

The Role of Institutional Entrepreneurs in Stakeholder Collaborations

Towards Sustainable Urban Transformations



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ABSTRACT

Despite the growing recognition of cities and urban areas as key drivers of sustainable urban transformations, progress remains slow due to complex pressures, conflicting stakeholder interests, and institutional constraints. Collaboration is essential for driving sustainable urban transformations, with institutional entrepreneurs playing a crucial role in promoting institutional change and sustainable development. However, limited research has explored how institutional entrepreneurs can stimulate stakeholder collaborations within existing urban contexts towards sustainable urban transformations. Therefore, this research aims to answer the question: *'How can institutional entrepreneurs stimulate collaboration between stakeholders towards sustainable urban transformations?'*

A qualitative research design is adopted, starting with a literature review to develop a conceptual framework that guides the empirical research. This framework is applied in case study analyses, using document analysis and semi-structured interviews with open-ended questions. The findings are combined into preliminary guidelines for institutional entrepreneurs, which are then refined and validated through an expert meeting with scholars and practitioners to develop the final guidelines. Data analysis follows an iterative deductive-inductive coding process to identify key themes. The research findings will be documented in this thesis report and presented to provide a conclusive answer to the main research question, ultimately contributing to the widespread adoption of sustainable urban transformations.

TABLE OF CONTENTS

1. INTRODUCTION	5
1.1 Research Questions	6
1.2 Relevance	7
2. RESEARCH METHOD	8
2.1 Type of Study	8
2.2 Data Collection	9
2.3 Data Analysis	12
2.4 Research Design	13
2.5 Research Output.....	15
3. LITERATURE REVIEW.....	17
3.1 Collaboration	17
3.2 Institutional Entrepreneurs	28
3.3 Sustainable Urban Transformations.....	38
3.4 Conceptual Framework	42
REFERENCES	45
APPENDICES.....	56
Appendix 1 – Deductive and Inductive Codes	56
Appendix 2 – Research Plan	61
Appendix 3 – Potential Cases	62

1. INTRODUCTION

National governments have struggled to respond to climate change, and it is evident that the required reductions in greenhouse gas emissions, to maintain global warming within a safe trajectory, are neither achieved nor adequately prioritised (IEA, 2011). This is also observed in the field of sustainable development, where little progress has been made in achieving the ambitions of systematic change (Rockström et al., 2009; Baumgartner, 2011). Major global events, such as the 2009 Climate Change Conference in Copenhagen and the 2012 Earth Summit in Rio de Janeiro, have highlighted these shortcomings, revealing limited agreements and actions at international and national levels on climate change and sustainable development (McCormick et al., 2013).

Cities have been recognised as key players in driving sustainable development and climate change solutions (UN-Habitat, 2010; ICLEI, 2011; Beatley and Wheeler, 2004; Roseland, 1997). There is a broad consensus that integrated and effective solutions can only be found and efficiently implemented through cities and urban areas (ibid.). The growing emphasis on cities and urban areas arises from the realisation that national and global actions are happening on too slow a pace, while local municipalities and collaborations can accelerate change more effectively by developing science-based strategies and visions and translating them into concrete actions at the local level (McCormick et al., 2013). Furthermore, with the majority of the population already living in cities and urban areas, and expectations indicating that over 70% of the global population will do so by 2050 (UN-Habitat, 2008), the critical role of cities and urban areas in driving sustainable urban transformations becomes even more apparent.

According to McCormick et al. (2013), *sustainable urban transformations* refer to structural transformation processes that can effectively move urban development towards ambitious sustainability goals. It involves recognising cities and urban areas as possibilities for sustainability, fostering active collaboration among diverse stakeholders, integrating various perspectives, sources of knowledge and expertise, and stimulating experimentation with different solutions and approaches (ibid.). McCormick et al. (2013) state that sustainable urban transformations can be defined along two key dimensions. First, the drivers of radical change, which refer to the processes that bring about change in the urban context, including governance and planning, lifestyle and consumption, and innovation and competitiveness. Second, multi-dimensional sustainable structures, which encompass resource management, climate mitigation and adaptation, building and the spatial environment, transport and accessibility, and public space.

Although cities and urban areas are recognised as playing a critical role in these transformations, they experience complex pressures that arise from above, in the form of national and international expectations and policies, as well as from below, through the needs and expectations of local communities (McCormick et al., 2013). As a result, urban areas must be simultaneously attractive and inclusive, thriving from local, national, and international viewpoints, as well as sustainable and resilient (Kautto, 2012; UN-Habitat, 2008). Because of this complexity, sustainable urban transformations require not only local action but also an understanding of how these actions integrate across different scales and how they interact with the dynamic and complex existing relationships (García-Sánchez and Prado-Lorenzo, 2009). Sustainable urban projects can be approached at three main scales: the building scale (Smedby and Neij, 2013), the district scale (Ryan, 2013), and city-wide activities (Corvellec et al., 2013). The district scale is particularly valuable for catalysing and learning about sustainable urban transformations (McCormick et al., 2013).

European cities face additional challenges in urban sustainability transitions, including social tensions, segregation, the continuous growth of solid waste generation and the high, often inefficient, resource consumption, all of which are linked to climate change and global environmental and resource concerns (McCormick et al., 2013). Moreover, cities and urban areas are continuously shaped by

dynamic transformation processes, including shifts in population composition, economic structures, lifestyles, and national policies, creating new local needs and opportunities (UN-Habitat, 2010). These challenges are classical wicked problems (Camillius, 2008), where traditional processes make it impossible to define a universal 'top-down' approach to establish sustainable urban developments (Klein Woolthuis et al., 2013). Wickedness in sustainable urban development arises not only from the technical complexity and multi-actor, multi-scale character of the problem but also from a lack of consensus among stakeholders on what sustainability entails in the urban context (ibid.). Additionally, sustainable urban developments are context-dependent, requiring a tailored approach that considers local factors, including people, infrastructure, ecosystems, and vice versa (ibid.). The challenge, therefore, is not just identifying the 'right' solution but also creating the conditions that enable such solutions to emerge, necessitating institutional change (ibid.).

Research points out that sustainable urban transformations require *collaborations* that integrate diverse knowledge and perspectives, stimulating stakeholders in a learning process that fosters new ways of thinking and drives urban innovations (Campbell, 2009; Zilahy and Huisingh, 2009). This becomes especially important when ambitious (sustainability) goals are involved (McCormick et al., 2013).

Furthermore, research highlights that *institutional entrepreneurs* play a significant role in driving institutional change and promoting sustainable development (Klein Woolthuis et al., 2013). These institutional entrepreneurs are influential groups of individuals or organisations (Fligstein, 1997; Garud and Karnøe, 2003) that challenge old institutions and initiate and accelerate new ones (Dacin et al., 2002). Institutions, in this context, are defined as the 'rules of the game' that drive routine behaviour (Jepperson, 1991), which may be taken for granted by stakeholders or reinforced by public opinion or legal authority (Dimaggio and Powell, 1983). These rules ultimately influence why stakeholders within the field of urban development remain with existing solutions rather than adopting innovative ones, to the detriment of actual sustainable urban transformations.

