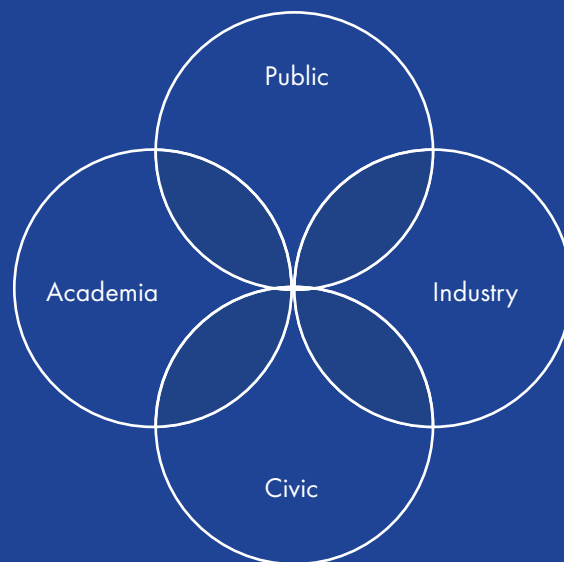


Figure 1.2.1 The quadruple helix Carayannis & Campbell, 2009).

1.2.2 Learning and continuity across projects

Pilot projects are often used to explore new solutions and collaboration models in urban energy transitions. In Amsterdam, many of these initiatives stem from European programmes like Horizon2020, and are designed to test technical, social, or governance innovations. These projects typically include formal dissemination plans and reporting requirements. However, it is not always clear how the knowledge developed through such efforts is retained, transferred, or integrated into the municipality's internal routines. While results are often shared in publications or public events, their practical uptake within the municipal organisation appears limited. Previous studies have pointed out that pilot outcomes are often difficult to scale or generalise, as they are rooted in specific local, institutional, or spatial conditions (Hufen & Koppenjan, 2015). While pilots can generate valuable insights, their temporary nature and limited organisational embedding make it uncertain whether these lessons are taken up beyond the project itself. The Research and Innovation Agenda acknowledges this challenge and calls for better alignment between innovation and implementation agendas (municipality of Amsterdam, 2024). The agenda primarily focuses on the outcomes and ambitions of pilots, while the lessons learnt on collaboration and coordination within those projects receive comparatively less attention.

There are barriers that complicate knowledge transfer. The decentralised nature of the energy infrastructure creates fragmented responsibility. Pilots often work in collaborations with public-private partnerships. Although municipal departments are usually formal partners (the public actor), the extent of their involvement can vary. Without clear internal structures for coordination and knowledge integration, the knowledge developed in these projects may fail to reach the work of departments responsible for implementation.

The establishment of the Team Europese Subsidies (TES) is intended to improve the municipality's capacity to participate in and benefit from European projects. TES acts as a central desk for subsidy acquisition, project support and knowledge management related to EU funding (Team European Subsidies Amsterdam municipality, 2018). Its mandate includes identifying relevant calls for Amsterdam's policy and supporting application processes.

Despite Amsterdam's involvement in multiple EU-funded pilots, lessons from these projects are not always integrated into city-wide strategies. Without clear responsibilities, feedback mechanisms, or any follow up, innovation efforts risk being just experiments and knowledge gained from pilots may not be reused in future initiatives. As municipalities are expected to scale up transition and innovation efforts in the coming years, the ability to systematically learn from project-based experimentation will likely become more important (municipality of Amsterdam, 2025).

1.2.3 short analysis of the municipality of Amsterdam

The Municipality of Amsterdam is organised in five clusters: Social, Economic, Spatial and Sustainability, Operational and Internal Services. These are subdivided into departments and connected to seven city districts with their own responsibilities (municipality of Amsterdam, n.d.). This segmented structure creates silos and makes cross-coordination difficult (Voorwinden, 2022). Innovation is not steered centrally. The municipality positions itself as facilitator in hybrid networks such as the Amsterdam Economic Board and Amsterdam Smart City, where public, private and knowledge actors share responsibilities and the municipality is only one partner (Voorwinden, 2022). This model reflects broader changes since the 1990s, when many public services such as energy, transport and telecom were liberalised and partly privatised. These reforms reduced the municipality's direct control over mainsectors and made collaborative arrangements with companies, utilities and knowledge institutions the

default mode of governance (Stellinga, 2012). Against this background it is not surprising that pilots often struggle to take root within the municipal organisation. Strategic agendas such as the Innovatieagenda Duurzaamheid 2023 present pilots and Living Labs as instruments to test systemic change (municipality of Amsterdam, 2023). Yet the Amsterdam Court of Audit has shown that responsibilities inside the organisation are often unclear and that knowledge from projects and reorganisations is rarely embedded in municipal routines (Amsterdam's Court of Audit, 2022). The combination of fragmented organisation, reliance on hybrid networks and weak learning mechanisms explains why lessons from pilots are difficult to anchor.

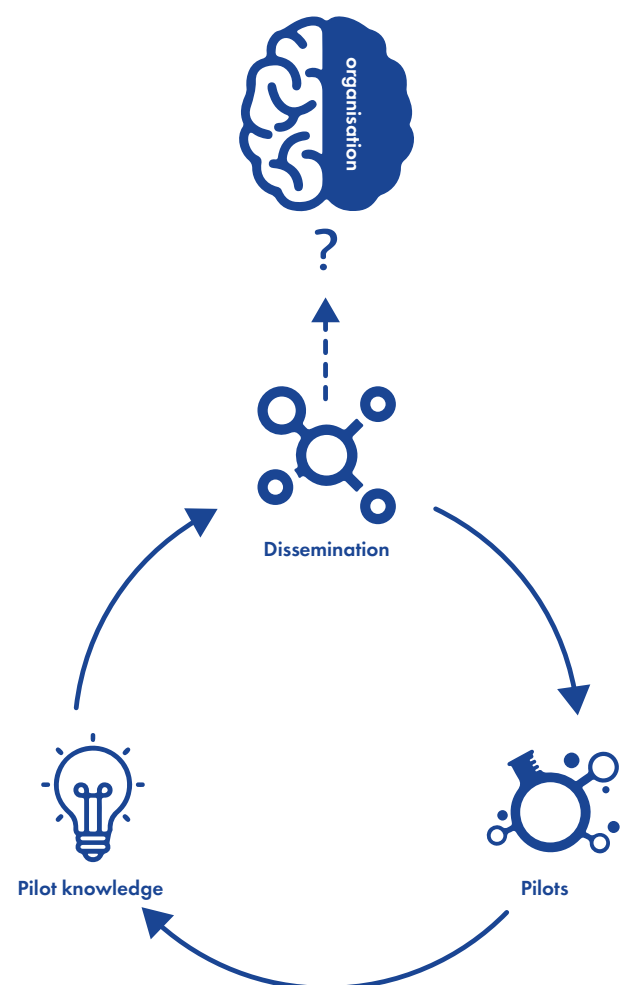


Figure 1.2.3 From pilots to generating knowledge, disseminating it and asking how to place it within the knowledge and expertise of the municipality.

1.2.4 The ATELIER project as a governance pilot

This section introduces the ATELIER project, which forms the empirical context of this thesis. The description is presented in two parts. The first situates ATELIER within its European background: as a Horizon 2020 Lighthouse Project, its funding, scope and activities in Amsterdam and Bilbao. The second discusses ATELIER as a collaborative governance pilot, meaning a structured form of coordination where public, private and civic actors jointly address a shared problem. The focus here isn't on the technical ambitions of Positive Energy Districts (PEDs), urban districts that generate more renewable energy than they consume, but on how collaboration across public, private, civic and academic actors was organised to achieve them.

ATELIER is a large-scale European demonstration project funded under the Horizon 2020 Smart Cities and Communities programme. Horizon 2020 was the EU's research and innovation framework for the period 2014 to 2020, designed to strengthen Europe's competitiveness and stimulate sustainable development through research funding (European Commission, 2014). Within this programme, Lighthouse Projects were launched as multi-year collaborations between cities to accelerate the urban energy transition (CORDIS, 2024).

ATELIER received approximately €21.8 million in total funding, of which €19.6 million comes directly from the European Commission. The project began in November 2019 and will continue until April 2026 (CORDIS, 2024). Its focus is on developing PEDs in two Lighthouse cities, Amsterdam and Bilbao, while several follower cities including Bratislava, Riga and Copenhagen observe and replicate lessons (ATELIER, 2024). In Amsterdam, the demonstration area is Buiksloterham, a mixed-use redevelopment zone in the north of the city. New residential projects such as Poppies and Repubblica are combined with experimental technical measures including low-temperature heating, heat recovery and renewable energy generation and storage (ATELIER, 2024). This scale and ambition make ATELIER not only a technical experiment but also a European flagship project that places cities under pressure to deliver both local results and transferable lessons.

From a governance perspective, ATELIER is equally significant. Achieving the ambition of PEDs requires coordination between actors from the public sector, private industry, academia and civil society, following a quadruple helix model (Carayannis & Campbell, 2009). The project also aims to identify and remove legal, financial and social barriers

to implementation and to share knowledge across participating and follower cities in Europe (CORDIS, 2024b). Amsterdam participates through a consortium of public, private, academic and civic actors working in Buiksloterham. To support this collaboration, partners developed the Innovation Atelier (IA), a guide to organise joint experiments and align short-term innovation with long-term transition goals. The Innovation Atelier was introduced by the consortium, showing the need for a structured approach to collaboration (ATELIER, 2024;D3.9). It is positioned as a transferable governance framework for achieving a PED, offering insight into how partners documented their governance practices and what they hoped could be reused in future initiatives.

The use of pilot projects to support sustainability goals raises important questions about how such initiatives are coordinated, how knowledge circulates, and whether municipal actors are able to act in and translate insights into practices. This research examines these questions by focusing on the ATELIER project in Amsterdam. The project serves as the context to explore how coordination is organised in practice, and how learning is facilitated within a pilot.

The next section introduces the research aim and questions, along with the relevance of this study. Chapter 2 covers the theoretical background used to analyse coordination and learning in pilots. Following that, Chapter 3 explains and visualises the conceptual model for this research. Chapter 4 describes the methodology. The findings are presented in Chapter 5 and discussed concerning the existing literature in Chapter 6. Finally, chapter 7 concludes the thesis and chapter 8 and 9 explain the recommendations and limitations.

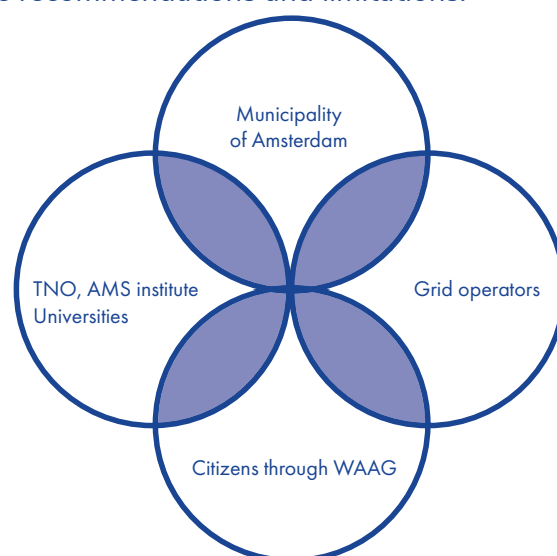


Figure 1.2.4 Quadruple helix, including the stakeholders that were mentioned during this research.

1.3 Research aim

Although pilots produce valuable insights, the extent to which the outcomes are embedded in the municipality of Amsterdam is currently difficult. Given that the municipality is the public actor within the quadruple helix model alongside market, knowledge institutions and citizens, this research pays particular attention to its role in influencing coordination and enabling learning. This research therefore focuses on coordination in a specific pilot in Amsterdam that used a quadruple helix and how it influences the municipality's ability to engage during and act upon generated knowledge. This research focuses on how coordination is organised in this project and how the role of the public actor affects both project progression and the uptake of lessons inside the municipal organisation.

The goal of this research is to find situations that support or hinder engagement from the public actor in pilots. By doing so, it makes it possible to identify conditions that support or hinder engagement from the municipality of Amsterdam in pilots, with the broader objective of informing approaches for Amsterdam's pilot projects. To do this, the main research question below will be answered. The sub questions reflect different dimensions of the main research question. The first focuses on how coordination was organised in ATELIER, referring to the first part of the main question, and how it shaped collaboration and project outcomes. The second examines the municipality of Amsterdam's internal positioning within the project, offering insight into how the public actor engages in a project like ATELIER. The third is needed to know whether and how the municipality absorbs knowledge from ATELIER, and which factors influence this process. Answering these questions will help understand how the municipality of Amsterdam functions in pilots, and helps to give recommendations that can inform how the municipality could approach coordination and learning in future pilots.

1.4 Relevance

Many reports and handbooks provide guidance on how such collaborations can be organised. One recent report called "The Urban Living Lab Way of Working Handbook" show this focus (Dijkstra and Joore 2025). At the same time, the same studies shows that cooperation with the municipality of Amsterdam as public actor is often difficult and can slow down projects. This makes the role of the public actor particularly relevant to understand.

It might help to look deeper into the collaboration dynamics and the effect they have, to explain why it is urgent to make this work in order to reach the climate objectives. There is a gap in understanding what effect the public actor has on collaboration and how it influences the continuity and institutional uptake of pilot lessons. This research addresses that gap by focusing on the municipality of Amsterdam's position in the ATELIER project. Municipalities do not only participate. They carry mandates, public responsibility and the capacity (or sometimes the lack of it) to embed project lessons into their organisation and execution. They also have resources that can support projects. A more detailed understanding of the collaboration can help explain why pilots often remain only experiments. With a clear understanding of what happens during this project, new approaches can be recommended for future projects.

M Q

How is coordination organised in a collaborative governance project involving the municipality of Amsterdam, and how can insights inform their approach in future projects?

1

What forms of coordination were used in ATELIER, and how did they influence collaboration and outcomes?

2

How did the City of Amsterdam position itself within ATELIER, and how was the municipality internally organised to engage in the project?

3

To what extent does the Municipality of Amsterdam absorb and apply lessons from ATELIER, and which institutional or project-related factors influence this process?

2.1 Governing coordination

The following section introduces the theoretical background that guides the analysis of ATELIER. In projects like ATELIER, no single stakeholder holds authority to enforce decisions or assign roles. Actors operate alongside each other, which raised questions about who decides, who takes responsibility and how tasks are distributed. Therefore, coordination becomes a design challenge in itself. This section summarises relevant literature about governance in multi-stakeholder projects. This part of the theoretical background combines two bodies of literature. The first is the Collaborative Governance Regime (CGR) framework by Emerson et al. (2012), which provides three dynamics to assess whether collaboration rests on a solid foundation. The second is literature on governance tensions, which explains the trade-offs and paradoxes that emerge when collaboration is managed in practice. The CGR framework offers a way to assess the structural conditions of collaboration, while governance tension literature highlights how those conditions play out in practice. Taken together, they provide complementary perspectives to analyse coordination in ATELIER.

2.1.1 Governance models and coordination tensions

Atelier operates within a quadruple helix governance model, a framework that expands the earlier Triple Helix Model developed by Etzkowitz and Leydesdorff (2000). The Triple Helix focuses on the interplay between academia, industry and government. The Quadruple Helix adds civil society to this (Carayannis & Campbell, 2009). This addition acknowledges the role of citizens in shaping innovation and outcomes.

In this model, every actor fulfils a distinct role. Industry provides access to resources and involves the participation of local stakeholders (Luengo-Valderrey et al., 2020). Academia leads in knowledge production and dissemination, helping to bridge between research, policy and practice (Colapinto & Porlezza, 2012). The government supervises and distributes outcomes of the knowledge-sharing process at the local level (Zhou & Etzkowitz, 2021) and civil society contributes lived experience and legitimacy (Carayannis & Grigoroudis, 2016).

Collaboration in this setting has to emerge between actors with different roles, agendas and capacities, which raises questions on how to coordinate in order to get the most out of the collaboration. No single stakeholder out of the four in the Quadruple Helix takes the lead in the process but every stakeholder has its distinct valuable input. This resembles what Provan and Kenis (2007) describe as a distributed governance, where decision making is shared across organisations. Depending on how coordination is arranged, networks can resemble shared governance, a lead organisation model or a network administration model. According to the project's grant agreement, the municipality of Amsterdam held the coordinating role in ATELIER. In practice, this task was outsourced to an external actor. That suggests that ATELIER had characteristics of a network administrative model with features of shared governance, since decision-making formally required equal input from all partners.