Recently, there has been growing interest in the role of collaboration in establishing sustainable urban developments or transformations (Liao and Liu, 2023; Wang et al., 2021; Chu et al., 2020; Liu et al., 2021; Silva, 2008; McCormick et al., 2013; Bradley et al., 2022; Common Eye, 2016). Studies have examined practices, challenges and lessons learned from urban development collaborations (Khan, 2013; Hamann and April, 2013; Block and Paredis, 2013), the role of institutional entrepreneurs in driving institutional change (Pacheco et al., 2010) and their role in initiating and establishing sustainable urban developments (Klein Woolthuis et al., 2013). However, limited research has explored how institutional entrepreneurs can stimulate stakeholder collaborations within existing urban contexts towards sustainable urban transformations.

1.1 Research Questions

This research, therefore, aims to answer the following question: '*How can institutional entrepreneurs stimulate collaboration between stakeholders towards sustainable urban transformations?*'

To answer this question, the following sub-questions will be addressed:

1. How can the relationship between collaboration, institutional entrepreneurs, and sustainable urban transformations be conceptualised?
2. What barriers and enablers related to collaboration are encountered in existing case studies that influence the widespread adoption of sustainable urban transformations?
3. What role do institutional entrepreneurs play in these case studies, and what interventions have they implemented to overcome barriers and establish more effective collaborations?
4. How can the role of institutional entrepreneurs in stimulating collaboration between stakeholders towards sustainable urban transformations be captured in a set of guidelines?

1.2 Relevance

The societal and scientific relevance of this research is discussed below.

1.2.1 Societal Relevance

The urgency of climate change, combined with the fact that the building and construction sector is the largest emitter of greenhouse gases, accounting for 37% (UN Environment Programme, 2023), has placed enormous pressure on cities and urban areas to drive sustainable transformations. With the majority of the global population already living in urban areas and expectations indicating this will rise to 70% by 2050 (UB-Habitat, 2008), urban areas have become key players in addressing sustainability challenges.

However, cities and urban areas face complex pressures from above (national and local policies) and below (needs and expectations of local communities), alongside additional challenges related to climate change and resource concerns (McCormick et al., 2013). These factors contribute to sustainable urban development's 'wicked' nature (Bossink, 2011), making a universal, 'top-down' approach impossible (Klein Woolthuis et al., 2013). Furthermore, conflicting interests, a lack of understanding among stakeholders, and the existing formal and informal institutions within the sector hinder the widespread adoption of sustainable urban development practices (TNO, 2012).

Collaboration among diverse stakeholders is widely recognised as essential for driving sustainable urban transformations (Campbell, 2009; Zilahy and Huisingsh, 2009). Moreover, institutional entrepreneurs play a significant role in initiating and driving institutional change and sustainable development (Klein Woolthuis et al., 2013). However, while existing research focuses on how institutional entrepreneurs initiate and realise sustainable urban development projects, little is known about their role in stimulating and strengthening collaborations within existing urban contexts towards sustainable urban transformations. This research addresses this gap by exploring how institutional entrepreneurs can stimulate stakeholder collaborations, thereby potentially accelerating the transition towards sustainable urban areas.

1.2.2 Scientific Relevance

This research is scientifically relevant because little is known about the role of institutional entrepreneurs in stimulating stakeholder collaborations towards the realisation of sustainable urban transformations. While existing studies examine practices, challenges and lessons learned from urban development collaborations (Khan, 2013; Hamann and April, 2013; Block and Paredis, 2013), as well as the role of institutional entrepreneurs in driving institutional change (Pacheco et al., 2010), and their role in initiating and establishing sustainable urban developments, there is a gap in understanding how they can actively stimulate stakeholder collaboration within complex urban settings towards more widespread sustainable urban transformations.

Therefore, this research contributes to the growing body of knowledge on institutional entrepreneurship, collaborations, and sustainable urban transformations by providing insight into the barriers and enablers within current and past collaborations and the interventions through which institutional entrepreneurs can influence stakeholder collaborations towards sustainable urban transformations.

2. RESEARCH METHOD

This chapter presents the research methodology used to answer the main research question: ‘*How can institutional entrepreneurs stimulate collaboration between stakeholders towards sustainable urban transformations?*’ It covers the type of study, data collection methods and techniques, and analysis methods. The research design and the comprehensive research plan (Appendix 2) integrate the research method components with a plan for conducting the research. Finally, this chapter outlines the expected research outputs, both academically and personally.

2.1 Type of Study

This research adopts a qualitative research design, which, according to Creswell (2017), is determined by the interaction of the adopted philosophical worldview, strategies of inquiry, and research methods. Furthermore, the type of study is influenced by the issue being studied, the audience, and the researcher's experience (ibid.). The first three are discussed below.

The *social constructivist worldview* is a commonly adopted approach to qualitative research and holds the assumption that individuals' understanding of the world around them is shaped by historical and cultural norms, as well as by interactions with other individuals (Creswell, 2017). This worldview emphasises exploring a specific context in which people live and work to get insights into their lived experiences (ibid.). In this research, the Social Constructivist Worldview aligns with the aim of understanding the diverse perspectives of stakeholders involved in sustainable urban transformations, specifically their experiences and perspectives on the collaboration process. By examining these interactions, the research delves into the informal, and to a lesser extent, formal institutions and processes that influence collaborative outcomes, providing insights into how institutional entrepreneurs can influence and stimulate effective collaborations towards more ambitious, sustainable outcomes.

The strategy of inquiry utilised is a *case study approach*, as it allows an in-depth exploration of the collaboration processes between the various stakeholders in sustainable urban transformation projects. After all, case studies allow for an extensive exploration of programs, events, activities, processes, or one or more individuals (Creswell, 2017). This is especially suitable for this research, where the context of existing urban area transformation projects provides an environment to understand the complexity of the inherent collaboration processes, including related barriers and enablers in the process.

Lastly, the choice of research methods for data collection, analysis, and interpretation also shapes the research design (Creswell, 2017). This research uses qualitative data collection, including document analysis, semi-structured interviews, and an expert meeting. Document analysis provides insights into the collaboration processes of current and past urban area transformations, highlighting barriers and enablers. Semi-structured interviews capture the individual experiences of stakeholders involved in these processes. The expert meeting, executed in a co-creative setting, provides unique insights for developing the guidelines for institutional entrepreneurs. Since the data collection methods provide non-numeric information, the analysis is also qualitative. As Creswell (2017) highlights, semi-structured interviews with open-ended questions allow information to emerge from participants. Therefore, interpretations in this research are based on patterns emerging from the data, again confirming the qualitative approach. Overall, this *qualitative research method approach* aligns with the aim of identifying individual stakeholder perspectives and the barriers and enablers in the process.

In conclusion, the selected philosophical worldview, the strategy of inquiry, and the research methods determine the choice of adopting a *qualitative research design*.

2.2 Data Collection

This research adopts a qualitative approach and utilises a combination of data-collection techniques: a literature review, semi-structured interviews and content analysis of documents (both conducted within case studies), and an expert meeting. These data collection techniques are discussed below.

2.2.1 Literature Review

During the development of the problem statement and the early stages of the research, a literature review is conducted. Initially, the aim was to gain insight into the topic of stakeholder collaboration in urban area transformations, which led to identifying a gap in the literature, as outlined in Chapter 1. Additionally, this initial step helped assess the worthiness of this research, examining whether the topic contributes to the growing body of knowledge and has both societal and scientific relevance, as outlined in Paragraph 1.2.

After establishing the research question and sub-questions in Paragraph 1.1, the literature review aims to gather the most relevant existing literature on the three concepts: collaboration, institutional entrepreneurs, and sustainable urban transformations. The review focuses primarily on the informal aspects of collaboration, while also acknowledging the formal aspects that might influence the process. Ultimately, this review develops a conceptual framework, which guides the analysis and interpretation of the collected data throughout the next steps of the research. Therefore, this part of the literature study answers the first sub-question: *'How can the relationship between collaboration, institutional entrepreneurs, and sustainable urban transformations be conceptualised?'*

Literature Review Process

To conduct the literature review, relevant academic sources were searched and collected using Google Scholar and Scopus, based on carefully selected search terms, including synonyms and related terms, derived from the three concepts identified in the main research question. Furthermore, the Dutch Platform Stedelijke Transformatie (English: Urban Transformation) was consulted due to its relevance to this research topic. This platform is a collaboration between municipalities, market actors, and the TU Delft, aimed at sharing knowledge and experiences on urban transformations, including the theme of collaboration (Stedelijke Transformatie, n.d.), which is particularly relevant to this study. Through an article on this platform, the Common Eye (2016) publication for the concept of collaboration was identified, which offers practical insights into key intervention domains that support successful collaboration, also within the context of urban area development. Additionally, recommended literature provided by the research supervisors was included in the literature review, including Mens et al. (2021) on social entrepreneurs and Ansell and Gash (2008) on collaborations.

The search terms to find the most relevant literature on each concept include, among others, the following:

- "Stakeholder collaboration" AND ("Sustainable urban transformations" OR "Sustainable urban development" OR "Area development")
- "Institutional entrepreneurs" AND ("Sustainable urban transformations" OR "Sustainable urban development" OR "Area development")
- "Sustainable urban transformations" OR "Sustainable urban development" OR "Urban sustainability transitions"

Sources were selected based on their relevance to the main research question and its related concepts, as well as their publication date. In general, literature published within the last 10 years was prioritised. However, in some cases, older sources were included when they were identified as key publications, published by key authors on a certain academic topic, and which have since been widely applied across various studies and contexts. For instance, the publication by Ansell and Gash (2008) was selected for this reason as an appropriate source for the literature review on collaboration. Moreover, several literature reviews were chosen, as these provide a good overview of the state of knowledge on a

specific topic up to the time of their publication. For example, both Ansell and Gash's (2008) publication on collaboration and McCormick's (2013) on sustainable urban transformations were selected for this reason. Furthermore, references cited within these selected sources were also examined for their relevance and included in the literature review.

The quality of the sources was assessed based on their publication date, the author's expertise (whether they are specialised in the topic or considered a key author), and the number of citations of each source. Finally, a comparative analysis was conducted for the sources per concept to identify overlapping elements and complementary distinctions relevant to this study.

2.2.2 Case Studies – Content Analysis of Documents and Semi-structured Interviews

After addressing the first sub-question, the research moves on to the empirical part, where case studies are used to allow an in-depth exploration of the collaboration processes among various stakeholders in current and past sustainable urban transformation projects. The focus lies on identifying stakeholders' perceptions and experiences of the collaboration process, the barriers and enablers of effective collaboration, and the role and intervention of institutional entrepreneurs in overcoming these barriers towards sustainable urban transformations. These objectives align with sub-questions two and three. Sub-question two: *'What barriers and enablers related to collaboration are encountered in existing case studies that influence the widespread adoption of sustainable urban transformations?'*. Sub-question three: *'What role do institutional entrepreneurs play in these case studies, and what interventions have they implemented to overcome barriers and establish more effective collaborations?'*

It was decided to analyse two case studies instead of a single case or a larger set of cases for several reasons. A single case study approach allows for an extensive and careful exploration of a subject, person or group, offering detailed insights and the opportunity to question existing theoretical relationships and explore new ones (Gustafsson, 2017). A multiple case study approach, on the other hand, allows analyses both within and across cases, making it able to identify similarities and differences (ibid.). Therefore, this cross-case analysis strengthens the reliability of the findings (ibid.). Analysing two case studies offers a balance between depth and comparison, and was therefore chosen as the most appropriate approach for this research.

To answer both questions, a combination of data collection methods is used, including *content analysis of documents* and *semi-structured interviews with open-ended questions*. The data for the content analysis is derived from sources such as minutes of meetings, project-related reports, formal contracts, etc. The content analysis provides insights into the context of specific urban area transformation projects, information about the involved stakeholders, the organisational structure, and the evolution of the collaboration process over time. The focus hereby lies again on identifying the informal aspects of collaborations, while to a lesser extent acknowledging the formal aspects that might enable or constrain effective collaborations towards sustainable urban transformations.

The semi-structured, open-ended interviews are conducted with stakeholders involved in existing collaborations of sustainable urban transformation projects. Interviews will be conducted with the institutional entrepreneurs and other public and private actors involved in the collaboration. According to Blaikie and Priest (2019), qualitative interviews have the potential to come close to the social actors' accounts of the social interaction in which they have been involved and their meaning and interpretations. The focus here lies on identifying the individual experiences of stakeholders involved in the collaboration process (the interaction), uncovering barriers and enablers, and getting a deeper understanding of how and to what extent institutional entrepreneurs can influence the collaboration process. This approach, whereby the interviews are semi-structured and open-ended, allows participants to share their views and experiences (Creswell, 2017) while ensuring consistency in the topics covered across the various interviews, based on the conceptual framework in Paragraph 3.4.

The interviews with each of the participants will last approximately [xx] minutes and will be held in a face-to-face manner. With the interviewees' written consent, the interviews will be recorded. At the start of each interview, participants will again be informed about the purpose of the study and how their data will be used afterwards. After the interviews, the recordings will be securely stored on a password-protected desktop computer, whereafter the recordings will be transcribed, with anonymisation applied to prevent identification of the responses.