Each of these governance forms has trade-offs. Shared governance removes central control, which can increase inclusiveness but slows down coordination and blurs responsibility. Lead organisation models give one actor control over the network, which can speed up decision making but can marginalise smaller or less powerful actors. Network administrative governance adds structure by creating a separate entity to coordinate the network, but because they are not embedded in any of the participating organisations, their authority can be questioned (Provan & Kenis, 2007). Projects like ATELIER, EU pilots, often adopt a shared governance, where no single actor dominates. In these governance, the municipality often takes a dual role of the public partner and the public authority which, as Voorwinden et al. (2023) tell us, can cause delays, misunderstandings, and frustration among other actors. This dual role requires the municipality to support innovation as a collaborative partner, while at the same time enforcing regulations as a public authority. As a partner it is expected to be open and flexible to enable experimentation, but as an authority it must follow rules, assess risks, and safeguard accountability. This tension can lead the municipality to enable, delay, or redirect the process depending on how the role is enacted in practice (Voorwinden et al., 2023).



2.1.2 Governance paradoxes

Urban Living Labs face similar challenges. According to Voorwinden et al. (2023), they are set up for co-creation, but legal responsibilities are often unclear. It is not always clear who should apply for permits, who is liable if something goes wrong, or who carries final accountability. These questions can remain open for years, which slows projects down and increases risks. Research shows that such labs operate on a spectrum. In some cases, roles and responsibilities are clearly formalised, while in others collaboration is improvised and dependent on trust between actors. Other literature has noted similar tensions. Sundaramurthy and Lewis (2003) describe them as governance paradoxes: control versus trust, structure versus flexibility, delivery versus dialogue. Woo (2019) adds that these tensions should be managed, not resolved. Collaboration needs friction to function, but not because disagreement is inherently beneficial, but because in a shared governance, where no actor is in charge, decisions must be worked out together. That means interests clash, roles overlap and priorities differ. But without friction, there's no movement.

Woo (2019) argues that coordination should not aim to eliminate tensions. Governance should hold opposing logics in place so they generate productive friction over time. By opposing logics the author means conflicting ways of organising that coexist in governance. Putnam et al. (2016) frame this as a tensile structure: a design that keeps those contradictions under deliberate tension so collaboration stays both stable and adaptive. Some examples are formality versus informality or control versus autonomy that must be actively held in place to support a strong collaborative process. This can be understood as a tent held upright by ropes pulling in different directions: if one side breaks, the structure collapses. The point is not to choose between formal or informal arrangements, but to design both. A steering group can provide formal accountability, while informal settings such as workshops allow actors to experiment and build

trust. The effectiveness of coordination depends on maintaining this pull rather than removing it (Woo, 2019). Some tensions are especially present in shared governance, where no single actor sets the rules. Control brings clarity and accountability, but too much reduces trust and initiative. Relying only on mutual understanding, however, makes collaboration fragile once actors change or disagree. Formal structures stabilise but slow down adaptation, while informal ones foster flexibility but blur responsibility. These paradoxes also appear in trade-offs such as outcome versus process, efficiency versus participation, and stability versus experimentation. If you want the solution to last, or carry legitimacy, you have to involve others in the process. That makes it slower, heavier and more difficult to manage. But it also makes it possible to align interests, share knowledge and build continuity. Lasting solutions require broad involvement, which makes governance slower and more complex but also strengthens legitimacy, alignment of interests and continuity. Smaller collaborations may deliver results faster but risk neglecting important perspectives, which can weaken long-term support. In each case, one side is more closed and directive, the other more open and responsive. The challenge is not to choose one side, but to keep both in balance.

To give an example, Formal agreements can clarify who is responsible for financial, legal, or organisational risks, which helps prevent disengagement and builds commitment (Castelblanco et al., 2020; Oord et al., 2023). Yet overly rigid arrangements may place disproportionate responsibility on a single actor, discouraging initiative. When risks are left informal or undefined, accountability becomes blurred, especially with emergent risks that do not clearly belong to one actor (Renn, 2015). In such cases, responsibility is either overlapping or missing entirely, causing delays. Risk management therefore illustrates how the choice between formalisation and informality influences collaboration (Williams, 2017; Thamhain, 2013).

2.2 Preconditions for collaboration

Before collaboration can be analysed, it has to exist. There are several models for collaboration in the literature, some of which include preconditions. Ansell and Gash (2008) explain 3 of those. When some actors lack the capacity, organisation, status, or resources to participate on an equal footing, processes become vulnerable to manipulation by stronger actors (Ansell & Gash, 2008). This can result in distrust or weak commitment. Participation also depends on incentives. Actors commit when they believe their involvement can influence outcomes. When they feel as if the process is symbolic or if decisions are predetermined, engagement declines (Ansell & Gash, 2008). The history of relationships can also shape the collaboration. Past collisions can impact trust even if conflict is no longer active (Sillak & Vasser, 2022). Figure 2.2 shows the starting conditions identified by Ansell and Gash. These provide a clear picture of what needs to be considered before collaboration can take place, and therefore serve as useful background for this research. This figure presents only one part of their broader collaborative governance model, focusing here on the elements that are most relevant for analysing preconditions.

Emerson et al. (2012) also discuss factors that can initiate collaboration, such as leadership, consequential incentives, interdependence and uncertainty. These can be seen as broader drivers of collaboration rather than strict starting conditions. For that reason, their model is not visualised here. The focus in this section is on the starting conditions by Ansell and Gash, since these best reflect what the literature emphasises as important to have in mind before actors begin to collaborate. research also shows that no single factor explains why collaborations endure. So it is specific combinations of conditions that matter (Molenveld et al., 2021).

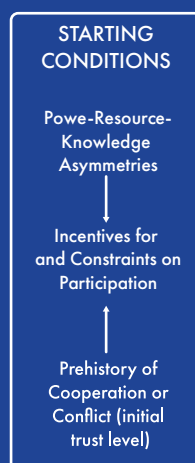


Figure 2.2 Starting conditions frame from the model of Ansell and Gash (2008)

2.3 Collaborative Governance

To explain collaborative governance, the definition by Emerson et al. (2012) is used. It refers to structured processes in which public, private and civic actors work across institutional boundaries to achieve a public goal that none of them could accomplish alone (Emerson et al. 2012). It emphasises building shared meaning, trust and collective capacity in the absence of central authority.

Within this literature, many authors note that conditions at the outset influence whether collaboration can begin. These preconditions help explain why some collaborations start more easily than others. In this study, they are acknowledged as background: they clarify what the literature regards as important before a project starts and provide inspiration for design considerations in later stages. The focus here, however, is on collaboration once it begins.

For that purpose, the CGR by Emerson et al. (2012) is used. It explains how collaboration is sustained over time through three collaboration dynamics: principled engagement, shared motivation and capacity for joint action. These capture how stakeholders interact, if there is trust, and whether sufficient structures and resources exist to act on goals. The full model is shown in chapter 3. (figure 3.1).

2.3.1 Principled Engagement

Principled engagement refers to the ongoing and iterative process through which diverse stakeholders collaborate across institutional and sectoral boundaries to address complex problems, resolve conflict, or create value (Emerson et al., 2012). It consists of four subprocesses: discovery, definition, deliberation and determination. These subprocesses structure how participants surface interests and knowledge (discovery), build shared meaning and goals (definition), engage in reasoned and inclusive dialogue (deliberation), and reach procedural or substantive decisions (determination). Ozawa (2019) emphasise that it is important for participants to explore the facts and evidence together, and to not rely only on their assumptions.

The concept comes from literature that emphasising the importance of communication, inclusion (Innes & Booher, 1999), and conflict resolution (Susskind et al., 1999; O'Leary et al., 2012).

Getting the “right” people to the table is considered essential, both normatively and instrumentally, as diverse representation ensures that decisions reflect a wider range of interests and can enhance legitimacy and learning (Ansell & Gash, 2008). Effective principled engagement is grounded in fairness and mutual respect. It helps the group agree on what the problem is, what needs to be done about it, and how they will work together to solve it (Koontz et al., 2004). Deliberation, in particular, is seen as an important way to help people speak up, be heard, and make thoughtful group decisions together (Roberts, 2004). When well executed, principled engagement contributes to better decisions but also to sustainable agreements, stronger interpersonal ties, and greater perceived legitimacy inside and outside the collaboration (Emerson et al., 2009).

2.3.2 Shared Motivation

Shared motivation refers to the trust that develops among participants through collaboration. It consists of four parts: trust, mutual understanding, internal legitimacy and commitment (Emerson et al., 2012). These elements reinforce one another over time, creating a self-reinforcing cycle that helps collaboration. Shared motivation builds on principled engagement, and once developed, it also strengthens it in return (Huxham & Vangen, 2005).

Trust is often described as a foundation for collaboration, but it does not come on its own. It develops when collaboration goes well: as people work together, demonstrate reliability, and become comfortable sharing their interests and concerns (Koppenjan & Klijn, 2004). Once established, trust itself becomes a basis that reinforces collaboration. It reduces destructive friction such as mistrust or miscommunication, while leaving space for productive friction which are the differences and tensions that, when managed well, can strengthen joint work (Woo, 2019; Leach & Sabatier, 2005). This creates mutual understanding, which does not necessarily mean agreeing with others but being able to see and respect their perspectives (Daniels & Walker, 2001). Mutual understanding in turn enhances collaboration, making it feel more meaningful and respectful. From here internal legitimacy develops: the shared sense that participants are credible, interdependent and trustworthy (Provan & Milward, 1995). It helps actors feel that the process is fair and worth committing to (Bryson et al., 2006). The last element is commitment, which is the willingness to invest time and energy in the process and to move forward together (Ansell & Gash, 2008). Commitment grows when participants see that their engagement matters and that others are equally invested.

2.3.3 Capacity for Joint Action

Capacity for joint action refers to the structural and organisational elements that make it possible for a group to work together and achieve goals. According to Emerson et al. (2012), it includes four key elements: procedural and institutional arrangements, leadership, knowledge and resources. These elements can be developed over time and are shaped through interaction with principled engagement and shared motivation. When strong, they enable more effective implementation and long-term collaboration. Procedural and institutional arrangements refer to the formal and informal rules that help coordinate ongoing interactions. These include meeting rules, roles, agreements and decision-making procedures. In longer-term or more complex collaborations, more formal structures like charters or governance documents may be needed (Milward & Provan, 2006). Leadership is essential in different phases of collaboration. Leaders may convene the group, mediate conflict, represent stakeholders, or push decisions forward. Effective leadership adapts to the needs of the group and helps maintain momentum, especially when coordination becomes difficult (Bryson et al., 2006). Knowledge is both a shared asset and a core function of collaboration. Working together requires collecting, processing and sharing information. Sometimes, new knowledge needs to be produced together to address uncertainty or complexity (Groff & Jones, 2003). Resources such as time, funding, expertise, and administrative support, must be sufficient and fairly distributed to support the collaboration. Uneven access to resources can create power imbalances or limit participation. Successful collaborations often find ways to share or reallocate resources to support joint goals (Thomson & Perry, 2006).

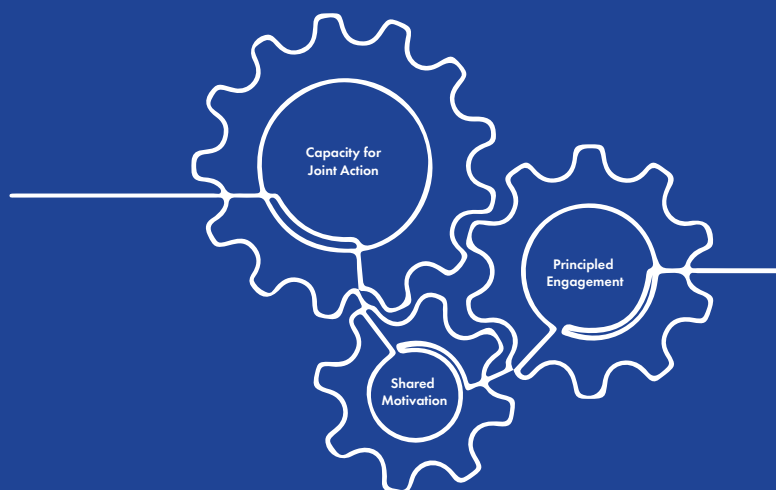


Figure 2.3 Collaboration Dynamics illustrated as engines for collaboration, part of the CGR

2.4 Institutional learning, recognising value of external knowledge

Organisational learning literature helps to understand why lessons are not automatically embedded in organisations. Learning can occur at different depths. Single-loop learning involves technical adjustments within existing frameworks (Argyris & Schön, 1978). Double-loop learning questions those frameworks, reframing roles, networks, and decision-making structures (De Jong & Edelenbos, 2007). This makes it clear that learning can range from minor adjustments to shifts that affect the foundations of how an organisation works. The presence of lessons or information on its own does not guarantee organisational learning. Single-loop adjustments may be absorbed more easily, but when lessons require double-loop learning they often meet resistance, since they challenge established routines and governance structures.

To make sense of how organisations can still capture external knowledge under such conditions, absorptive capacity provides a more systematic concept. Cohen and Levinthal (1990) define it as the ability to recognise the value of new external knowledge, assimilate it, and apply it to achieve organisational goals. They explained that prior knowledge strongly shapes how organisations identify and use what is new. Zahra and George (2002) later reframed absorptive capacity as a staged process, distinguishing between potential capacity (acquisition and assimilation) and realised capacity (transformation and exploitation). This reconceptualisation became widely cited, but it removed the explicit first step of recognising value, as if organisations would automatically appreciate new knowledge once they encountered it.

Todorova and Durisin (2007) were critical about leaving the recognition stage out. They reintroduced recognition as a necessary starting point, arguing that without it the rest of the process can never begin. This model is shown in the next chapter under figure 3.4. Their perspective places absorptive capacity in a social and political setting. Knowledge uptake does not depend only on quality, but also on who promotes it, how it fits into existing agendas, and how it challenges routines. Recognition may even be shaped by broader institutional and cultural contexts, as Hirose (2022) shows: cultural gaps can prevent organisations from perceiving certain external practices as valuable, thereby blocking subsequent stages of absorptive capacity.

Absorptive capacity can thus be understood as four steps of recognising value, assimilation, transformation, and application. Among these, recognising value is the decisive filter. Knowledge cannot be assimilated, transformed, or applied if it is never acknowledged as relevant. Recognition is not an objective act of spotting a good idea. It depends on how people think, what drives them, and where they sit in the organisation. Constraints on recognition can come from limited ways of thinking, inflexible systems, or ingrained habits (Gavetti & Levinthal, 2000; Leonard-Barton, 1992), and also from the way influential, higher up people in an organisation judge ideas (Christensen & Bower, 1996). Recognition is therefore not only cognitive but also political because whether knowledge is picked up often depends on support from influential actors, or on whether someone takes the role of advocate to push it forward can come from a political perspective. External knowledge is more likely to be recognised if it fits existing agendas.

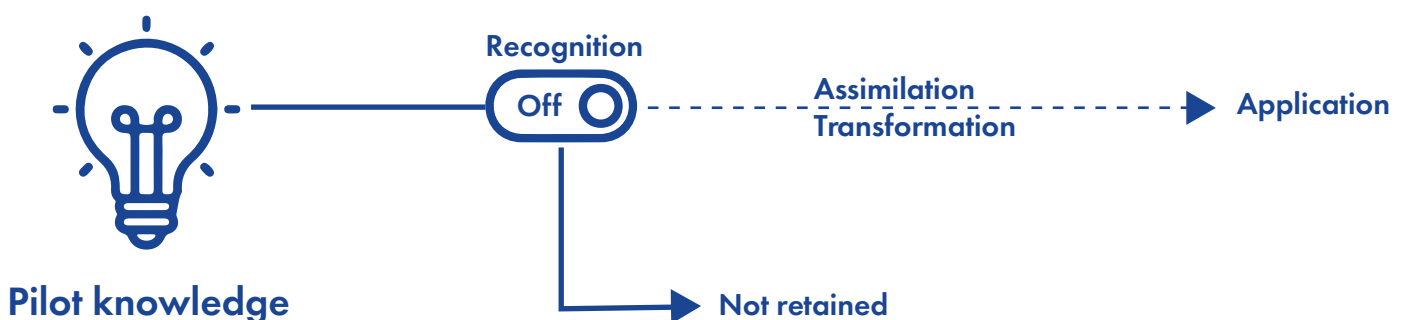


Figure 2.4.1: Absorptive capacity as staged process with recognition as entry point

Sjödin et al. (2019) show that recognition depends both on an individual's willingness to look for new knowledge and if they are able to connect it to existing contexts. Even after recognition, knowledge rarely advances without political and social work. It must be legitimised, defended, and linked to organisational goals before it can be taken up. Boundary spanners often play this role. They are individuals who connect across organisational and professional divides, cultivate relationships, and align different interests in order to move ideas forward (Williams, 2002). In this sense, recognition is a political act as much as a cognitive one, depending on relationships, influence, and timing.

This research therefore focuses on the first step of recognising value of external knowledge. Todorova and Durisin's (2007) approach restores the central role of recognising value and situates learning in a social and political context.