Selection Criteria Case Studies

Based on the conceptual framework developed in Paragraph 3.4, selection criteria for the case studies were established. These include the following:

- The case involves a sustainable urban transformation, in line with the definition formulated in Paragraphs 3.3 and 3.4;
- The case includes a multi-stakeholder collaboration, involving both public and private actors;
- The case includes an institutional entrepreneur, in line with the definition and examples formulated in Paragraphs 3.2;
- The case must be situated in the Netherlands;
- Project-related documents, particularly those focusing on the collaborative process, must be available for content analyses;
- It must be possible to conduct interviews with the stakeholders involved.

Appendix 3 presents a list of potential case studies, previously discussed with the organisational mentor. After the P2, this list, along with any other relevant cases, will be reviewed in consultation with the supervisors and the organisational mentor to determine the two most appropriate cases for this study.

2.2.3 Expert Meeting

Following the case study analyses, an expert meeting with practitioners and scholars is organised to support answering sub-question four: *'How can the role of institutional entrepreneurs in stimulating collaboration between stakeholders towards sustainable urban transformations be captured in a set of guidelines?'*.

Participants of the expert meeting are selected based on their experience with urban area transformation projects, either in practice or academically, to ensure a diverse mix of perspectives during the co-creative session. Furthermore, to maintain the integrity of the research, participants should not have been involved earlier in the research to ensure a neutral and objective view. First, the findings from the case study analyses and a preliminary outline of the guidelines are presented. Subsequently, through an interactive discussion, the practitioners and scholars are invited to collaboratively refine the guidelines by reflecting on the presented findings, adding missing elements, and suggesting improvements based on their professional experience and knowledge. Through this co-creative approach, the unique insights of the participants can significantly improve the design and functionality of the guidelines (Ertz, 2024), while simultaneously assessing the usefulness and practicality.

Similarly to the interviews, the expert meeting will be conducted face-to-face and recorded with the written consent of each participant obtained before the start of the collaborative session. At the start of the session, participants will again be informed about the purpose of the study and how the data will be used. The recording will be stored on a password-protected desktop computer. Subsequently, the most relevant findings from the session will be summarised and translated into the final version of the guidelines.

2.3 Data Analysis

The process of data analysis in research involves several steps, including data preparation, conducting analysis, understanding the data, and interpreting its broader meaning (Creswell, 2017). In qualitative research, as Creswell (2017) emphasises, data analysis is an iterative process that co-occurs with data collection, interpretation, and writing (ibid.). In this research, the data analysis process follows the chosen strategy of inquiry, as outlined in Paragraph 2.1, in line with Creswell's (2017) recommendation. In the context of case study research, data analysis typically starts with a detailed description of the setting and individuals involved, followed by an analysis of the data to identify recurring themes or issues (Wolcott, 1994). This approach allows for an in-depth examination of the collaboration process in existing urban area transformation projects and the role of institutional entrepreneurs in stimulating these processes towards ambitious sustainability goals. The specific steps in the data analysis process for this research are outlined below and illustrated in Figure 1.

2.3.1 Data Organisation and Preparation

The first step involves organising and preparing the gathered data for analysis (Creswell, 2017). Regarding the interviews, this involves transcribing the audio recordings and anonymising the responses by coding to prevent participants' identification. Furthermore, this step involves arranging and scanning the material (ibid.).

2.3.2 Obtaining a General Sense of the Information

Once the data is prepared, the next step involves reading through the documents and transcribed interviews to obtain a general sense of the information (Creswell, 2017). During this step, general thoughts are written down before starting the detailed analysis (ibid.).

2.3.3 Detailed Analysis With a Coding Process

Thirdly, the actual analysis takes place. It is chosen to combine the deductive-inductive coding approach, as it increases the accuracy of research outcomes and produces more relevant findings than using a single approach (Yuwono and Rachmawati, 2023). Atlas.ti, a qualitative data analysis software, is used to code the data due to its efficiency compared to hand coding (Creswell, 2017).

In this research, the deductive codes are derived from the conceptual framework, which is presented in Paragraph 3.4, and are initially applied to code the data. These codes, along with their group name, are illustrated in Figure 2. As the analysis proceeds, an inductive open coding approach is applied to identify emerging ideas and patterns. This iterative process leads to the development of new codes and the refinement of the conceptual framework. The inductive codes are presented in Figure 3. For a complete overview of the codes, along with a description of each code derived from the literature review, and an example per code derived from the data, see Appendix 1. Direct quotations are used to support conclusions and help to bring the reader into the reality of the studied situation (Schulz, 2012).

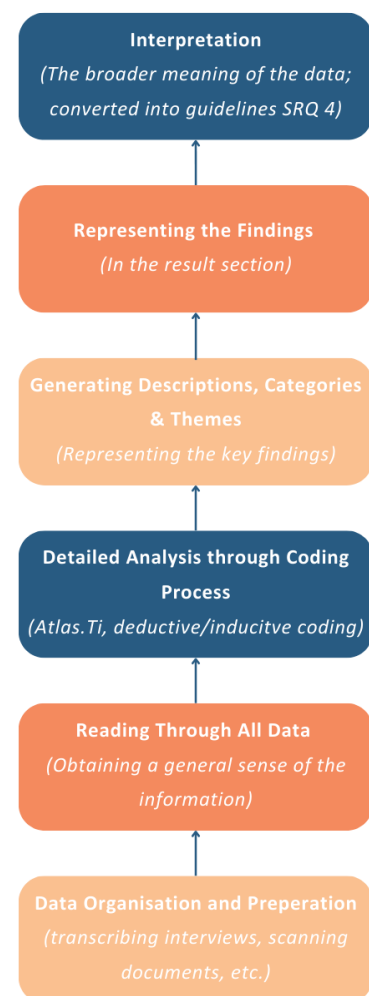


Figure 1. Data Analysis Approach (Own figure).

Group	Deductive Code
Institutional entrepreneur	Pioneers
	Consolidated organisation
	Intermediate agent
Actions and Strategies	Framing

	Theorisation
	Collaboration
	Lobbying
	Negotiation
Institutional design/professional organisation	Open/broad/inclusive stakeholder access
	Clear ground rules and process transparency
	Clearly defined roles
Starting Conditions	Prior history of conflict or cooperation
	Collaboration strategies and collaboration skills
	Organisational and individual interests
	Resource/knowledge/power asymmetries
	Incentives or constraints to participate
Collaborative Process	Face-to-face dialogue
	Active and continuous trust and relationship building
	Commitment to the process
	Shared understanding/ambition
	Clear process/intermediate outcomes and evaluations
Sustainable Urban Transformations	Drivers of radical change
	Multi-dimensional sustainable structures

Figure 2. Deductive Codes (Own figure).

Group	Inductive Code
t.b.d.	t.b.d.
t.b.d.	t.b.d.

Figure 3. Inductive Codes (Own figure).

2.3.4 Generate Description, Categories and Themes

Fourthly, the coding process is used to generate a description of the setting, the individual stakeholders involved, and categories or themes for analysis (Creswell, 2017). This includes a detailed rendering of information about stakeholders, their collaboration efforts, and the influence of institutional entrepreneurs on the collaboration process. Codes are used to generate the data into a small number of themes or categories that represent the key findings in the qualitative research, displaying various individual perspectives supported by diverse quotations from the data (ibid.).

2.3.5 Representation of the Findings

Fifthly, the identified themes, categories and descriptions are presented in a coherent storyline in the results section. Hereby, the storyline might discuss the themes in detail, along with sub-themes and the varying perspectives of the involved stakeholders (Creswell, 2017). To improve readability, visuals are utilised. A process model might be used to illustrate the collaboration process, a table to outline descriptive information about each stakeholder group, or the frequency of identified barriers and enablers in the process.

2.3.6 Interpretation

The final step in the analysis stage involves interpreting the broader meaning of the data by reflecting on the lessons learned from the research (Guba and Lincoln, 1985). In this research, these interpretations are first translated into a preliminary outline of actionable guidelines. Subsequently, through an interactive expert meeting, practitioners and scholars are invited to collaboratively refine and validate these guidelines. This step directly addresses sub-question four: *'How can the role of institutional entrepreneurs in stimulating collaboration between stakeholders towards sustainable urban transformations be captured in a set of guidelines?'*

2.4 Research Design

The key elements of the research methodology, along with a plan for conducting the research, are illustrated in Figure 4. The research is divided into five phases, aligned with the five deadlines shown in the timeline at the bottom of the figure. The figure outlines the sequential use of data collection methods: literature review, content analysis of documents, semi-structured interviews, and an expert

meeting. According to Merriam (1988), this triangulation of data, whereby data is collected through multiple sources, strengthens the reliability and internal validity of the research. The arrows indicate the flow of information, showing how the conceptual framework guides the case studies, while findings from the case studies, in turn, refine the framework. For a more detailed explanation of the planning and execution of this research, see Appendix 2 – Research Plan.

In *phase 1*, the focus is on the introduction, research design, and the initial development of the conceptual framework. *Phase 2* continues with the further development and finalisation of the conceptual framework, which then serves as input for the analysis and interpretation of the case studies. In *phase 3*, the case study analyses are conducted by analysing existing sustainable urban transformation projects. The content analysis provides insight into the context, stakeholders, organisational structure, and the evolution of the collaboration process over time. In parallel, the semi-structured interviews are conducted to identify the personal experiences of stakeholders involved in these collaborations, with a specific focus on the role of the institutional entrepreneurs. *Phase 4* focuses on integrating the findings in collaboration with practitioners and scholars during an expert meeting. This step aims to develop the final guidelines for institutional entrepreneurs to stimulate stakeholder collaborations towards sustainable urban transformations while validating the guidelines' practicality and usefulness. The *final phase* focuses on completing the thesis and providing a conclusive answer to the main research question.

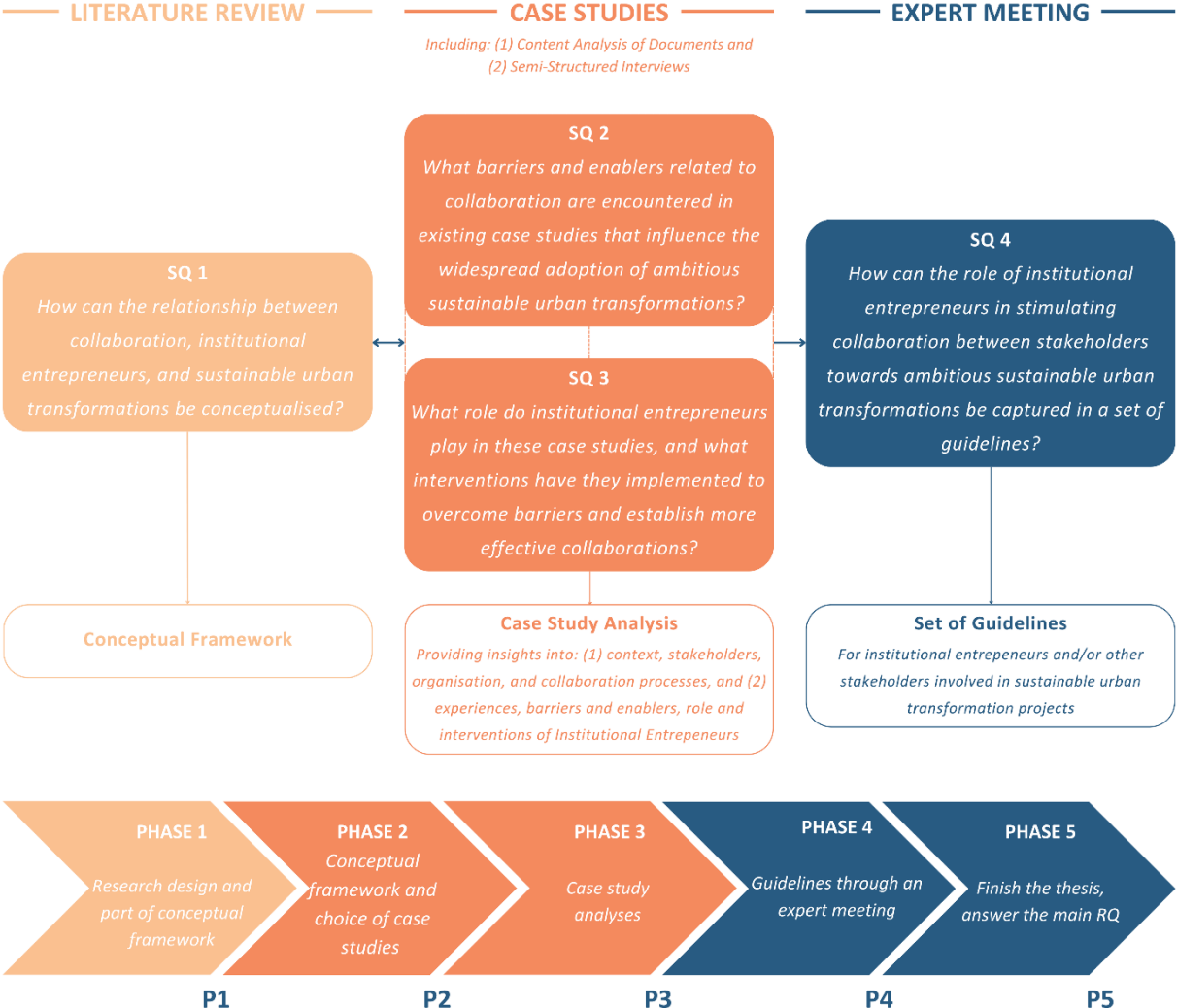


Figure 4. Research Design (Own figure).