3.1 Short recap of the theory

This research examines a pilot that uses collaborative governance: a form where public, private, academic, and civic actors work across institutional boundaries to achieve a shared public goal that none could accomplish alone (Emerson et al., 2012). In such pilots, no single organisation has full authority. Progress depends on how coordination is organised: how roles are defined, trust is built, and resources are mobilised.

To analyse this coordination, this study uses the Collaborative Governance Regime (Emerson et al., 2012). The model consists of three parts: principled engagement, shared motivation, and capacity for joint action. Together, these describe how stakeholders interact, how trust and legitimacy are sustained, and whether structures and resources exist to act on shared goals. This is explained in the previous section and shown in figure 3.1.

The second main theory focuses on institutional learning through recognition, which is part of absorptive capacity. Recognition depends on routines, agendas, power, and individual initiative (Lerch et al., 2010). Broader contexts also matter, as Hirose (2022) shows: cultural gaps can prevent organisations from perceiving certain practices as valuable (Hirose, 2022). This research focuses on recognition, because it acts as the gateway for all later stages of learning. Without this step, lessons learned, whether technical or more focused on governance insights will be difficult to apply. The step is shown in figure 3.2.

3.2 Interplay between coordination and learning

Now, collaborative governance and absorptive capacity are treated as separate theories, but in this research they are seen as intertwined. Recognition is the connecting element. Within collaborative governance, coordination only works when actors feel their contributions are acknowledged, which runs through all three aspects of the CGR. Dialogue gains meaning when participants see their input reflected in the shared definition of problems. Trust and commitment grow when efforts are visibly taken seriously. Resources and organisational support follow when the collaboration is recognised as legitimate and worthwhile. In absorptive capacity, recognition plays a similar role: without noticing and acknowledging the relevance of new knowledge, no further steps can take place. Recognition therefore does not begin after a project

ends. It is already part of the collaboration itself, and it is this ongoing recognition that later determines whether lessons can be taken up at all.

Recognition in collaboration and recognition in knowledge uptake can reinforce each other when the actors who are expected to embed lessons are also directly engaged in the collaboration, as in the ATELIER case. A pilot does not simply move step by step from collaboration, to outcomes, to lessons, to implementation, and then to the next project. Recognition gives collaboration its strength, and the same recognition makes it possible for lessons to carry beyond the project.

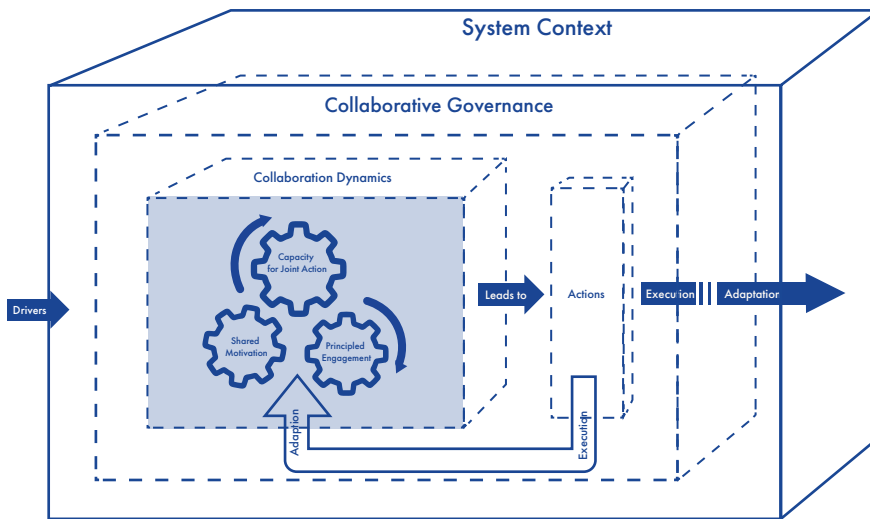


Figure 3.1 Conceptual model of Collaborative Governance Regimes by Emerson et al. (2012) showing the collaboration dynamics in the light blue

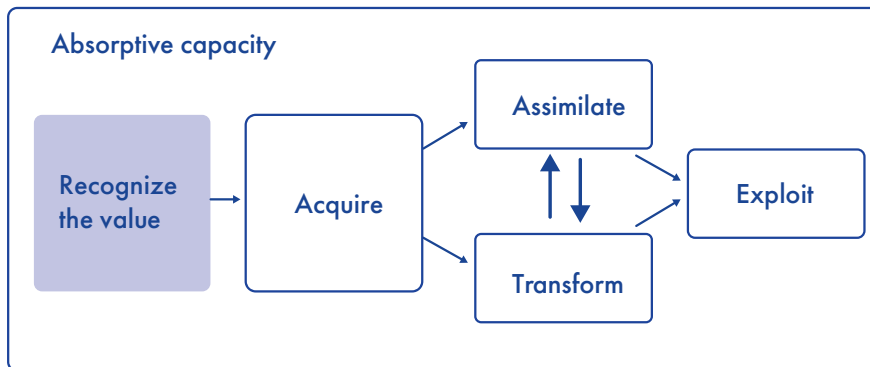


Figure 3.2 Part of the refined model of Todorova and Durisin (2007) showing recognising value as first step

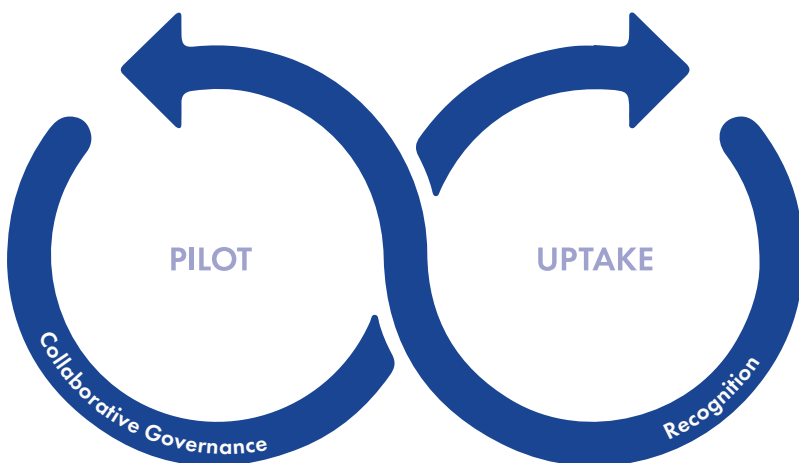


Figure 3.3 Conceptual model used for this analysis. Collaborative governance influencing uptake (recognition), and recognition influencing pilot (collaborative governance)

This research adopts a qualitative single-case study design focusing on the ATELIER project in Amsterdam. The study's methodology is structured in four parts. First, the reason for selecting ATELIER as the case is explained. Next, the qualitative data collection methods are described. The third section explains how the data was analysed through a theory-informed thematic approach, using concepts explained in the conceptual framework. Finally, the methodology is reflected upon, addressing issues of researcher subjectivity, case-specific limitations, and the influence of the internship position.

4.1 Case selection

The ATELIER project was selected as the case for this study because it is a collaborative governance pilot project in the energy transition. It is funded by the EU's Horizon 2020 programme, aimed at developing Positive Energy Districts in Amsterdam and Bilbao. This is done in a governance setting that includes public, private, civic, and knowledge actors. This is referred to as a quadruple helix structure. Several features made ATELIER particularly suitable for this research. First, it is situated within the domain of the energy transition, aligning with the focus of this thesis. Second, it is a mature pilot project, currently in its dissemination phase, with documentation publicly available. This made it feasible to look for developments from the beginning until the current phase. Stakeholders involved in the project reported some promising outcomes, and there was a stated ambition within the consortium to replicate the "innovation atelier" approach. This interest in scaling offered a useful opportunity to examine whether, how and what insights could be transferred.

The project also offered practical access. Through an internship in the Municipality of Amsterdam it was possible to attend internal meetings and engage directly with municipal departments, one of the stakeholders in the project. Additional access was because of the ATELIER's dissemination conference, which helped gain more engagement with consortium partners and insights that are not documented in their papers. In ATELIER, the municipality was one actor among many, making it a strong case for examining how coordination is realised when public actors work in a consortium with varied partners. Analysing ATELIER provides insight into both the project's outputs and the processes that shaped them, aligning with this study's goal to examine coordination practices, the municipality's role and positioning in the collaboration, and how these factors influence institutional learning and up-

take. This because the aim is to identify conditions that can inform the design and execution of future pilot projects. The choice for ATELIER is therefore the case for this research: a mature, accessible pilot in the energy transition with the municipality as the public actor.

4.2 Data collection

Three data sources were combined to build an understanding of the ATELIER pilot and the public actor within this project by reading documents, conducting semi-structured interviews, and observing during an internship at the Municipality of Amsterdam. This combination was a basis for the research by making it possible to compare and verify patterns from three angles: the factual and procedural details found in formal records and deliverables, the perspectives and interpretations offered by stakeholders, and the situational understanding gained from observing coordination and decision-making in practice. The data collection is summarised in table 4.2.1.

Documents included internal ATELIER reports, project proposals. An evaluation report from the ATELIER partners would have been desirable, but as the project duration was extended by 18 months, until april 2026, it was not yet available at the time of research. The deliverables that were available were reviewed to trace the project's evolution, governance arrangements, and reported outcomes. They also provided evidence of coordination structures, such as regular steering group meetings, agreed decision-making procedures, and defined points of contact between partner organisations. The documents also described obstacles that partners had together during the project and outlined the design of the "innovation atelier" introduced earlier. Documents offered no reflection on the informal dynamics from day-to-day coordination which shows the importance of the interviews.

The **semi structured interviews** were setup with a set of relevant questions, often leading to overlapping topics for each participant. While the focus was primarily on coordination, the conversations were deliberately kept open so interviewees could bring in their own input. This was important in this case because it allowed unexpected or less obvious issues to surface like unforeseen tensions around coordination that might not have been anticipated in advance.

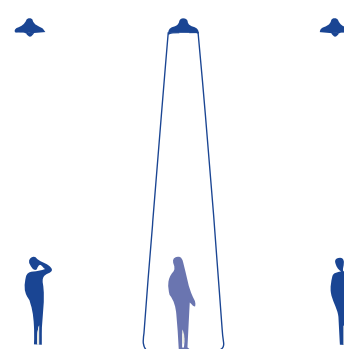
Data Source	Description	Data analysis	Purpose
Documents	ATELIER grant proposal, deliverables (from work package 3, including reports on Innovation Ateliers (3.3, 3.6, 3.7, 3.9), policy documents and reports from Municipality of Amsterdam (Klimaatplan 2020, Klimaatroutekaart 2023, Research and Innovation agenda 2025–2030, Energie voor de stad plan van aanpak).	Focused on formal coordination structures, role descriptions, and planned knowledge dissemination. Compared systematically with interview data to trace gaps between formal reporting and practice.	Provide basis on project design, how governance was meant, and outcomes or lessons. reports and plans of the municipality used for understanding it's aims. Supports sRQ1 (forms of coordination) and sRQ2 (municipal positioning).
Interviews	8 semi-structured interviews with municipal officials (4), consortium partners (3), external researcher from a comparable EU project (1).	Theory-informed framework analysis (Ritchie & Spencer, 1994; Gale et al., 2013). Manual coding to coordination (more specifically explained in the results if they apply to specific collaboration dynamics of Emerson et al. (2012) principled engagement, shared motivation or capacity for joint action) and Todorova & Durisin's recognition concept. Extra inductive category created for "conditions for learning and collaboration."	give perspectives on collaboration and role interpretation (RQ1, RQ2), reveal informal dynamics, and explore how lessons were or were not absorbed, and why that is (RQ3).
Observations	Internship at Municipality of Amsterdam at the department of "Energie voor de stad". participation in internal meetings and informal exchanges; attendance at ATELIER dissemination conference.	internship of 6 months where I was included in meetings about dissemination and the team discussions. Focused on routines, informal practices, and municipal responsiveness to new knowledge. Observed behaviours were triangulated with interview and document findings to contextualise claims and validate patterns.	Provide contextual insight into day-to-day coordination and learning culture inside the municipality. Supports RQ2 (internal organisation/role) and RQ3 (recognition and uptake).

Table 4.2 summary of data collected

The interviews were conducted with 9 participants representing different perspectives and roles: municipal officials, representatives of partner organisations, and one researcher from a comparable EU-funded pilot in Amsterdam. The latter provided a point of comparison to see whether observed patterns in ATELIER were unique or mirrored elsewhere. Interviews lasted about 60 minutes and followed a guide based on the conceptual framework focusing on CGR and Recognising value. Questions covered how collaboration was coordinated, challenges encountered, handling of project knowledge, and perceptions of outcomes. During these interviews, there was more emphasis on coordination than on learning, as participants tended to speak more easily about roles, coordination and interaction than about the value or use of knowledge for after the project. This is also because most of the interviewees were project partners, and knowing how the coordination worked out could show underlying potentials. Learning aspects were often implicit since it was difficult to ask directly whether participants found the knowledge valuable, so such insights were drawn from indirect comments or from observed behaviour during the internship. For example, participants were asked about role clarity, decision-making processes, and the extent to which lessons from ATELIER were shared within the municipality. All interviews were recorded with consent, transcribed, and anonymised. To protect anonymity, statements are not linked to individual interviewees or organisations.

The only distinction made is when remarks came from municipal representatives, the public actor, to provide minimal context about the perspective behind the statement.

Since the focus on learning was less during interviews, **observation** helped to understand that part and took place during an internship in the municipal department responsible for achieving the city's energy goals. Internal meetings and informal conversations were held to observe habits, ways of communicating and know about the latest developments. Notes captured interactions between municipal staff and partners, responses to innovative ideas, and how strategic considerations were addressed. This provided insight into organisational culture and dynamics that were not visible in documents or fully articulated in interviews. Some observations could be written down and are shown in appendix C.



4.3 Data analysis

This section explains how the collected material was analysed step by step. Semi-structured interviews were coded using concepts from the conceptual framework, supported by documents, observations, and literature.

The semi structured interviews were analysed using the concepts from the conceptual framework. These are the 3 collaboration dynamics of principled engagement, shared motivation and capacity for joint action from Emerson et al. (2012) and the recognition step from Todorova and Durisin (2007). This method is named a theory informed framework method, developed by Ritchie and Spencer (1994) and later adapted for multidisciplinary settings by Gale et al. (2013). This method made it possible to organise interview responses into a table with the conceptual framework's categories, in order to group and interpret what belonged where. During the manual coding process, it became clear that many statements touched on more than one category of the conceptual framework at the same time. For example, a comment about inconsistent municipal attendance might relate to both shared motivation and principled engagement. Placing them directly in the three dynamics or recognition created overlap and reduced clarity. To keep the analysis transparent, the material was therefore grouped into four broader analytical themes: collaboration dynamics, institutional learning, conditions for collaboration, and conditions for learning. These themes helped to organise the analysis in a transparent way before clustering into the broader result sections, shown in figure 4.5.

All interview transcripts were read and organised in tables with three columns: statement, summary, and quote. These tables were made per interviewee and are included in Appendix B. The full thematic summaries, based on the four themes, are presented in the results section (Chapter 5).

Whereas the semi structured interviews served as the primary source of insight into coordination practices (mainly about what went wrong, or how things happened), document analysis was there to see what the consortium wrote in their deliverables. Observations played a supportive role as well.

Project documents such as the grant proposal and relevant deliverables about the innovation atelier were read to understand how the project was designed and reported. These were not coded but were used to validate interview findings and identify (in)consistencies. Observations, during the internship and during the ATELIER conference, provided insight into the project and municipal culture, working routines, and internal coordination. These observations were used to contextualise, support and validate mainly interview claims. The literature review informed the conceptual framework and is used as a comparative lens in the discussion of findings.

4.4 Analytical lens

This section describes the concepts that structured how findings were interpreted. Two elements of the conceptual framework guided the analysis: collaboration dynamics and recognition.

Collaboration dynamics were analysed through the categories of principled engagement, shared motivation, and capacity for joint action. For example, irregular attendance at meetings was read as weak shared motivation, and missing legal support related to capacity for joint action. Both formal structures and informal practices were considered in this reading.

Absorptive capacity was used in a narrower sense here, focusing only on when valuable insights from ATELIER were noticed (Recognition). The analysis traced moments when officials explicitly or implicitly acknowledged lessons from ATELIER as relevant to their work. Instead, insights outside recognition, but did influence the possibility to recognise were linked back to collaboration dynamics or categorised under broader conditions for learning and collaboration.

Using these two theories in combination made it possible to see how collaboration dynamics created or constrained opportunities for recognition, and how the municipality's ability to recognise value shaped the longer-term potential of the project.



4.5 Structuring the results

This section explains how the findings are presented in Chapter 5. The results in this study are structured thematically, based on recurring patterns that emerged from interviews, observations, and document analysis.