2.5 Research Output

This paragraph outlines the intended research outputs and consists of the goals and objectives, deliverables, dissemination of audiences, and personal study targets.

2.5.1 Goals and Objectives

As outlined in Chapter 1, this research explores the role of institutional entrepreneurs in stimulating stakeholder collaborations within existing urban contexts to achieve sustainable urban transformations. This goal will be accomplished by addressing the following objectives.

The *first objective* is conceptualising the relationship between collaboration, institutional entrepreneurs, and sustainable urban transformations. This will involve gathering relevant literature on the three concepts and using it to develop a conceptual framework to guide the empirical part of the research. The *second objective* is to identify barriers and enablers related to collaboration in existing case studies that hinder the widespread adoption of sustainable urban transformations. Alongside this, the *third objective* is to determine the role and interventions of institutional entrepreneurs in overcoming these barriers in collaborations. Together, these two objectives form the empirical part of the research. The *fourth objective* is to combine the insights of the case studies into a set of guidelines for institutional entrepreneurs to stimulate collaborations towards sustainable urban transformations. As the development of the guidelines happens in collaboration with scholars and practitioners, their usefulness is simultaneously assessed.

2.5.2 Deliverables

To achieve the main goal of understanding how institutional entrepreneurs can stimulate stakeholder collaborations towards sustainable urban transformations, the following deliverables, related to the objectives and sub-questions, will be produced.

First, an extensive literature review will be developed, outlining the most relevant literature on collaborations, institutional entrepreneurs, and sustainable urban transformations. The outcome of this review will be a conceptual framework that illustrates the interrelations between these three concepts and forms the *first deliverable*. The *second deliverable* consists of case study analyses of existing urban transformation projects, focusing on identifying the barriers and enablers in the collaboration process, the perspectives of stakeholders on collaboration, and the role and interventions of institutional entrepreneurs. Building on the findings from the case study analyses, the *third deliverable* will be a set of guidelines for institutional entrepreneurs to stimulate effective collaborations in sustainable urban transformation projects. The *fourth deliverable* combines, among other things, the findings of the previous deliverables in the thesis. Lastly, presentation slides will be developed to summarise the research into a coherent story and form the *last deliverable*.

2.5.3 Dissemination and Audiences

The primary target audience for this research is institutional entrepreneurs operating in the urban environment sector, as the study aims to develop guidelines specifically for them. In addition, this research will be valuable to other stakeholders involved in sustainable urban transformation projects, such as developers, municipalities, and urban planners, not only because they may act as institutional entrepreneurs themselves, but also as a source of inspiration to take on this role. Additionally, by contributing to the growing body of knowledge on institutional entrepreneurship, collaborations, and sustainable urban transformations, this research will also be relevant to scholars and researchers in the field of urban development.

2.5.4 Personal Study Targets

On a personal level, I hope that conducting this research, at such a large scale and duration, will be an engaging and successful journey. I expect to gain much experience in the field of area development, especially in understanding and dealing with the complexities involved, such as managing the various

stakeholders involved. Additionally, I aim to develop my research and academic writing skills further. Lastly, I am excited to conduct my graduation project at a company, where I can gain practical experience that will benefit both my research and future career steps.

3. LITERATURE REVIEW

This chapter reviews the most relevant literature on the three concepts of collaboration, institutional entrepreneurs, and sustainable urban transformations, addressing the first sub-question: *'How can the relationship between collaboration, institutional entrepreneurs, and sustainable urban transformations be conceptualised?'* Paragraphs 1 to 3 explore each concept individually, while Paragraph 4 integrates these findings into a conceptual framework, providing variables that guide the analysis and interpretation of the case studies.

3.1 Collaboration

Effective collaboration is essential in urban area transformations, as stakeholders cannot simply do it alone (Hoorn, 2018). These transformations involve complex collaborations that require mutual dependency and recognition that decisions can no longer be made independently (ibid.). Over the past decade, a new mode of governance called "collaborative governance" has emerged (Ansell and Gash, 2008), as a response to increasingly "wicked" societal issues, such as climate change, characterised by limited consensus on both the exact nature of the problem and the appropriate solutions (Voets et al., 2021).

To better understand the concept of collaboration in this context, this research builds on two complementary models, one grounded in academic theory and the other in practice. The first is the Collaborative Governance Model by Ansell and Gash (2008), which was developed through a meta-analysis of existing literature on collaborative governance. This model identifies critical variables that influence the success of collaborations within this governance mode. This source was chosen because Ansell and Gash remain key authors in the academic literature on collaborative governance, and their model has since been widely applied and adapted in various studies and contexts (Dong-Young, 2014; Hrelja et al., 2016; Jiang and Ritchie, 2017; Baldwin et al., 2018; Wallner, 2018; Wijaya, 2019; Grossi and Welinder, 2024). It also serves as a theoretical foundation in the to-be-published paper by Heurkens and Mens (2025), which explores social value creation by sustainable entrepreneurs in urban development, a topic highly relevant to this research.

The second model is the Common Eye Model on Collaboration, developed by Common Eye (2016), a Dutch consultancy firm specialised in improving collaboration in practice. This model identifies key intervention domains that facilitate successful collaborations, including in urban area development. This source was selected for three reasons: first, it is developed specifically in the Dutch context, second, it addresses the application in urban area development, and third, it is rooted in practical experience, which provides a valuable and complementary perspective to the more theoretical model of Ansell and Gash.

These two models, one rooted in academic theory and the other in practice, are discussed in the following section and ultimately compared to identify their overlapping elements and complementary distinctions relevant to this study.

3.1.1 Variables Influencing the Success of Collaborative Governance

Ansell and Gash (2008) identified five critical variables that influence the success of collaborations in the governance mode Collaborative Governance, alongside five factors crucial to the collaborative process itself. The definition of collaborative governance is described below, followed by the established Model of Collaborative Governance, including its variables contributing to successful collaborations.

Definition of Collaborative Governance

According to Ansel and Gash (2008), collaborative governance is defined as: *'A governing arrangement where one or more public agencies directly engage non-state state stakeholders in a collective decision-*

making process that is formal, consensus-oriented, and deliberative and that aims to make or implement policy or manage public programs or assets’.

This definition is built on six key criteria (Ansell and Gash, 2008): (1) The process is initiated by public institutions or agencies, either to comply with a mandate, such as legislation or rules, or to fulfil their own purposes. The term public agency refers to governmental bodies at various levels, including local, regional, and national. (2) Participants in the process also include nonstate stakeholders, including both organised groups and individual citizens. (3) Rather than being merely consulted by public agencies, non-governmental stakeholders are directly engaged in decision-making. Collaborative governance relies on two-way communication, mutual influence, and opportunities for stakeholders to talk with each other through a deliberative and multilateral process. (4) The process is formally organised, distinguishing it from informal interactions between public agencies and interest groups. Collaborative governance refers to an explicitly organised form of interaction, which, according to Walter and Petr (2000), involves joint activities, shared resources, and joint structures. (5) Although full consensus is not always achieved, collaborative governance is consensus-oriented, striving to reach some degree of consensus among stakeholders. Therefore, the purpose of coming together in a multilateral, deliberative and formal process is to aim for consensus, or, at the very least, to identify points of agreement. After all, stakeholders in the collaborative governance mode will often have an adversarial relationship, but the aim is to transform it into a more cooperative one. (6) Finally, the collaboration focuses on public policies or public management.

Model of Collaborative Governance

Ansell and Gash (2008) established A Model of Collaborative Governance consisting of four main variables: starting conditions, institutional design, leadership, and collaborative process. Some of these are further broken down into more specific variables, as illustrated in Figure 5. The variable collaborative process is the core of the model, whereby the other three main variables are critical contributors or context setters for the collaborative process (ibid.). These four main variables and their related specific variables, as specified by Ansell and Gash (2008), are outlined in detail.

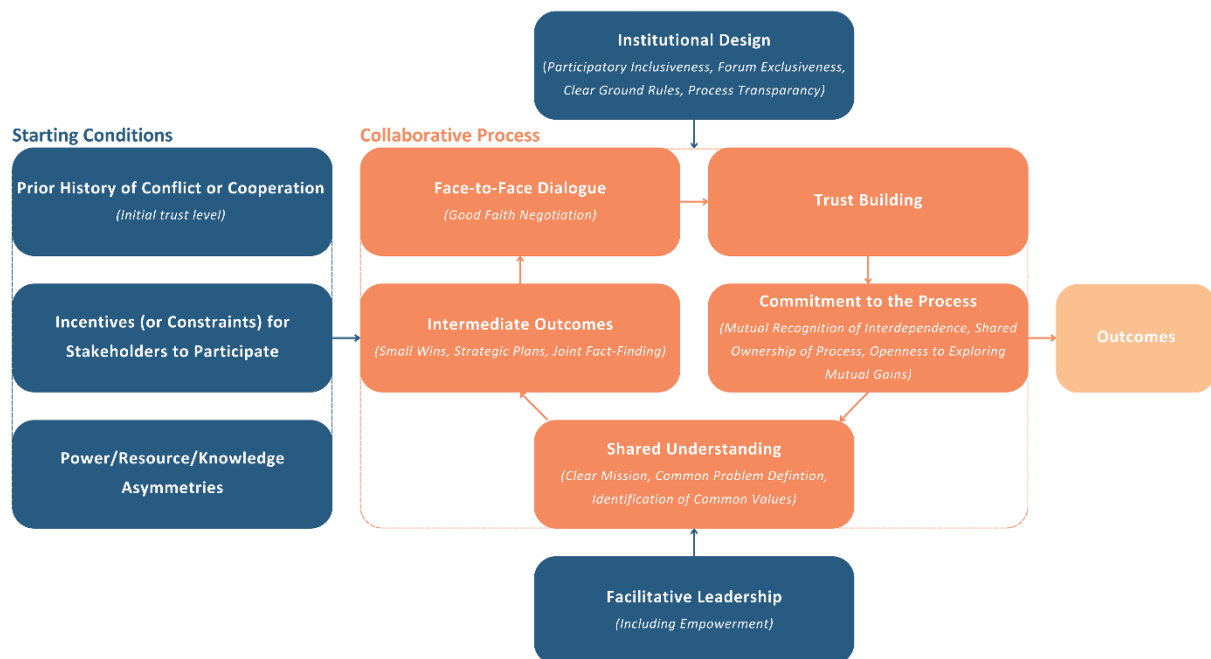


Figure 5. Model of Collaborative Governance. Recreated from Ansell and Gash (2008).

Starting Conditions

The cooperation between stakeholders, including public agencies and nonstate stakeholders, depends largely on the conditions present at the start of the collaboration. Ansell and Gash (2008) mention that these starting conditions can either discourage or facilitate effective cooperation. Three broad variables influence these starting conditions: imbalances between the resources or power of stakeholders, incentives to collaborate, and the history of cooperation or conflict among stakeholders.

1. Power/Resource Imbalances

If stakeholders lack the capacity, status, organisation, or resources to participate on an equal footing, the collaborative governance process will be vulnerable to manipulation by stronger stakeholders. Ultimately, these imbalances lead to weak commitment and distrust (Gray, 1999; Warner, 2006). Power imbalances are particularly problematic when important stakeholders lack the organisational capacity to participate effectively in collaborative governance processes. Furthermore, resource imbalances emerge when some stakeholders do not have the expertise and skill to engage in highly technical discussions (Gunton and Day, 2003; Lasker and Weiss, 2003; Merkhofer et al., 1997; Murdock et al., 2005; Warner, 2006) or when they do not have the energy, time, and liberty to engage in these collaborative processes (Yaffee and Wondollec, 2003).

However, if there are power or resource imbalances, these can, according to several studies (Fawcett et al., 1995; Lasker and Weiss, 2003; Merkhofer et al., 1997; Mitchell, 2005; Schuckman, 2001), be resolved through a commitment to a positive strategy that focuses on representation and empowerment of disadvantaged and weaker stakeholders.

2. Incentives to Participate

Given that participation in collaborative efforts is largely voluntary, understanding stakeholder incentives and the factors that shape those incentives is crucial (Andranovich, 1995; Chrislip and Larson, 1994; Gray, 1999; Nelson and Weschler, 1998). Incentives to participate are, first of all, shaped by power and resource imbalances (Gunton and Day, 2003; Imperial, 2005). Stakeholders who believe they hold greater power won't be likely to commit to collaborative efforts. Secondly, incentives depend largely on stakeholder expectations, especially regarding the results of the collaborative process, in relation to the required time and energy (Bradford, 1998; Geoghegan and Renard, 2002; Rogers et al., 1993; Schneider et al., 2003; Warner, 2006). Incentives increase when a direct relation is seen between participation and concrete, tangible, and effective outcomes (Brown, 2002). Thirdly, the possibility of alternative venues and the perception of interdependencies influence stakeholders' incentives to participate. These incentives increase when the collaborative process is the exclusive form or when stakeholders perceive that achieving their goals depends on cooperation with others (Logsdon, 1991).

3. Prehistory of Cooperation and Antagonism

The historical relationship between stakeholders, marked by cooperation or conflict, will either facilitate or hinder collaboration (Andranovich, 1995; Gray, 1999; Margerum, 2002). While a history of successful cooperation can build high levels of trust and social capital, creating a virtuous cycle of collaboration, a history of antagonism can have the opposite effect, resulting in low levels of commitment, manipulation and dishonest communications.