While the conceptual framework, with collaboration dynamics (Emerson et al., 2012) and recognition (Todorova & Durisin, 2007), guided the analysis, the data did not always fit well into these frames. Many findings touched on several aspects at once, which made a direct division impractical. Many findings touched on several aspects at the same time. Forcing them into a single category would oversimplify the results, while placing them in multiple categories would create overlap and make the findings harder to follow.

To address this, the interview material was first grouped into four broader themes as explained in section 4.3. These themes served as an intermediate step in the analysis, but using them directly for the results would still have led to overlap. Several alternative structures were tested, and the thematic clustering now used in Chapter 5 proved the most workable approach. This adapted structuring combines insights across themes and concepts, which better reflects how collaboration, learning, and conditions were intertwined in practice. This means the analysis follows the conceptual framework, but its presentation was deliberately adjusted to increase clarity and readability.

This means the analysis follows the conceptual framework, but its presentation was deliberately adjusted to increase clarity and readability. The results are therefore not presented as a strict sequence of CGR components or absorptive capacity stages. Instead, each section of Chapter 5 highlights how elements of collaboration dynamics and recognition were visible within broader patterns. This approach avoids repetition, gives a coherent overview, and still connects findings back to the theoretical concepts. The approach is visualised in figure 4.5.

References to interview results are indicated with numbers. These numbers correspond to the overview table at the end of Chapter 5, where statements are grouped by theme, and to the full summaries in appendix B that provide further detail.

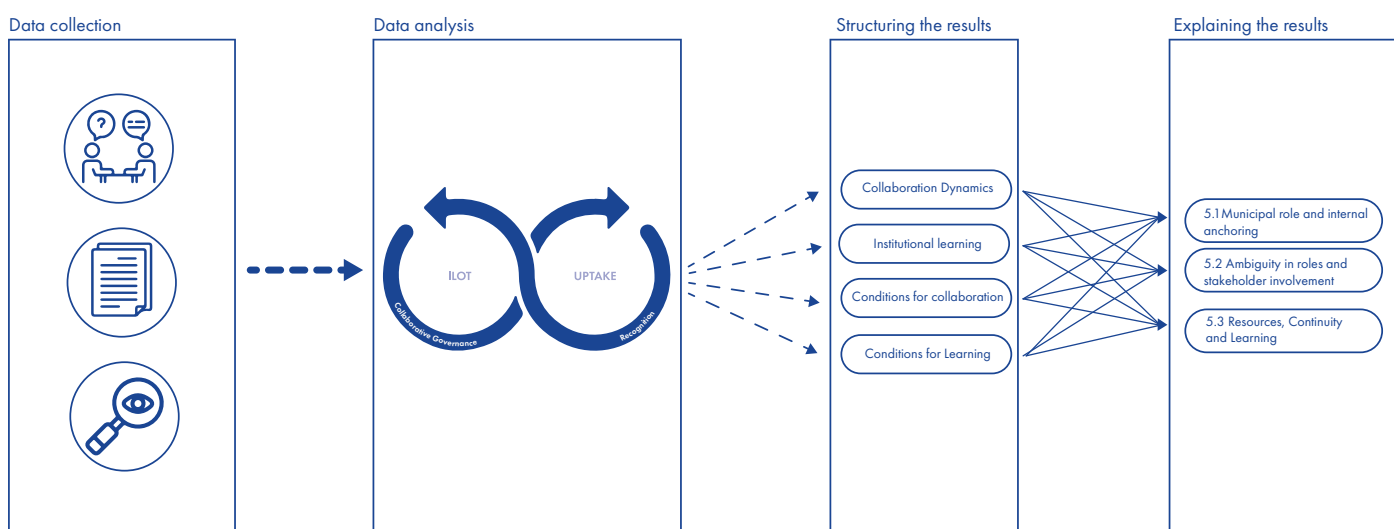


Figure 4.5 From left to right: data from interviews, documents, and observations was analysed through the conceptual lens (collaboration dynamics and recognition), grouped into four themes, and finally clustered into three broader result sections (5.1–5.3).

RESULTS

The results in this chapter follow the approach explained in section 4.5 and figure 4.5.1. Interview material was first organised in a table using the categories coordination and institutional learning, linked to collaboration dynamics and recognition. Since many answers touched on several aspects at once, the findings are presented thematically rather than per category. Each section combines interview insights (with numbers referring to table 5.1), documents, and observations, while highlighting the relevant elements of collaborative governance and recognition.

The following sections are organised into three main themes. Section 5.1 Municipal role and internal anchoring discusses how the project was positioned inside the municipality. Section 5.2 Ambiguity in roles and stakeholder involvement examines how roles and responsibilities were interpreted by different actors. Section 5.3 Missing ground for learning and continuity addresses the conditions for resources, learning, and the long-term anchoring of project lessons.

5.1 Municipal role and internal anchoring

For most of its duration (2018–2024), ATELIER lacked a clear position within the municipal organisation. The project was formally placed under the Directorate for Space and Sustainability, within the Sustainability department's Strategy team, with some involvement from the Digitalisation and Innovation directorate (3, public actor). The team of Strategy was consulted for decisions, and the director of Space and Sustainability signed on behalf of the municipality of Amsterdam. No single municipal unit or person was completely responsible for guiding or embedding the project. The project was placed in a strategy team, but a respondent explained that this was too far removed from daily practice (6). Only at the end of the project, responsibility shifted to Energie voor de Stad, and near the end of 2024, the momentum did improve, mainly because of a motivated official (1;2;3, public actor; 6) and because that department had more operational focus and could better connect the project to the rest of the municipality. This relates to institutional arrangements and leadership capacity as part of the capacity for joint action (Emerson et al., 2012).

Respondents directly involved in the collaboration said that the municipality had no clear idea on what it aimed to achieve through ATELIER and that without explicit questions it was nearly impossible for partners to deliver relevant deliverables (1;2). The project did not originate from a defined municipal policy need but from the availability of EU funding (4, public actor). Many officials were unaware of the project or what their role in it should be (4, public actor; 6). As one respondent explained: "There is no fixed municipal department responsible for such projects" (4, public actor). Several respondents (1; 3, public actor; 7) pointed out that Amsterdam had no clear objectives for its role in ATELIER. This made it harder for partners to deliver something useful for the municipality. One respondent even said that it was unclear "for whom" the project was being done (2). Another added: "There were no questions from the municipality. We didn't know what they wanted" (3, public actor). In terms of collaborative governance, this affected the discovery and definition phases of principled engagement, where joint problem framing was absent. During interviews and the ATELIER dissemination conference, it was repeatedly mentioned that there was no municipal mandate (2; 3, public actor; 4, public actor; 6; Conference (appendix A)).

One interviewee emphasized many times that the project was not linked to a learning agenda, meaning it had no connection for anyone in the municipality (3, public actor). Another added that the objectives set at the beginning were outdated and no longer matched the current needs of the municipality (1). Deliverable 3.7 explains that midway through the project, strategic coordination around ATELIER in Amsterdam was still not institutionally anchored because it was not embedded at a high decision-making level and was poorly connected to other municipal initiatives (D3.7). This lack of anchoring meant outreach to other departments often depended on individual networks.

Although the municipality of Amsterdam was listed in the grant agreement as the coordinator, this role was outsourced to an external project manager who had no position within the municipal organisation. One interviewee noted that the municipality initially intended to coordinate the project itself but underestimated its internal capacity and expertise (6). The coordinator began three months after the kickoff, meaning the early phase proceeded without his plan to make concrete agreements on goals, roles, or risks. When the COVID-19 pandemic began shortly after the coordinator started, it further constrained these efforts to make agreements (6). This had influenced principled engagement, especially in the early phases.

The external coordinator had to explain the purpose of ATELIER repeatedly to people across departments. As one interviewee put it: “Nobody really knew what this project was about inside the municipality” (6). This lack of internal visibility made it difficult to get things moving (6). One interviewee noted that departments from the municipality shifted multiple times during the project, with no department assuming consistent ownership (3, public actor). Within the municipality, participation in ATELIER was not part of formal job descriptions or performance assessments (3, public actor; 6). Involvement therefore depended more on individual initiative than on institutional rules or commitment. An observation from the department *Energie voor de Stad* helps to illustrate this: staff in the electricity supply programme (*Elektriciteitsvoorziening Amsterdam*) were tasked with delivering new energy stations in maximum numbers and at maximum speed, with performance measured solely on that output. They were not evaluated on whether they explored more innovative or sustainable approaches while doing so. This shows how daily work pressures and assessment criteria left little room for staff to engage with activities outside their formal responsibilities. This was also observed during the internship, where motivation to

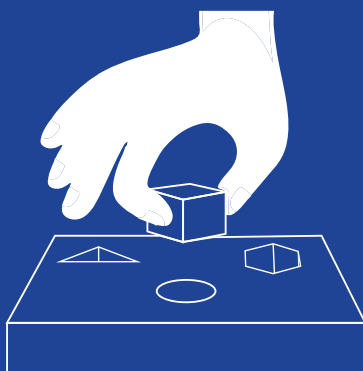
apply project knowledge varied within the same department, as further discussed in section 5.3. These patterns illustrate that the project did not really become a part of the municipal organisation’s daily life. The European Commission also noted that the municipal staffing level did not reflect its prominent role in this collaboration, and judged its commitment to ATELIER as weak (6). In terms of shared motivation, respondents said the lack of a mandate and policy anchoring made officials less motivated to participate. EU projects like ATELIER were said to not align well with the municipality’s internal structure, which is organised around fixed tasks and departments (2). Because the municipality of Amsterdam works in silos, it was difficult to attach the project to the right and one singular department (4, public actor), which often led to multiple departments being loosely connected which created a barrier to embed the project (1;2;3, public actor;6;8). At the same time, the looseness in structure gave more room for individual initiative and adaptive responses to emerging themes, such as grid congestion, which only became an issue two years after the start (2). The absence of clear objectives and the municipality’s uncertainty about its role weakened the discovery phase of principled engagement, where joint problem framing depends on early clarity about goals and responsibilities.

There were also shifts in municipal staffing that influenced engagement. A proactive official, who was also the manager of the coordinator of ATELIER, left during the project. Her replacement was described as more risk averse, which made the connection between the coordinator and the municipality weaker (6). This reduced initiative on the municipalities side, which was already limited due to the externally hired coordinator having no institutional position inside the municipality (2;6). As stated earlier, the shift to the department *Energie voor de Stad* created new opportunities for dissemination, as one official there actively sought to use the project’s results (see Chapter 5.3 for a broader explanation). This reflects leadership capacity, a subtheme of capacity for joint action. It also fits well with another interviewee’s explanation and a comment from a municipal official during the internship that when senior officials (such as directors) value innovation, they create space for others in the organisation to take initiative (5, public actor). In the same organisation, a risk-averse culture within hierarchical departments was described as discouraging innovation and experimentation. In some municipal departments, staff were said to be reluctant to “stick their neck out” due to long-standing unsafe work environments (5, public actor).

The municipality's lower visibility could've allowed other consortium partners, like research organisations, to influence the project direction more directly. This created space for certain ideas to develop that might not have emerged in a more formally controlled setting. So, while the lack of municipal direction limited alignment, it also gave more autonomy to other partners. As explained by an interviewee, that there was no grid congestion at the time the project started, they had very different objectives. but since it was so loosely defined what the goal was, it was easy to steer towards that subject. This reflects how gaps in one actor's engagement can lead to redistribution of initiative elsewhere in the consortium.

During the ATELIER conference, no one from the municipality was present on the day dissemination was discussed (observation). While municipal representatives attended the first day, their absence on the day where lessons were presented highlighted inconsistent involvement. Several consortium members mentioned this as a missed opportunity during the conference. In terms of absorptive capacity, being present during key moments like this signals that the knowledge being shared is recognised as relevant. Another time where the municipality of Amsterdam wasn't present was during a more regular ATELIER meeting about disseminating the lessons learned through AIC.

In summary, no department of the municipality felt like they owned the project until the end of 2024. There wasn't a lot of engagement. The absence of a clear mandate affected early discovery and problem definition, which also impacts the ability to transport learnings to the municipality. Without consistent presence, learning does not occur, and without explicit questions, partners cannot provide relevant answers.



5.2 Ambiguity in roles and stakeholder involvement

The first thing that stood out in almost every interview was that respondents had different interpretations of the municipality's role in ATELIER. Some described the municipality simply as a facilitator (3, public actor; 4, public actor), meant to provide support when needed. Others assumed that they were the chair or coordinator, given its role in the grant agreement and the hiring of an external coordinator to take on tasks the municipality initially intended to do itself. One respondent recalled being perceived as chair of the Amsterdam Innovation Atelier without this ever being agreed, which led to misunderstandings in the consortium and frustration for this person (3, public actor). Another noted that the facilitating role did not feel supportive in practice, for example because legal assistance was not provided for a long time (1). These differences illustrate that partners held very different expectations about what the municipality's contribution should be.

Despite the proposal assigning roles between developers, knowledge partners, and local actors, respondents said it took months before it became clear who would do what (2). Another interviewee said that in practice, tasks were often picked up by whoever happened to be available (1), indicating that those assigned roles were not so defined. As that same actor put it: "A lot was not agreed upon formally, a lot was just verbally agreed" (1). This created flexibility but also made responsibilities vague. Some respondents clearly found this informality undesirable (3, public actor; 6). Attendance of the Municipality at sessions like Innovation Ateliers, a core part of ATELIER, was also inconsistent, even when commitments had been made (2). These examples reflect how role descriptions, whether written down or agreed in conversation, were not consistently followed in practice.

Deliverable 3.7 confirms that responsibilities such as communication of results were not clearly assigned, leaving uncertainty over whether the consortium or the municipality should take the lead (D3.7). This unclarity also took place in decision-making. The formal voting structure in the consortium gave each partner an equal vote, but the municipality assumed that financial contribution translated into influence (6). At the same time, some partners held dual roles, for instance acting both as consortium member and as advisor to REPUBLICA in Buiksloterham (the development area of ATELIER), which created confusion for other members (2).

Citizens were included as a fourth stakeholder group, but in practice ATELIER functioned more as a triple helix. The ambition of equal involvement proved difficult in practice, a consortium member during the conference mentioned that “citizens don’t want to be involved, it’s time consuming and they don’t care”. There were no residents yet in the development area, and attempts at alternative forms of engagement were unsuccessful. Waag, a non-profit organisation who led the work package on citizen engagement using citizen science methods to involve them, was responsible for their engagement in ATELIER. Respondents (2;6) noted that Waag’s role was too academic and introduced too late. Citizens were also the only stakeholder group not compensated for their contributions, while all other actors received payment (2;4, public actor;6). Participation of residents proved vulnerable when not structurally financed and included. One interviewee (2) stated that future collaboration models should treat neighbourhood organisations as formal partners within the consortium. Together with the municipality’s limited and inconsistent involvement, this meant that two of the four stakeholder groups were not fully engaged (Emerson et al., 2012).

The municipality of Amsterdam expressed interest in participating but resisted taking the lead, fearing this would imply responsibility to implement (2). As a result, leadership felt unclaimed, and progress depended on individual efforts rather than agreements. One respondent explained that research partners often had to step in to keep the project moving forward (2). Which also raises the broader question of authority in such collaborations. As another noted: “In a quadruple helix, who actually decides?” (8). Deliverable 3.9 highlights that strong leadership commitment is a key design principle for similar projects, emphasising that appointing a coordinator to guide the group and align tasks is decisive for smoother functioning (D3.9).

In summary, responsibilities were neither clearly defined nor consistently followed up. The City hesitated to lead, while others assumed it had a central role. Commitments were not always fulfilled, and leadership was improvised. This reflects parts of the principled engagement and the capacity for joint action of collaborative governance (Emerson et al., 2012).

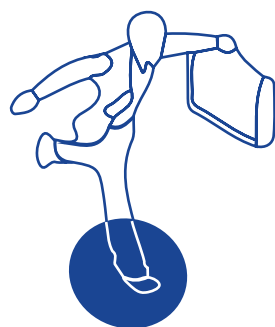


5.3 Missing ground for learning and continuity

The municipality of Amsterdam underestimated the level of staffing and expertise required to coordinate ATELIER. An interviewee expected more resources from the municipality, particularly in legal advice (1). This municipal capacity could have been mobilised to clarify partnership arrangements or distribute risks more evenly (1). Risk allocation was not addressed at the start of the project. Some stakeholders experienced this as positive, because formal risk-sharing could have blocked the project before it began. Others, such as the developer or public actors, would have preferred clear agreements, since these would have provided protection and more balanced responsibilities. One interviewee described the municipality's financial administration as "on the edge" (6), pointing to half a million euros of unused budget, reallocating it to another partner, and another large sum eligible for reimbursement but never claimed. These examples suggest that the municipality struggled to allocate resources effectively and to match its prominent role in the project with sufficient internal support. This is connected to the resources and institutional arrangement subthemes of capacity for joint action (Emerson et al., 2012).

Continuity was a challenge from the beginning. Staff turnover, from every stakeholder group disrupted team stability and caused knowledge loss. All members of the steering group were replaced over the years except for two individuals. Whenever people left, the internal network and working relationships had to be rebuilt, which took time (6). Over the course of the project, this respondent interacted with around 130 people, even though only about 50 people at the same time were formally involved. Without mechanisms to preserve or transfer insights, knowledge disappeared when people left (2). ATELIER's collaborative processes were not structurally passed back to those writing future project proposals in the European subsidies department (4, public actor). The external coordinator will also depart after the project, taking much of the accumulated knowledge with him (2).

In contrast, knowledge resources within the consortium were found strong. Respondents showed that ATELIER brought together a top group of researchers and practitioners, producing both technical and governance insights on energy communities. This was especially visible during the ATELIER conference, where three days were dedicated to sharing lessons and experiences. The event was found an effective way to disseminate knowledge, showing that while municipal resources were weaker, knowledge capacity within the consortium was one of its main strengths.



Multiple respondents explicitly valued the role of one particular official, part of the Energie voor de Stad department, because of consistent presence, clarity of vision, and proactive attitude (1;2;3, public actor;6). Although this person was not involved during most of the project's duration, she became engaged near the end and clearly recognised the value of ATELIER's technical lessons. As someone who operated close to implementation, this person recognised the importance of acting on the knowledge generated by this pilot. During observations in the internship it seemed as if not all colleagues on the same floor shared this urgency. One commented that insights from projects like these often just end up "in a drawer."

According to this official, if the municipality does not take ownership of project lessons, it will be dependent on external partners to interpret and deliver knowledge "having to keep paying to hear the same lessons again." (observation). During the internship, this official was observed actively working to transfer ATELIER's lessons to other teams within the municipality, sometimes it needed a couple of sessions to convince others. Their role demonstrated how important it is to have someone within the organisation who recognises a project's relevance and is motivated to act on it, and is positioned close to implementation.

An interviewee mentioned that within the municipality of Amsterdam, curiosity and intrinsic motivation are essential, and that learning cannot be forced (5, public actor). Urgency, for example due to grid congestion or CO₂ limits, was said to create this curiosity and gives momentum for experimentation and change. At the same time, during observations someone noted that implementing lessons from such projects at the execution level can take a lot of time and money, partly because innovation requires time for reflection. Showing not everyone has the resources in this organisation to implement outcomes. Respondent (5, public actor) dismissed this as an excuse, pointing instead to organisational barriers such as limited openness to change.

A recent development that could help improve the internal anchoring of lessons is the Onderzoek- en Innovatieagenda Energietransitie 2025–2030. This municipal strategy sets out plans to link outcomes of pilot projects more directly to policy, by creating Living Labs, working with clear roadmaps, and translating results into regular municipal practice. One of the officials involved in ATELIER also contributed shaping this agenda, noticing that this is an important step. This may help give follow-up to project lessons that would otherwise stay isolated. It shows a more active effort by the municipality, or at least that individual, to use innovation projects to strengthen its own way of working.

These observations are consistent with findings from another study on learning in Amsterdam's municipal organisation focusing on ATELIER. That study also found that the municipality of Amsterdam is not yet a learning organisation (Stjokrodikromo, 2022). lessons often fail to stick in the organisation. Respondents in that study argued that new projects should start with an analysis of what knowledge already exists, to avoid rushing into action without reflecting on earlier experiences. Evaluation was also described as a weak point: quarterly evaluations could help sharpen goals and priorities, but evaluation of processes and lessons was said to receive too little attention. The same study found that knowledge and experience is often lost because projects are not "taken up" by a department or official, echoing the lack of ownership observed in ATELIER. Time was also mentioned as a barrier, since many staff work on several projects at once, leaving limited capacity to reflect. Projects like ATELIER were seen as useful because they provide extra time and money not tied to regular policy plans, but this also means they are not strongly embedded in the municipal organisation (Stjokrodikromo, 2022).

In summary, ATELIER showed how weak organisational resources limited continuity and anchoring, while strong knowledge capacity within the consortium created valuable outputs. Whether these lessons gained traction depended largely on individual recognition within the municipality, underlining how the resources dimension of capacity for joint action is closely linked to the recognition stage in determining long-term impact (Emerson et al., 2012; Todorova & Durisin, 2007).

Respondent	Collaboration Dynamics emerson	Institutional learning
1	Coordination in ATELIER was shaped by informal arrangements, which allowed progress but also created fragility. Deliverables were designed to meet EU reporting requirements and were less focused on the specific needs of Amsterdam. Within the municipality roles were unclear and there was no single owner of the project. One municipal staff member, Mimi, played an important role in keeping Amsterdam's learning needs visible, but this was based on individual commitment rather than an assigned role.	Learning was not anchored within the municipality. Outputs such as lengthy reports were not suited to busy staff, who needed shorter and more accessible materials. As a result, much of the knowledge stayed at the level of individuals and did not circulate across departments. When staff changed, their knowledge left with them, and there was no mechanism to retain it.
2	The municipality deliberately avoided taking ownership in ATELIER because it did not want to create expectations that it would implement the results. Once the proposal was approved, the people who had written it withdrew, and responsibility shifted to departments that had not been involved in the design. This created a disconnect between project goals and municipal practice. Coordination weakened further as EU reporting requirements took precedence, while Amsterdam's own learning needs remained secondary. The City's representation in the consortium was minimal, and its role in steering partners was unclear.	Institutional learning inside the municipality was fragile. Knowledge was tied to external coordinators, and once they stepped away, expertise was lost. There were no mechanisms in place to capture knowledge or circulate it across departments. Reflection on project outcomes was ad hoc and relied on the interest of individuals, rather than being organised through a structured process. As a result, lessons from ATELIER did not reach other parts of the organisation or become embedded in municipal procedures.
3, public actor	ATELIER started in a small R&D unit of the municipality that had no clear mandate or ownership over the project. This created fragmentation from the beginning, as it was not tied to a department with responsibility for energy transition in the city. Later the project was moved to Energy for the City, which was a more logical home, but overall coordination within the municipality remained weak. Departments were reluctant to take responsibility, while external partners assumed that the City was the main problem owner. This mismatch caused confusion and slowed collective progress.	There was no learning agenda or clear set of questions from the City to guide ATELIER. Lessons were not linked to broader innovation or research programmes. Reporting obligations were directed to the EU rather than local governance, which meant political engagement and alignment with municipal priorities were limited. Institutional memory was fragile, and when people left, their knowledge left with them. As a result, much of the project's learning potential was not realised within the municipality.
4, public actor	described that EU projects often begin without a clear municipal team or mandate. After grant submission, the writers step aside and there is no continuity, which leads to confusion and delays. Within the consortium, coordination is hindered by siloed departments and a lack of alignment between policy and district-level execution. This makes cooperation fragmented and reactive rather than strategic.	the municipality rarely learns from governance experiences. There is no culture of evaluating how collaborations functioned, so mistakes are repeated. Outputs remain focused on problem-solving and execution, with little reflection on process. Without systematic evaluation, institutional memory is weak and lessons are not embedded.
5, public actor	Had no involvement in the ATELIER project	Materials such as Open Research pages, presentations, and videos exist, but uptake depends on active outreach. Without a trigger, people do not use them. Dissemination across the municipality is underway, but embedding lessons still relies on individuals' curiosity rather than a structured learning process. Pilots are seen as inherently valuable, even when they fail, because they provide insights and reusable ways of working. At the same time, the respondent points out that pilots are rarely directly scalable without broader institutional support.
6	Coordination in ATELIER improved when urgent issues such as grid congestion or CO ₂ reduction forced partners to act. Senior officials legitimised experimentation at those moments, which helped align efforts. Outside of such urgency, departments worked in parallel and responsibilities remained diffuse. The municipality was coordinator on paper in the EU consortium, but internally hesitant to lead. Progress depended largely on informal arrangements and the personal involvement of individuals, since no clear mandate was in place.	There was no hypothesis or innovation agenda from the municipality to give direction to the project. Lessons were therefore not tied to broader goals or municipal priorities. Dissemination events, videos, and reports were produced, but these were primarily designed for the EU and not for local decision-making. This weakened political engagement. Pilots in different parts of the city remained disconnected, and there was no process to bring them together into a joint learning trajectory. Knowledge often disappeared once projects ended or staff left, since the municipality had no mechanism to retain it.
7	Collaboration slowed down because mandates were unclear and no actor had the authority to take final decisions. Subsidies created momentum to bring parties together, but when projects ended the collaboration quickly weakened.	Institutional learning was fragile. Outputs such as frameworks or reports were rarely completed or shared due to lack of time, budget, and ownership. Knowledge disappeared when staff left or projects closed, and there were no structures to retain it.
8	The municipality's role in LIFE was unclear and fragmented. Different departments handled small parts of the project without central coordination or a clear governance structure. At times external consultancies represented the municipality, which raised questions about mandate and legitimacy.	Institutional learning was absent. The municipality had no process to secure lessons from LIFE, and follow-up depended on individual staff members. Once projects ended or people left, knowledge was lost.

Table 5.1 Interview results summarised under themes collaboration dynamics, institutional learning, conditions

Conditions for collaboration	Conditions for learning
The Innovation Atelier created a space where departments and partners could exchange knowledge across silos. TNO mobilised wider networks to help solve issues that arose during the project, such as technical bottlenecks faced by developers. This flexibility supported collaboration. The involvement of individual staff, especially those willing to take initiative, kept some momentum in the absence of formal municipal structures.	Informality created room to adapt, but it also left responsibilities unclear and increased the risk that lessons would not be taken up. Deliverables often did not match what the municipality could use. Without stronger structures such as Amsterdam in Change or other dedicated platforms, there was no institutional place to store and use the lessons.
Collaboration continued because of a few committed municipal staff who formulated concrete questions for Amsterdam's involvement and maintained some link to the project. Broader networks within the consortium helped to sustain progress, even when municipal engagement was limited. However, the lack of clear ownership from the City created an imbalance in commitment between partners. Some organisations invested strongly, while the municipality remained hesitant and reactive.	Conditions for learning were constrained by the absence of citizen participation, since it had not been included in the project budget. This meant social knowledge and perspectives were missing from the project. At the same time, the rigid structures and slow procedures of the municipality made it difficult to embed results into practice. Because there was no strategic learning agenda from the City, project outcomes had no clear route to enter policy or programmes, leaving valuable insights unused.
Collaboration relied strongly on motivated individuals. Staff such as Machiel invested personal time and effort to keep processes going, but this was not supported by structural arrangements. External spin-offs such as Amsterdam in Change helped to continue some of the networks, but these were never structurally embedded back into the municipality. Partners outside the City remained active, but the internal organisation of the municipality made sustained collaboration difficult.	Several pilots were running at the same time in Amsterdam, including ATELIER, but there was no connection between them. This lack of integration meant there was little cross-learning or accumulation of knowledge. Without an overarching innovation agenda from the municipality, lessons from pilots were isolated and not embedded into city policy. Uptake of knowledge relied entirely on intrinsic motivation from individual staff, which was inconsistent and unsustainable.
emphasised that collaboration requires formal agreements between municipal directorates. Without signed commitments, much time is lost in the start-up phase and continuity disappears. He also stressed the need for project leaders with broader skills: not just technical delivery, but the capacity to manage stakeholders, include residents, and understand governance responsibilities.	Learning conditions are undermined by the absence of a project office inside the municipality. He argued for a professional support team that understands EU project structures, governance, risk management, and accountability. Without this, responsibilities remain unclear and fear of liability prevents experimentation. Citizen involvement is also weak, since residents are not formal partners and can only participate indirectly through organisations, limiting the depth of social learning.
Collaboration benefited from senior sponsorship, which gave legitimacy and space to work on innovation. In Zuidoost, a safe environment was created to experiment, but this was the exception rather than the rule. In district offices, a long-standing culture discouraged staff from taking initiative, reinforced by signals of an unsafe workplace. Project leaders were often focused on physical execution and lacked the participatory skills needed to engage residents effectively. This meant professional guidance was necessary to support citizen involvement. At the same time, fragmentation of programmes and conflicting aims across the municipality weakened collaboration, as did the weight of regulatory complexity that R&D units struggled to navigate.	Learning was limited by a shortage of time and fragmented programmes. Capacity was a bigger constraint than money. In some departments a risk-averse culture reduced willingness to experiment. At the same time, urgencies such as net congestion and CO ₂ drove learning and innovation, but structural embedding required integration of lessons into tenders and municipal procedures. Learning depends strongly on urgency and curiosity: grid congestion and other pressing problems drive knowledge uptake. More structural measures are needed to sustain learning. The respondent also highlighted that sustainability ambitions often collapse in late project phases when financial calculations dominate. This makes the early phase crucial, as ambitions must be firmly embedded when parties are still open to them.
ATELIER mobilised broad networks and used open dissemination formats such as videos and reports to share results. This made knowledge accessible beyond the consortium. Some results, such as the Energy Lab Zuidoost, were connected to practice and showed that pilots can generate practical outcomes. In most cases, however, collaboration was not embedded in municipal structures and remained dependent on external funding and motivated individuals. Some progress was made when urgency (grid congestion, CO ₂ reduction) forced action and senior officials legitimised experimentation. Stakeholder roles were misaligned, with commercial actors focusing on their own interests and civic partners such as Schoonchip excluded due to unclear legal status.	Learning conditions were undermined by municipal silos, frequent re-organisations, and lack of continuity. Staff turnover erased institutional memory, and citizen participation was weak because it was either absent or too academic. Without a municipal project office or a post-project ambition, knowledge disappeared once the pilot ended. The City's rigid procedures and risk-averse culture blocked embedding of lessons, leaving results dependent on external champions and ad hoc spin-offs.
Partners were enthusiastic but cooperation often remained at the level of meetings and networks without concrete follow-up. Amsterdam in Change tried to share and sustain lessons, but without resources or a formal role its impact was limited.	Knowledge outputs were scattered and often inaccessible. Dissemination was not budgeted from the start. ATELIER raised many questions but gave few concrete answers, and knowledge disappeared after projects ended.
Collaboration was uneven. Municipal involvement only increased after repeated urging by partners. Residents were asked to participate, but because technical decisions had already been made their input had little influence.	Conditions for learning were poor. Residents experienced participation fatigue when they realised their input had little effect. Trust and ownership were only recognised as important at a late stage. Continuity depended on follow-up projects such as the Energy Lab Zuidoost or local energy cooperatives, but these lacked formal municipal ownership.

for collaborating, conditions for learning. Public actors are shown



6.1 Evaluation of coordination, revisiting Emerson's collaboration dynamics

This part of the discussion first revisits how coordination in ATELIER aligned with or diverged from existing collaborative governance literature. Next it discusses the role of the municipality within the experienced governance tensions, the vulnerabilities created by informality, and the effect on project outcomes. Finally, it reflects on the short-term and long-term value of openness, and considers how the notion of public actor readiness extends current frameworks.

ATELIER adopted a quadruple helix governance. On paper this aligned well with what collaborative governance literature prescribes. In practice only parts of the collaboration dynamics described by Emerson et al. (2012) were present. The same familiar issues in collaborations appeared: unclear roles, limited inclusion of citizens, and a municipality that did not participate consistently. The case confirms what the literature already warns about: a collaborative model does not implement itself, it has to be actively organised and tensions have to be managed. (Ansell & Gash, 2008; Provan & Kenis, 2007; Woo, 2019). Other research already showed difficulties with collaborating with municipalities in Living Labs (Voorwinden et al. (2023).

Collaborative governance research mainly looks at how actors interact with one another. The results in this research show that the current literature can be expanded since collaborative governance is not only affected by what happens between actors. In ATELIER, and in earlier research, the public actor in a quadruple helix is not always ready to play its role. In that sense this case points to an extra layer in the idea of starting conditions. Ansell and Gash (2008) describe asymmetries in power, resources and knowledge, incentives and constraints on participation, and the prehistory of cooperation or conflict. These are important and they are logically focused on relations between stakeholders, since collaboration is something that happens between people. In this setting, the role of the public actor appears to be decisive for continuity. The usual starting conditions, framed mainly in relational terms, do not capture this fully or in detail. In this context it is not enough to look only at asymmetries or trust between stakeholders. What might matter just as much are the internal starting conditions of the public actor before starting this collaboration.

ATELIER shows that these conditions do not

cover all of it. For a collaborative governance that depends heavily on engagement and capacity, it could be beneficial to look more in depth at what starting conditions should be inside the public actor.

The municipality was expected to be both authority and partner at the same time. These two roles are always difficult to combine. Authority demands rules, direction and enforcement. Partnership demands openness and flexibility. Woo (2019) calls this a governance paradox that requires tensions to be held in place rather than resolved or choosing a side. Authority asks for clarity, enforcement and hierarchy. Partnership asks for openness, flexibility and reciprocity. Even for a prepared partner this is a complex balance. In ATELIER it became nearly impossible, because without mandate or objectives, the municipality of Amsterdam could most of the time not participate meaningfully. It often couldn't act as an authority and it was a challenge to be a fully engaged partner.

Much of the coordination in ATELIER stayed open, with very little being formalised. This did not follow from a conscious design choice. Agreements at the start were missing, and as the project progressed it became difficult to add formal structures afterwards. Tensions such as authority versus partnership, control versus trust, and formality versus flexibility were present, but they all played out mainly on the informal side.

Woo (2019) stresses that such paradoxes can be productive only when there is space to have both. In ATELIER that space was missing, which made it harder for principled engagement, shared motivation and capacity for joint action to take shape.



The effects were clear. Roles stayed blurred, and tensions like formality versus flexibility or control versus trust weren't. Literature suggests informality, or openness can be productive when deliberately managed. In ATELIER it was more a result of missing agreements. This raises the question whether we should distinguish between informality as strategy and informality as default. This distinction matters because in ATELIER informality was not a deliberate strategy but the default outcome of missing agreements, and this shaped the project's results.

There was some upside in this informality. Space was created for partners to take initiative. In the short term this openness worked well, as it allowed the consortium to address an emerging issue of grid congestion and act on it as a shared problem. Yet this openness was not the result of how the project was designed. It emerged from absence of structure, not from a deliberate design that balanced openness with direction. Woo (2019) stresses that flexibility becomes productive only when it is intentionally balanced with structure, leaving room for informality within a formal frame. In the longer term, the lack space for formal arrangements made responsibilities vague and continuity fragile.

This raises the broader question of how collaborative governance can balance openness with direction. A degree of openness is necessary in long projects where new issues inevitably emerge, but flexibility on its own does not create collaboration dynamics. To make openness work, there has to be direction between partners and sufficient readiness within each partner. For the public actor this means having a clear mandate to act within the project, explicit objectives for what the municipality wants to achieve, internal coordination across departments to align those goals, and resources to participate consistently. In ATELIER these elements were missing. There was no mandate clarifying the city's role, no shared objectives formulated beforehand, and little cross-departmental alignment. This lack of internal readiness meant the municipality entered without a clear idea of what it wanted to gain. As a result, essential discussions on roles, responsibilities and outcomes were never held, and the openness that existed could not mature into joint work.

The case shows that friction in collaborative governance does not only come from clashing logics between organisations or from choosing an informal setup. It may also come from the public actor when mandate, objectives, legitimacy, coordination and resources are not in place. In such situations it can be harder for collaboration dynamics to devel-

op. Flexibility on its own does not appear sufficient to create collaboration dynamics; some degree of direction and internal readiness seems necessary to turn openness into joint work.

Frameworks such as Emerson et al. (2012) and Ansell and Gash (2008) define starting conditions or drivers mainly in relational terms such as asymmetries between stakeholders, incentives and constraints on participation, or levels of trust. This may not fully capture the situation when public actors take part in a quadruple helix collaboration. In such settings, readiness inside the public actor itself can influence whether principled engagement, shared motivation, capacity for joint action and eventually recognition can even develop. This does not disprove the existing frameworks, it raises the question whether their notion of preconditions is complete enough. Public actor readiness may be fundamental to consider starting a collaborative governance.

6.2 Institutional learning through value recognition

Absorptive capacity theory stresses that recognising the value of new knowledge is the first step before assimilation and application can follow (Todorova and Durisin, 2007). This part of the discussion will first show you how ATELIER confirms the existing literature, in the second part it will explain how the theory could be stretched for public actors in their role in a collaborative governance.

In their model, recognition comes at the moment when knowledge is first encountered. In ATELIER the problem began earlier. Recognition was already absent at the start, when the project was not linked to mandate or departmental responsibilities. The City participated without explicit objectives, a formal assignment, or a departmental agenda to connect the project to. Because there was no clear goal at the start, recognition had nothing to build on and could not take hold later in the project. This raises a question for theory: does recognition in pilots need to be understood as something that begins before knowledge is even produced? If so, absorptive capacity needs a broader reading for collaborative governance settings.

The case also highlights how recognition is not a neutral or technical step, but a social and political one, as Todorova and Durisin argue. Knowledge does not travel on quality alone. Its uptake depends on who promotes it, how it fits into existing agendas, and whether it challenges or reinforces established routines. In ATELIER, outputs were judged against agendas that had little room for experimental projects, making recognition unlikely regardless of their relevance. This dynamic was reinforced by performance assessments within the municipality, where officials were evaluated on delivering concrete outputs such as new energy stations, not on whether they engaged with innovative approaches. Such criteria left little incentive to treat pilot lessons as valuable, even when they were technically sound.

Beyond these political conditions, organisational learning literature points to the cognitive limits and ingrained routines that restrict recognition (Argyris & Schön, 1978; Leonard-Barton, 1992; Gavetti & Levinthal, 2000). In ATELIER these were visible in how project outputs were treated as external to municipal work, rather than connected to ongoing responsibilities. Rigid departmental routines and siloed structures meant that many officials did not even perceive the project as relevant to their tasks, echoing Hirose's (2022) observation that institutional and cultural contexts can prevent organisations from seeing external practices as valuable.

The case also highlights how recognition can depend on individuals. Towards the end of ATELIER, one motivated actor inside the municipality actively sought out the lessons, connected them to ongoing work and pushed them into relevant organisational channels. This shows the importance of champions, which literature often praises as boundary spanners (Williams, 2002). But the case also reveals the fragility of relying on them. When recognition rests on one person, learning becomes vulnerable to turnover and shifting priorities. The real discussion here is whether champions are a solution or a symptom of a deeper problem. If the municipality wants to be a learning organisation, it cannot depend on learning individuals. Structural arrangements are needed so that recognition survives beyond the presence or absence of a single champion.



Absorptive capacity theory describes recognition as the first step in learning: organisations must see the value of new knowledge before they can assimilate and apply it (Todorova and Durisin, 2007). In ATELIER, recognition did not only matter once knowledge appeared, but already seemed to influence the collaboration from the moment the municipality joined. The possibility to take that first step was shaped by how the project was positioned inside the organisation.

This links recognition more closely to the collaboration dynamics in Emerson's framework. Whether actors engage and feel motivated already depends on whether they recognise it as relevant to their own work. If that is missing in the collaboration, later recognition of project results might be harder to achieve.

In ATELIER this anchoring was hard. The project was positioned at the margins of municipal work: it did not connect to the agendas that departments considered their main tasks, so staff did not feel responsible for it. This suggests that recognition is not only a cognitive step but also an organisational one. Staff will not recognise value if they do not see it as part of their daily responsibilities. In collaborative governance this link is especially important, because institutional conditions shape both the quality of collaboration and the recognition of its outputs. Principled engagement is about whether actors define a shared problem together and build a common understanding. If a project like ATELIER is not anchored in municipal agendas, officials do not experience it as part of their problem set, which makes principled engagement shallow from the start. That shows recognition is more than an absorptive step but also a sign of whether engagement was present in the collaboration in the first place.

The ATELIER case also shows that recognition and uptake was fragile. Lessons were produced that respondents considered valuable, but their continuation depended on the effort of one motivated official. Recognition in this form rests on individual motivation rather than institutional arrangements, which makes outcomes vulnerable to individuals or staff turnover.

This dependence on individuals was not the core problem in itself, but a reflection of the fact that nothing in the organisation was set up to carry the lessons further. The weakness was therefore not only that recognition rested on a few people, but that nothing is in place to carry it further when those people aren't there.

This fragility shows that the current design of pilots leaves little structural support for uptake or recognition. If uptake depends only on whether there are individuals that push lessons forward, institutional learning cannot be secured. Therefore it seems important to consider during the design of the pilots how recognition can be supported structurally, not just left to motivation.

One possible way forward is to think in terms of a pilot extension. Which could mean that a pilot starting in Amsterdam would have a secondary development phase which could already be anticipated at the design stage. This second phase would not replicate or scale the pilot but focus on which parts can be transferred into ordinary contexts or developed further in another setting. The possible strength of this approach is that it forces proposal writers to think early about continuity, reach and inbedding. Ideally, every pilot with lessons would lead into a next step, yet it is difficult to hardwire such a phase into proposals. Still, acknowledging fragility and planning for continuity would already help to strengthen recognition and give pilots a greater chance to extend their impact.

Taken together, ATELIER shows that recognition should be seen as a process that runs from project initiation through to absorption. In this case the absence of early recognition weakened principled engagement and left absorptive capacity dependent on one individual. The central discussion is therefore whether recognition in pilots should be treated as an institutional condition rather than a personal effort. Should recognition be understood as a part before knowledge is produced, and as part of the starting conditions? Are motivated individuals, or boundary spanners (Williams, 2002), evidence of strength or fragility, since they appear so different from the rest of the organisation? And most of all, if a municipality claims to be a learning organisation, does that not demand recognition that is institutionally embedded rather than left to individual effort?

7.1 Answering the research questions

The ATELIER project was shaped by the collaboration between partners as well as by how the municipality, one of the main actors in the project was organised internally. Responsibilities were spread across departments, staff turnover was high, and it was hard to link the project to policy. Without a clear mandate, consistent representation, or internal anchoring, the municipality's contribution wasn't a lot and coordination with this party was difficult. This directly influenced how coordination was organised. One of the parts of collaborative governance, principled engagement, didn't completely happen, and much of what was agreed between partners was informal.

This conclusion will answer the research questions. First bringing subquestions 1 and 2 together and then answering subquestions 3. the main question is answered throughout the conclusion. This thesis examined how coordination is organised in a collaborative governance project involving the Municipality of Amsterdam, and how insights can inform its approach in future projects.

The research shows that coordination in ATELIER was informal, which created both flexibility and fragility. The municipality was formally listed as coordinator but in practice acted in a fragmented and distant way, limiting its influence. Learning depends on individual initiative. These insights led to conditions that the municipality can apply when preparing for future pilots which are shown in the recommendations.

What forms of coordination were used in ATELIER, how did they influence collaboration and outcomes, and what was the municipality's position?

Looking at how coordination was organised gave insight into the ways such projects actually function, both in formal structures as for daily practice. It showed what happens to information once it is produced, how it is shared or not shared, in what way and how partners expect outcomes to be used. It also revealed much about the municipality itself, as its fragmented organisation and lack of anchoring influenced the course of the project.

Overall, coordination in ATELIER was informal. For future projects, such informality can work best when combined with clearer role division between partners and stronger anchoring in the municipal organisation from the start, otherwise involvement risks becoming inconsistent. A clearer role division does not have to reduce openness, but can provide the structure that

makes open collaboration more reliable.

The municipality of Amsterdam was formally coordinator, but in practice its role was fragmented and largely facilitative, with weak policy links and limited continuity. For future projects this means that the municipality should not only secure the grant but also anchor the project in policy, assign departments wisely, and ensure stable representation, so that its role is consistent and its influence meaningful.

To what extent does the Municipality of Amsterdam absorb and apply lessons from ATELIER, and which institutional or project-related factors influence this process?

Knowledge from ATELIER is in the process of being absorbed by looking in what ways they can apply some of the lessons. Uptake depends currently on individual initiative, which makes the process fragile and inconsistent. The absence of clear links with municipal agendas and the open design of the project reduces the chance that lessons can be embedded. For the lessons to take root, projects must already be linked to agendas and daily work at the start, so their relevance is clear throughout the process.

For cities that see pilots as opportunities for change, readiness inside the organisation is the first step that makes collaboration possible. Within the municipality, this also means creating space for conversation between colleagues about why external knowledge matters and how it can be used. Individual motivations will differ, but discussing them openly can help align perspectives and make the organisation more capable of absorbing lessons together and structurally.



7.2 Linking back to theory

The findings confirm challenges described in the literature on collaborative governance, such as Emerson et al. (2012) on principled engagement and Ansell and Gash (2008) on starting conditions. In ATELIER these mechanisms never fully developed, as engagement from the beginning was weak and capacity for joint action was limited. What the case adds is that the internal organisation of the public actor matters for these processes to take place. Existing frameworks emphasise relationships between actors, but say little about intra-organisational readiness. Public actor readiness therefore is the recommendation as an additional precondition for collaborative governance in a pilot setting that makes use of the quadruple helix governance.

7.3 Practical implications

For Amsterdam this means that before joining future pilots, the municipality should check a couple of things first. Before joining future pilots, the municipality must be clear on why it is joining and link this to policy goals. This should be done so that it doesn't become a project that no one knows what to do with. If multiple departments are involved, they must agree on a joint purpose before the project starts. Someone with authority must ensure continuity and link departments. If that role is external, an internal counterpart with mandate is still needed. Capacity must also be secured from the start. Time for coordination, legal, finance, and communications should be reserved, and resources coordinated. Each pilot is also a chance to learn about collaborative governance. Proposal writers in the TES can ask partners what they expect from the municipality and use this to prepare better for the next one. Recognition has to be built in from the beginning by tying objectives to municipal agendas and assigning clear receiving owners. Designing for continuity finally is also important. Pilots should include a plan for how lessons move beyond the project.



RECOMMENDATIONS

These recommendations point to measures municipalities could take to be better prepared for participating in a collaborative governance pilot. They are practical conditions distilled from what went right and wrong in ATELIER. The focus is on the public actor, since the municipality's readiness proved in this case to be decisive for collaboration dynamics to function well. The recommendations concern the start of such projects: what should be arranged before committing, and what should be in place to increase the chances of recognition and continuity.

8.1 Preconditions before joining a pilot

A collaborative governance in the form of a pilot with a quadruple helix only works when the municipality enters with a clear internal foundation. ATELIER showed what happens when this foundation is missing: ownership shifted between departments, the mandate was never firmly anchored, and progress relied on a handful of motivated individuals.



1

PRECONDITION 1 PURPOSE

Before thinking about roles, the municipality must know why it is joining the pilot and what it hopes to achieve. This means formulating a clear problem definition and linking it to existing policy goals. Without this, the pilot risks becoming an add-on without direction. Objectives need to be agreed at the right level so they reflect municipal priorities, not just the interests of a project team.

2



PRECONDITION 2 OWNERSHIP

When one department is clearly responsible, that department must take ownership and carry the formal responsibility. This ownership should be written down and communicated, explaining why the municipality is participating, how the pilot connects to existing policy agendas, and what responsibilities follow from it. With this in place, the project is not treated as "extra work" or a side experiment, but as part of the municipal line. In cases where multiple departments are involved, the departments must sit together to agree on a joint purpose and describe how the pilot fits into both of their agendas. This needs to be defined before the municipality enters collaborative governance with external partners. To be precise, it needs to happen during or before writing the proposal because it may require adjustments to the proposal itself to make the pilot a better fit for municipal objectives. Otherwise, the pilot begins without a shared direction inside the municipality.



3

PRECONDITION 3 RESPONSIBILITY

Pilots last several years and involve many stakeholders so they cannot be coordinated through goodwill alone. One person with authority must be responsible for connecting departments, keeping track of decisions, and ensuring continuity. If that person is external, the municipality still needs an internal counterpart who carries the mandate and guarantees support throughout the project. Even a deputy can make a difference, so that the process does not collapse when one person leaves.

PRECONDITION 4 CAPACITY



Time and expertise for coordination, legal, finance, and communications must be reserved from the start. These tasks should be part of job descriptions and aligns with precondition 3, that when resources are necessary, someone is clearly responsible to provide these. If several departments are involved, they need a clear way to coordinate resources. Every pilot is also a chance to learn: proposal writers can ask partners what they expect from the municipality and use that feedback to prepare better for the next one.

4



PRECONDITION 5 SECURING RECOGNITION

Recognition has to be built in from the very beginning. This means that every expected output is tied to a municipal agenda and has a clear receiving owner like a department or team that commits to using it. Recognition is closely linked to the preconditions of purpose and ownership because a pilot can have more impact when it contributes to a defined municipal objective and when one or more departments formally take responsibility for its outcomes. By giving recognition its own place in the design, extra attention is given to that which could help officials to see that the project is a part of their core work.

5



PRECONDITION 6 DESIGNING FOR CONTINUITY

Pilots are by definition temporary, but their lessons should not be. Continuity needs to be designed, not left to chance at the closing event. This starts in the proposal phase: alongside the pilot activities, there must already be a plan for how the most relevant lessons will move beyond the project. It's important to keep in mind that this is not about replicating or scaling, but about preparing at least one concrete step of transfer.

A pilot design should already make space for outcomes or lessons to be applied beyond the project. To make this credible, a follow-up role needs to be assigned while the pilot is still running. This can be a "buddy" team or coordinator who keeps track of potential continuation, lines up the right stakeholders, which goes hand in hand with precondition 3 and ensures that lessons do not vanish when the pilot comes to an end.

6

8.2 Bringing it together

The six preconditions are the basics that need to be in place for municipalities to lead or join a pilot. Purpose and ownership make clear why the municipality is involved and who carries responsibility. Responsibility and capacity ensure that work and resources are secured. Recognition and continuity keep results connected to municipal work and are preparations for the steps after the pilot.

Together these preconditions can form a checklist for practice. They should be addressed before a municipality signs on to a pilot in the European subsidy department, kept in view during execution, and followed up afterwards.

The preconditions are related to one another. Recognition depends on clarity of purpose and clear ownership, and capacity only works when linked to responsibility. A next step could be to apply these recommendations within the municipal EU subsidies team, to test whether they improve preparation and follow-up or whether deeper changes, such as cultural change, are also needed. This is discussed further in chapter 9.

9.1 Limitations of the research

This study is based on a single case named ATELIER, a Horizon2020 pilot with its own funding rules and consortium set-up. Studying only one case limits generalisation, but findings from other studies of similar projects show patterns in line with what is described here, so the findings are not unique to ATELIER.

The sources used for this research were not as balanced as I'd hoped. Most interviews came from project partners, while senior officials who set direction and influence staff performance were less represented. There was only one interview with a public actor which was about the learning culture inside the municipality. This department wasn't in the picture for most of the project duration. Some documents, such as the project's evaluation report by the coordinator, were not yet available, which meant relying more on interviews than intended and having less time to dive deeper into other things that appeared important.

The results reflect processes visible during the research period and the interviews give information on how it was before. They do not show how lessons will evolve after the project ends in 2026, or how the new TWIST proposal will be taken up in the municipality. Documentation on collaboration was limited, since the EU did not ask for detailed governance reporting of their own project, so much of the analysis rests on interviewees' perceptions.

The recommendations are built on what was most concrete in ATELIER: a set of preconditions for municipal engagement. These are presented as a baseline that makes lessons as applicable as possible, but they are not a guarantee. Political, cultural, and financial barriers may still weigh heavier than procedural improvements, and recognition of lessons often depended on motivated individuals.

The theory also narrowed the view. By focusing on collaborative governance and recognition of knowledge, other factors such as politics or power differences received less attention. ATELIER is still running, which means later outcomes and new strategies such as the municipal innovation agenda could not yet be assessed. The findings are context-specific for Amsterdam and do not cover broader influences such as national or EU rules.

Finally, there are limitations of access and position. Not all meetings or documents were open, and many decisions happened informally, so there was no documentation on that. Interviewees may have highlighted problems more than

successes. The internship created close access but also shaped the view, creating a bias, since observations came mainly from one department. Semi-structured interviews introduced another bias: questions often followed up on negative points raised by participants, which may have given less attention to positive experiences.

Together these limitations mean the results should be read as an indication. This research shows result from one project at a particular moment in time and offer lessons that can inform practice, without claiming that it is valid for all comparable.

9.2 Implications for future research

This study relied on document analysis and interviews with a limited group of stakeholders. The findings therefore reflect a single case and cannot capture the full variety of the municipality. These limitations, however, also point to opportunities for future research. Within the municipality, the TES department, where EU proposals are written, could be a relevant setting to study how recommendations can be implemented and whether ownership should rest there or elsewhere.

Another line of inquiry would be to investigate how senior officials set and apply assessment criteria, in order to understand recognition at a deeper organisational level. Mapping these officials and understanding their choices across organisational levels could reveal where learning and continuity break down. Such research could provide valuable insight into the institutional mechanisms that support or hinder uptake and participation in collaborative governance.

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A. Conference word cloud, coded to emersons collaboration

Collaboration Dynamic	Pain Points	Interpretation
Principled Engagement	No shared vision, missing deep discussions, participation ends, no access to citizens, delays in consultation work	There was insufficient early framing of the problem and no ongoing deliberative space that supported shared understanding or inclusive decision-making.
Shared Motivation	Low municipality interest, commitment from the city, lack of impact, need for project continuation	Trust and legitimacy were fragile. Commitment was actor-dependent and declined over time, weakening collaboration and reducing continuity.
Capacity for Joint Action	Delays, data availability, regulations, bureaucracy, admin, long-term planning, scalability, EU coordinator changing	Trust and legitimacy were fragile. Commitment was actor-dependent and declined over time, weakening collaboration and reducing continuity.

B. Interviews per respondent from left to right: statement, summary, quote

Respondent 1

Statement	Summary of the statement	Quote
Deliverables vs. Learning Needs	EU deliverables were aimed at Brussels and a broad audience, not Amsterdam specifically. This mismatch meant the City's actual learning needs were not addressed, and Lennart struggled to bridge that gap.	
Innovation Atelier as Learning Space	The Innovation Atelier was designed to build learning capacity and prevent siloed work. It allowed Amsterdam to articulate its needs and provided flexibility to adapt to challenges.	
Role of Municipal Champion (Mimi)	Having someone like Mimi inside the City, who defined and pushed learning questions, was crucial. Without this champion, lessons risked being overlooked.	"It is really good that we now have someone like (motivated official) who just says... this is what we want to get out of it."
Accessibility of Lessons	Municipal staff are too busy for lengthy reports. Lessons need to be short, accessible, and linked to people who can explain more detail.	"They are extremely busy, they really don't have the time or desire to skim through all kinds of deliverables."
Risk and Informality	Developers and companies carried major risks, while many agreements were informal. This informality allowed progress but also made the project fragile.	"A lot was just agreed orally... that's also what made people willing to take a step, because if you put everything on paper upfront... often the conclusion is: we won't do it."
Support through Wider Networks	The consortium and IA mobilised external experts (jurists, technical partners) to help solve problems that individual developers could not manage alone.	"Because everyone felt involved... you have much more leverage to make sure that his problem gets solved."
Municipality's Supporting Role	The City should not dominate projects but should provide supportive expertise when aligned with its goals. This reduces risks for innovators and improves scaling potential.	"Amsterdam doesn't have to take everything over, but they should give legal and financial support when projects fit their agenda."
Institutional Anchoring Problems	The EU proposal was written by a different municipal team than the one implementing it. This handover weakened ownership and caused disconnects.	"Then the whole team that helped write the proposal just isn't around anymore... and that means it isn't properly anchored in the organisation."
Importance of Early Involvement	Municipal departments that will implement outcomes should define learning questions before proposals are submitted, to avoid misalignment.	"If the implementing team is not involved from the start, you inherit a project you don't own."
Flexibility of Governance	The IA created flexibility to adapt lessons and goals during the project, which was valuable in a pilot setting.	
Quadruple Helix Governance	In innovative projects, citizens and knowledge institutions should be part of governance. Municipalities can organise this but need external expertise for monitoring and structuring learning.	"In real innovation, you need knowledge institutes and citizens in governance, not just government."
Energy Communities	Energy communities can offer a governance model for stronger citizen involvement and distributed ownership. Amsterdam could use this more actively.	"Energy communities are a way to give citizens ownership. Amsterdam should make more use of that."
Knowledge Uptake and Amsterdam In Change	AIC could store and share pilot lessons, but this requires a clear mandate. Without it, knowledge risks dissipating.	"Amsterdam in Change could be a platform, but only if it gets a mandate to manage knowledge."
Balance of Roles	The municipality should not pull everything to itself. It must safeguard knowledge and continuity while leaving room for external innovation.	"The City shouldn't centralise everything. It should safeguard knowledge but let others innovate."

Statement	Summary	Quote
Municipality Avoiding Ownership	The City deliberately avoided taking ownership in ATELIER, because ownership would create expectations that they would implement results. This choice shaped how roles were defined from the start.	"The City of Amsterdam made a very conscious choice not to be in an ownership role... because then people expect you to actually implement the results."
Disconnect Between Proposal and Execution	The grant-writing team disappeared after approval, leaving departments that had little connection to the proposal to execute the project. This created confusion and weak ownership.	"Once the proposal was written and approved, the people who had written it were no longer there... the project landed with others who hadn't been part of it."
Blurry Responsibilities	Responsibilities within the City were unclear, and no one claimed a mandate. This left external coordinators to take the lead on tasks.	"It was never really clear who inside the municipality carried the responsibility... so it was easier for externals to step in and fill that gap."
Dependence on External Coordination	Much of the project's continuity relied on external coordinators, since municipal representatives were not in strong roles. When externals left, knowledge continuity broke down.	"The continuity of ATELIER depended heavily on people outside the City... when they left, you lost a lot of the knowledge with them."
Mismatch EU vs. Local Priorities	Deliverables had to satisfy EU reporting but did not always serve Amsterdam's needs. This mismatch limited the project's local usefulness.	"You're always writing for Brussels... but that doesn't mean those reports are usable for Amsterdam."
Citizen Participation Absent	Although citizen engagement was promised, in practice no budget or mechanism was in place. Residents had almost no influence on the outcomes.	"Participation was written in the project... but there was no budget for it, so in practice citizens hardly played a role."
Value of Committed Staff (Mimi)	Individual municipal staff like Mimi were essential, as they defined questions and provided continuity, even though the wider organisation did not take ownership.	"If you have someone like Mimi, who really takes it seriously and formulates what Amsterdam needs, then you can actually create value."
Lack of Continuity	Knowledge was not secured in institutional systems. Once key individuals left, lessons disappeared, and no mechanisms existed to retain them.	"When people left, their knowledge went with them... there were no feedback loops to keep it inside the organisation."
Importance of Networks	Broader collaboration networks helped solve problems and keep momentum, even when municipal involvement was weak.	"Because the network was broad, you could always find someone to help solve the problem."
Rigid Structures of the Municipality	The City's siloed and rigid structures made it hard to integrate EU project results. Embedding was almost impossible under the existing organisation.	"ATELIER didn't fit into the rigid boxes of the City... that's why it was so difficult to embed the results."
Quadruple Helix Governance	In innovative projects, citizens and knowledge institutions should be part of governance. Municipalities can organise this but need external expertise for monitoring and structuring learning.	"In real innovation, you need knowledge institutes and citizens in governance, not just government."
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Balance of Roles	The municipality should not pull everything to itself. It must safeguard knowledge and continuity while leaving room for external innovation.	"The City shouldn't centralise everything. It should safeguard knowledge but let others innovate."

Statement	Summary	Quote
Unclear Ownership at Start	ATELIER began without a clear problem owner inside the municipality. The project landed in an innovation department, disconnected from the real energy transition mandate.	"We started within the R&D department, but it was never clear who actually owned the problem. It was disconnected from the real energy transition tasks."
Fragmented Positioning	Multiple departments (R&D, Energy for the City, Sustainability, subsidies team) were involved, but none took full responsibility. This created fragmentation and confusion.	"It was always a puzzle where ATELIER should land. Different departments were involved, but none were the actual owner."
Energy for the City as Logical Owner	Over time, the project moved towards Energy for the City, which provided more relevant ownership and better alignment with implementation needs.	"Now it sits at Energy for the City, which makes much more sense because they are closer to the execution side."
Knowledge Loss Through Turnover	Staff departures led to significant knowledge loss, since ownership and institutional structures were absent.	"When colleagues left, their knowledge disappeared with them. There was no real mechanism to secure it."
Weak Interest Internally	In early phases, when results were not visible, colleagues in other departments showed little interest. Interest only grew when concrete technical results emerged.	"At first it was difficult to show anything tangible, so internally there was little interest. Only once the buildings and batteries were there did it become more interesting."
Lack of Hypothesis and Direction	The project lacked a clear municipal problem definition or hypotheses. Instead, it built on earlier EU trajectories without strong local anchoring.	"We never really had hypotheses we wanted to test as Amsterdam. The project built on a previous EU trajectory, not on our own formulated questions."
Silos Between Pilots	Amsterdam ran many pilots (ATELIER, Schiphol, Port, Zuidoost) but failed to connect them into a learning group or shared knowledge base.	"All the pilots stayed fragmented. We never pulled them together into one research group to learn from each other."
EU vs. Local Accountability	The City reported to the EU rather than to aldermen, which misaligned accountability and reduced local political engagement.	"We didn't report to the alderman, but to Brussels. That makes it harder to connect results to our own governance."
Weak Strategic Fit	ATELIER was not tied to a municipal innovation or research agenda. As a result, its outputs were not embedded in strategy or follow-up programmes.	"It never really fit into an innovation agenda. Without that, the lessons risked ending up in a drawer."
Need for Stronger Steering Role	The municipality was seen as problem owner by partners, but did not act as such. Lennart stresses that more directive ownership could have made the consortium much more effective.	"We were seen as the problem owner, but we didn't take that role. If Amsterdam had steered more, the consortium could have worked much more effectively."
Pilotitis and Lack of Strategy	The City kept running EU pilots without clear long-term strategy or framework, leading to inefficiency and weak institutionalisation.	"It was all pilotitis – lots of projects, but no framework to connect them to strategy or decide what to scale up."
Innovation Agenda Needed	Lennart argues for a municipal innovation agenda, where research questions are defined in advance and pilots are aligned to those knowledge gaps.	"If you have an innovation agenda with clear research questions, then these EU projects can really work for you. Now they just landed without context."
Amsterdam in Change as Spin-Off	Networks like Amsterdam in Change became places where ATELIER knowledge and partners connected, but these were not structurally tied back into the municipality.	"Amsterdam in Change became a place to continue some of the networks and content of ATELIER. But it was more external than municipal."
Dependency on Champions	The success of parts of ATELIER relied heavily on individuals like, who carried disproportionate responsibility without structural support.	"We were lucky that Machiel was there. Without him, many things would not have happened. But that's not a sustainable model."
Lack of Continuity and Uptake		

Statement	Summary	Quote
Quadruple helix governance in Ground for Well-being	The project introduced a new governance structure in a polder area, with collaboration between the municipality, district Noord, and Voeren. Coordination between municipal directorates and districts was weak.	"Ground for Wellbeing was an EU-project in a polder area with a quadruple helix governance. The City worked together with Noord and Voeren, but coordination between policy directorates and districts was limited."
Siloed municipal organisation	No fixed department was attached to the project; collaboration was ad hoc between policy officials and districts. The siloed structure of the municipality made integral cooperation difficult.	"The municipality works strongly in silos, which makes integrated collaboration very hard."
Project leaders lack participatory skills	Project leaders were mainly physically oriented, lacking co-creation and participation expertise. There was a need for dedicated participation managers to guide residents.	"Project leaders are often focused on the physical side and miss co-creation experience. You need participation managers to really support residents."
Weak start-up after grant approval	After subsidy submission, there was no formal team in place. Writers moved on to other jobs, funding was delayed, and new staff had to be recruited. This caused delays and uncertainty.	"After submitting the subsidy there is no team ready. People have moved on, money is not there yet, and you have to find new people. Starting up takes 4–6 months."
Need for formal agreements	Formal arrangements between municipal directorates (e.g., signing intent letters) were essential to avoid losing time and ensure continuity.	"We thought about agreements between directorates, like signing a letter of intent. Otherwise, you lose months and continuity disappears."
Citizens lack formal role	In ATELIER, the municipality acted as contractor, but citizens were not a formal partner. They could only be included through organisations, leaving their voice indirect.	"Residents are not formal partners in EU consortia. They can only join through organisations, otherwise they have no voice."
No evaluation culture	Governance experiences were hardly evaluated. The municipality focused on execution and problem-solving, not on reflecting how collaboration had worked.	"Within the City there is hardly any learning from governance experiences. No-body evaluates how cooperation went."
Need for a municipal project office	There was a structural need for a project office inside the municipality to guide both applications and implementation. It should bring expertise on EU structures, governance, risk, and accountability.	"We need a project office in the City that understands EU project structures, governance, risk management, and accountability."
Limited skills of project leaders	Project leaders were too narrowly focused on execution. They needed to coordinate integrally, balance stakeholder interests, take residents seriously, and understand governance responsibilities.	"The project leader role has to be broader. Not just execution, but also managing stakeholders, involving residents, and knowing who the client is."
Fear of liability blocks innovation	Innovation needs freedom, but fear of liability and unclear responsibilities made the municipality risk-averse and hesitant to experiment.	"Freedom is essential, but because of liability and unclear responsibilities the City quickly pulls back."
Pilotitis and Lack of Strategy	The City kept running EU pilots without clear long-term strategy or framework, leading to inefficiency and weak institutionalisation.	"It was all pilotitis – lots of projects, but no framework to connect them to strategy or decide what to scale up."
Innovation Agenda Needed	Lennart argues for a municipal innovation agenda, where research questions are defined in advance and pilots are aligned to those knowledge gaps.	"If you have an innovation agenda with clear research questions, then these EU projects can really work for you. Now they just landed without context."
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Dependency on Champions	The success of parts of ATELIER relied heavily on individuals like Machiel, who carried disproportionate responsibility without structural support.	"We were lucky that Machiel was there. Without him, many things would not have happened. But that's not a sustainable model."
Lack of Continuity and Uptake	At the final conference, municipal presence was weak, and lessons were not systematically followed up. Uptake depended on intrinsic motivation of individuals.	"At the final conference hardly anyone from the City was there. Lessons were shared, but without structure it depends on individual enthusiasm."

Statement	Summary	Quote
Senior sponsorship enables innovation	A supportive senior civil servant actively put sustainability and innovation on the agenda and created room for staff to act. Their backing was decisive for momentum.	"Support from a higher placed official is crucial. It gives people the space to work on innovation."
Risk averse routines persist	Hierarchy is mild, yet risk averse officials stick to rules and slow experimentation.	"There are always risk averse civil servants who want to do everything by the rules."
Safe zone in Zuid-oost	The Southeast team built a safe environment to experiment. Other departments do not offer the same conditions.	"In Zuid-oost it is a safe environment to experiment. Elsewhere that is not self evident."
District office culture blocks initiative	A long standing culture at district offices discourages initiative. Signals of an unsafe work-place reinforce caution. Change takes years.	"In the district office a culture emerged where you had better not stick your head above the parapet."
Time and money are scapegoats	Lack of time or budget is often cited, yet the core constraint is mental space and reflection.	"If money is the problem, I will arrange it. So what is the real problem?"
Learning through LIFE	The LIFE project brought in substantial knowledge and was taken up in execution. External funders supported it because they expected real implementation.	"Funding was granted because there was trust it would actually be implemented in Zuid-oost."
Energy hub established	An energy hub started and is now housed with a local business platform. Firms were already engaged via LIFE. A provincial grant funds a hub coordinator.	"An energy hub has started. Together we applied for subsidy to pay a hub coordinator."
Fragile citizen cooperative	Ten residents founded an energy cooperative. It remains fragile and needs support to survive. The City is considering how to backstop continuity.	"Without support it collapses. The municipality is considering whether and how to keep supporting it."
Knowledge will not spread by itself	Materials exist (Open Research, slide decks, videos) but people do not use them without a trigger. Active outreach is required.	"People do not go there spontaneously. You have to trigger them."
Citywide dissemination in motion	Presentations have been given to internal teams. A public version of LIFE results is being prepared for wide circulation.	"A public version of the LIFE results is in the making. To spread widely."
ArenaPoort managers engaged	Project managers in the area understand the hub's purpose. The team explores adding municipal buildings through a group contract and invites Facilities to join.	"Project managers know what the hub is and what it does. Facilities is invited to learn and participate."
Cross hub exchange	There is exchange with hubs in the port area and Utrecht. A project video is available for internal learning.	"There has also been exchange with hubs in the port area and Utrecht."
Curiosity drives uptake	Knowledge uptake depends on curious people. It cannot be forced. Urgency, such as grid congestion, increases engagement.	"You need curious people for knowledge uptake. You cannot force it. Urgency helps."
Bio based building underused	Bio based construction is important and can address several issues at once, yet it is not internalised in practice.	"Bio based building is important, but it is not in people's heads yet."
Execution is the bottleneck	Execution is where everything comes together. Plans were not co created and that remains a structural bottleneck.	"Execution is where it all converges. Plans were not made jointly, and that remains a pinch point."
Programme fragmentation	Too many fragmented programmes launched in parallel with conflicting aims. Mapping was attempted, but reorganisation and discomfort limited follow through.	"There were too many fragmented programmes. I drew an organogram, but these signals are uncomfortable."
Regulatory overload	The explosion of environmental regulation since the 1980s makes it hard for R&D units to keep up, compounding fragmentation.	"The explosion of environmental legislation since the eighties makes it hard to keep up."
Value of pilots	Pilots are always valuable, even failed ones, because they yield insights and reusable ways of working. They are often not directly scalable.	"Pilots are always valuable, also when they fail. You learn a lot."
Structural issues need structural tools	Grid congestion and similar problems require structural measures. Making grid aware building a standard tender requirement could change behaviour.	"Just including it in agreements can make it happen. Put grid aware building in tenders."
Ambitions collapse in late phases	Sustainability ambitions often fall away once financial calculations are run. Early phase alignment is critical while parties are still open.	"Ambitions often fall once the financial run through starts. The early phase is crucial."

Statement	Summary	Quote
Generic and vague proposal	The ATELIER proposal was written in broad, generic terms, leaving partners with different expectations and no shared understanding of goals. This lack of clarity created confusion from the start.	"The proposal was very generic... everyone had a different perception of what the project would do."
Weak municipal coordination	The City of Amsterdam underestimated the coordination task. It wanted to be coordinator but lacked the internal capacity, both organisationally and financially. Responsibilities remained diffuse.	"The municipality wanted to be the coordinator, but they didn't have the expertise or capacity... on finance they also failed."
Financial mismanagement	The City left €500,000 unused, shifted money late to other partners, and missed reimbursements. This showed weak financial control and undermined trust in their coordinating role.	"The financial administration of the municipality was 'on the edge'... half a million euros wasn't spent, another large sum wasn't even claimed back."
Lack of risk allocation	Risks were never formally divided between partners. Some actors carried disproportionate risk without protection, which created frustration later in the project.	"There were no risks shared between parties... in construction you'd normally arrange that in contracts."
Exclusion of civic actors	Civic actors like Schoonschip were sidelined due to unclear legal status. They only received a letter of intent and no compensation, which caused frustration and weakened legitimacy.	"Schoonschip couldn't formally join... they got nothing paid, which led to frustration."
Divergent partner interests	Knowledge institutions generally performed well, while some companies mainly pursued commercial interests. This imbalance created tension in collaboration.	"Companies joined mainly for their commercial interest... which is logical, but it didn't always help collaboration."
EU scepticism about Amsterdam	The European Commission noted Amsterdam's limited commitment, since municipal staffing was minimal compared to their official role. This damaged credibility.	"The EU saw that Amsterdam wasn't really committed... their personnel input was far too low for the role they had."
Organisational instability	Frequent reorganisations and leadership changes in the City disrupted coordination. A supportive manager was replaced by a risk-averse director, which slowed progress.	"My manager who supported me was fired... then I got a 'nitwit' who didn't dare take any risks."
Misalignment of project placement	ATELIER was positioned under Strategy and Sustainability, which was too far from execution. Later transfer to Energy for the City created a better fit.	"The positioning was wrong... strategy was too disconnected. Energy for the City was better."
No learning culture	The municipality rarely evaluated its own processes. Lessons from ATELIER were not embedded or connected to municipal priorities, limiting uptake.	"The City hardly evaluates its own processes... plans just disappear in the drawer."
Over-reliance on individuals	Continuity depended on a few individuals like Frans or Machiel. Their departure would have left the project without direction or memory.	"The whole steering group was replaced except me and one other... without us, much knowledge would have been lost."
Need for readiness check	Participation of municipalities should only follow an internal check of mandate, capacity, and commitment. Amsterdam entered unprepared.	"TNO always checks readiness beforehand... municipalities should do the same."
Project design shortcomings	Work packages lacked interdependencies, agreements were informal, and no clear follow-up was planned. This weakened both delivery and learning.	"The proposal had no good structuring of dependencies between work packages... a big mistake."
Citizens hard to engage	Citizens were difficult to involve meaningfully; topics like CO ₂ reduction were too abstract. Without stronger mechanisms, engagement remained shallow.	"Energy is too abstract for citizens... CO ₂ reduction means little to them, health or waste is more tangible."
Long project fatigue	Project duration was too long for motivation but too short for real construction. Staff turnover and fatigue eroded continuity.	"Long projects are too short for real building, but too long for people's motivation... knowledge gets lost."
Need for post-project ambition	ATELIER and similar EU pilots lacked a post-project ambition. Without continuation, knowledge and momentum collapsed after funding ended.	"EU projects need a post-project ambition that is monitored... otherwise everything falls apart afterwards."

Statement	Summary (Paraphrased)	Illustrative Quote (English)
Lack of Clear Mandate	Collaboration in the quadruple helix was slowed because no actor had a final mandate to take decisions. Diffuse roles created stalemates.	"Nobody had the mandate to really decide. That meant things kept hanging."
Dependence on Subsidy	Subsidy provided the main incentive to collaborate. Once subsidy ended, collaboration quickly lost momentum.	"The subsidy brought people together, but when it was gone, everyone stepped back again."
Weak Dissemination Structures	Dissemination and learning were not budgeted. Reports and outputs were missing or inaccessible, even to AIC itself.	"There is no report, no central place... even I don't know what to give the municipality."
Time and Resource Constraints	Lack of time and resources meant frameworks or plans were never completed or followed up.	"We had good ideas, but without hours and budget they never became concrete."
Institutional Learning Gaps	Knowledge was not structurally embedded; once individuals left, the lessons disappeared with them.	"As soon as people left, all the knowledge went with them."
Symbolic Collaboration	Collaboration often remained at the level of meetings and networks without concrete follow-up or results.	"We talked a lot, but in the end there was little that really stuck."
Amsterdam in Change Role	AIC tried to spread and sustain lessons from projects like ATELIER, but without mandate or resources this remained limited.	"Amsterdam in Change wanted to share lessons, but we had no real role or money to do it properly."
Unclear Ownership of Outputs	Questions remained on who should own or use the outputs. This left frameworks unused and learning fragmented.	"In the end, nobody really took ownership of the results."
ATELIER Lessons	ATELIER produced many questions but few practical answers, leaving the municipality without clear guidance.	"ATELIER raised lots of questions, but in practice we didn't get the concrete answers we needed."
Knowledge Disappearing After Projects	Lessons were not linked to institutional memory, and so faded once projects closed.	"If there is no follow-up structure, the knowledge just disappears when the project ends."
Pilotitis and Lack of Strategy	The City kept running EU pilots without clear long-term strategy or framework, leading to inefficiency and weak institutionalisation.	"It was all pilotitis – lots of projects, but no framework to connect them to strategy or decide what to scale up."
Innovation Agenda Needed	Lennart argues for a municipal innovation agenda, where research questions are defined in advance and pilots are aligned to those knowledge gaps.	"If you have an innovation agenda with clear research questions, then these EU projects can really work for you. Now they just landed without context."
Amsterdam in Change as Spin-Off	Networks like Amsterdam in Change became places where ATELIER knowledge and partners connected, but these were not structurally tied back into the municipality.	"Amsterdam in Change became a place to continue some of the networks and content of ATELIER. But it was more external than municipal."
Dependency on Champions	The success of parts of ATELIER relied heavily on individuals like Machiel, who carried disproportionate responsibility without structural support.	"We were lucky that Machiel was there. Without him, many things would not have happened. But that's not a sustainable model."
Lack of Continuity and Uptake	At the final conference, municipal presence was weak, and lessons were not systematically followed up. Uptake depended on intrinsic motivation of individuals.	"At the final conference hardly anyone from the City was there. Lessons were shared, but without structure it depends on individual enthusiasm."

Statement	Summary (Paraphrased)	Illustrative Quote (English)
Unclear Municipal Role	The role of the municipality in LIFE was unclear. Different departments handled small fragments, but no central coordination existed.	"Different departments were responsible for small parts, but there was no central coordination or contact point."
External Representation	The municipality outsourced its role to an external consultancy, raising legitimacy issues about who represented the City and with what mandate.	"The City hired an external consultancy... but then who actually speaks for the municipality?"
Asymmetry of Effort	Involvement of the City only increased after repeated urging by external partners. Engagement was reactive, not proactive.	"It took repeated urging before municipal involvement really began."
No Social Domain Contact Point	There was no one inside the municipality responsible for participation or energy poverty. Responsibilities were passed around.	"There was no one you could address about participation or energy poverty. You were always sent to someone else."
Participation Fatigue	Residents were asked to participate, but technical decisions were already locked in. This created frustration and fatigue.	"When technical choices are already made, participation backfires and people lose motivation."
Lack of Governance Structure	LIFE lacked a local governance structure for the energy platform. Trust and ownership were only recognised as critical very late.	"There was no governance structure in place... only later people realised how important local trust and ownership were."
Weak Institutional Learning	There is no clear pathway for learning from LIFE. Follow-up depends on individual efforts rather than institutional mechanisms.	"How do we now learn from LIFE? There is no clear case to build on."
Need for Concrete Follow-Up	Future learning could build on concrete initiatives like the Energy Lab Zuidooost or the local energy cooperative, but this requires ownership.	"The Energy Lab Zuidooost could become a place for continuation, or the energy cooperative. But someone has to own it."
Weak Strategic Fit	ATELIER was not tied to a municipal innovation or research agenda. As a result, its outputs were not embedded in strategy or follow-up programmes.	"It never really fit into an innovation agenda. Without that, the lessons risked ending up in a drawer."
Need for Stronger Steering Role	The municipality was seen as problem owner by partners, but did not act as such. Lennart stresses that more directive ownership could have made the consortium much more effective.	"We were seen as the problem owner, but we didn't take that role. If Amsterdam had steered more, the consortium could have worked much more effectively."
Pilotitis and Lack of Strategy	The City kept running EU pilots without clear long-term strategy or framework, leading to inefficiency and weak institutionalisation.	"It was all pilotitis – lots of projects, but no framework to connect them to strategy or decide what to scale up."
Innovation Agenda Needed	Lennart argues for a municipal innovation agenda, where research questions are defined in advance and pilots are aligned to those knowledge gaps.	"If you have an innovation agenda with clear research questions, then these EU projects can really work for you. Now they just landed without context."
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C. Written down observations

This appendix contains observational notes from meetings, events, and day-to-day work in the context of ATELIER. They are presented written down without analysis or interpretation. These are only the written down observations, there were more but not all could be written down. Some notes were lost during the thesis.

ATELIER Nine lessons learnt (Pilot Results)

1. Several small-scale users on a group connection need half to ten times less power than calculated and reserved by the grid operator.
2. Integration of district heating, thermal energy storage, charging stations, electric cars, PV generation and consumption is possible through Smart Energy Systems. Commercial software is available.
3. Different users (households, hotel, office, SMEs) can share a group contract. Contracts have been developed and are available for both rental and owner-occupied housing.
4. This type of connection functions as an “energy community.”
5. Actual energy consumption deviates a lot from expected use.
6. If applied across all new area development in Amsterdam, reserved grid capacity could be freed up, reducing connection queues.
7. Energy communities can be created.
8. Application requires experimental designation for development areas in Amsterdam.
9. One idea is to test energy communities in existing neighbourhoods using VvE structures.

Additional notes:

- * The list still requires nuance.
- * There is a wish for the municipality to use persuasive power to influence Liander.
- * Alignment with Liander was seen as important for progress.
- * Main congestion seen in Zuidas, while others pointed to Zuidoost.

AIC & ATELIER Meeting

- * List of lessons learned was circulated.
- * Difficulty identifying what Amsterdam specifically needs. Proposal to use one-on-one statements or info sheets.

- * Amsterdam can continue its own route beyond ATELIER.
- * Questions raised about a possible follow-up programme.
- * Request for a general slide on lessons learned for dissemination.
- * Proposal from the municipality to turn brief statements into one-pagers or info sheets.
- * Lessons should cover technical, governance, and other aspects.
- * Need to make dissemination concise and accessible.
- * Wish to use ATELIER lessons to lobby the grid operator.
- * Legal department interested in replication for area development.
- * Relation between ATELIER and LIFE project discussed.
- * Behavioural change mentioned as an additional theme.

WP4 Meeting ATELIER

- * Extension phase confirmed until April 2026.
- * Poppies described as “chaos,” Republica as correct monitoring.
- * Billing problems reported, with frustration about financial risks.
- * No document exists clarifying who is legally responsible if failures occur.
- * Synthesis of lessons will be produced by TNO as a matrix.
- * Republica considered a flagship site.
- * Nine statements judged too compact; proposal for more elaboration.
- * Challenge noted in motivating project managers for innovations.

Weekstart Meeting Notes Municipality

- * Knowledge core teams (kenniskernteam) started as a trial, including sustainability. Aim is to facilitate and standardise knowledge transfer with a budget.
- * Project managers were not consulted; approach came from management.
- * It was noted that the municipality is not yet a learning organisation.

Knowledge Sharing Meeting municipality

- * Demand expressed from the municipality for a practical handreiking on “Netcongestie.”
- * Desire for municipal departments to present lessons themselves, not rely on externals.
- * Knowledge described as too specific; translation into practice is needed.
- * Debate on who should lead knowledge transfer, with preference for internal responsibility.
- * Concern over duplication of efforts across departments.
- * Outputs such as handreikingen should be clearer and more practical.
- * Limited embedding at DGO level was noted.
- * Suggestions included phased guidance, step-by-step governance manuals, and “netcongestie for dummies.”
- * Idea raised to test innovations in a second pilot without experimental rules.
- * Project managers observed to lack technical backgrounds.
- * Some find that there is not enough time or resources to implement innovation