However, even in cases with deep-rooted conflict, high levels of interdependence between stakeholders can create a powerful incentive for collaborative governance, as stakeholders often realise their goals can only be achieved through collaborative efforts with others, despite opposing interests. Therefore, if there is a history of conflict, collaborative governance is most likely to succeed either when the degree of stakeholder interdependence is high or when efforts are made to resolve the low levels of trust and social capital.

Facilitative Leadership

Leadership is broadly recognised as a key factor in bringing stakeholders together and guiding them through the challenges inherent in collaborative processes (Burger et al., 2001; Chrislip and Larson, 1994; Frame et al., 2004; Gilliam et al., 2002; Gunton and Day, 2003; Heikkila and Gerlak, 2005; Huxham and Vangen, 2000; Imperial, 2005; Lasker and Weiss, 2003; Margerum, 2002; Murdock et al., 2005; Reilly, 1998, 2001; Roussos and Fawcett, 2000; Saarikoski, 2000; Smith, 1998; Vangen and Huxham, 2003). It plays a crucial role in building trust, setting ground rules, facilitating a dialogue, exploring mutual gains, synthesising knowledge, and mobilising stakeholders to move collaboration forward (Vangen and Huxham, 2003). Furthermore, leadership should give a voice to all stakeholders, particularly weaker ones, by empowering them and encouraging them to listen to one another.

Lasker and Weiss (2001) identify four skills for effective leadership: (1) promoting inclusive and active stakeholder participation, (2) ensuring equitable influence and control, (3) establishing effective group dynamics, and (4) broadening the scope and impact of the collaborative process.

A specific form of leadership that has received attention is *facilitative leadership*. This approach focuses on bringing stakeholders together to engage with one another (Chrislip and Larson, 1994; Ozawa, 1993; Pine et al., 1998; Reilly, 2001; Susskind and Cruikshank, 1987). Susskind and Cruikshank (1987) describe *facilitation* as the least interventionist of three assisted negotiation techniques. In this role, the leader aims to ensure the integrity of the consensus-building itself. When facilitation proves insufficient, *mediation* can be applied, where a third party plays a more active role by helping stakeholders to explore possible win-win gains. If consensus still cannot be reached, *non-binding arbitration* can be used, whereby the third party proposes a solution without enforcing it.

Lastly, the type of leadership best suited for a collaborative process often depends on the specific situation, including factors such as conflict levels, trust, power distribution and stakeholder incentives. When power distribution is relatively equal and stakeholders have an incentive to participate, but conflict is high and trust is low, collaborative governance can continue effectively by depending on the support of a trusted and accepted broker by all stakeholders. In cases where incentives are weak or power is unevenly distributed, collaborative governance can continue effectively if there is a strong “organic” leader who receives the respect and trust of stakeholders from the beginning, emerging naturally from within the stakeholder community.

Institutional Design

Institutional design refers to the ground rules and basic protocols that are critical to ensure the legitimacy of the collaborative process. A key element of the institutional design is stakeholder access, collaboration must be open and broadly inclusive to all stakeholders who care about or are effected by the issue (Andranovich, 1995; Burger et al., 2001; Chrislip and Larson, 1994; Gray, 1999; Gunton and Day, 2003; Lasker and Weiss, 2003; Margerum, 2002; Martin et al., 1999; Murdock et al., 2005; Plummer and Fitzgibbon, 2004; Power et al., 2000; Reilly, 1998, 2001). This broad inclusion must be actively sought, and therefore, proactive strategies to include less-represented and weaker stakeholders are often important (Weech-Maldonado and Merrill, 2000). Furthermore, clear ground rules and process transparency are important, not only for trust building but also to establish procedural legitimacy (Busenberg, 1999; Geoghegan and Renard, 2002; Glasbergen and Driessen, 2005; Gunton and Day, 2003; Imperial, 2005; Murdock et al., 2005; Rogers et al., 1993). Finally, clearly defined roles are important to increase the effectiveness of the collaboration (Alexander et al., 1998).

The Collaborative Process

The collaborative process is cyclical or iterative in nature, moving through communication, trust, commitment, understanding, and outcomes (Huxham, 2003; Imperial, 2005). These five elements are interdependent, each influencing the further development of collaboration positively or negatively.

They are simplified in the Model of Collaborative Governance by Ansell and Gash (2008), as illustrated in Figure 5 and discussed below.

1. Face-to-Face Dialogue

Communication is the core of collaboration. Having a face-to-face dialogue is necessary to identify mutual gain opportunities (Ansell and Gash, 2008) and to break down stereotypes and other barriers to identifying mutual gains (Bentrup, 2001). Furthermore, it is essential to build a shared understanding, trust, mutual respect, and a commitment to the process (Gilliam et al., 2002; Lasker and Weiss, 2003; Plummer and Fitzgibbon, 2004; Schneider et al., 2003; Tompkins and Adger, 2004; Warner, 2006). However, it is important to recognise that a face-to-face dialogue can also do the opposite and intensify antagonism, stereotypes, or mutual disrespect.

2. Trust Building

The collaborative process is not only about negotiating but also about building trust among the involved stakeholders (Alexander et al., 1998; Beierle and Konisky, 2001; Brinkerhoff, 1999; Glasbergen and Driessen, 2005; Imperial, 2005; Murdock et al., 2005; Short and Winter, 1999; Tett et al., 2003; Vangen and Huxham, 2003). This trust-building process is especially a critical and difficult aspect of the early collaborative process if there has been a prehistory of antagonism among stakeholders (Murdock et al., 2005). Therefore, because of this difficulty, good collaborative leaders must build trust among their former opponent stakeholders before they are willing to take risks; the stakeholders, on the other hand, must assign sufficient time for effective trust building, because of its time-consuming nature. Thus, this trust-building process requires a long-term commitment from all involved stakeholders to achieve collaborative results. If stakeholders cannot justify the time and cost, they should not participate in this collaborative strategy.

3. Commitment to the Process

The level of stakeholder commitment to collaborate is a critical variable for the success or failure of the collaboration (Alexander et al., 1998; Gunton and Day, 2003; Margerum, 2001; Tett et al., 2003). This commitment is closely linked to the original motivation to participate; however, commitment to the process goes beyond initial intentions and requires a psychological shift, especially for those who view their position in absolute terms (Putnam, 2004; Putnam et al., 2003), towards the belief that mutual gain thinking (Ansell and Gash, 2008), or “mutual recognition” (Saarikoski, 2000) or “Joint appreciation” (Gray, 1999; Plummer, and Fitzgibbon, 2004) is the best approach to achieving desirable outcomes (Burger et al., 2001). Achieving this “buy-in” from all stakeholders is essential to establish real commitment to the collaborative process.

However, commitment to the process introduces a dilemma, as it requires an initial willingness to comply with the collective, even if it leads in a direction that a stakeholder does not fully support. While the consensus-oriented approach inherent to collaborative governance reduces the risk for stakeholders, the dynamics of bargaining can still lead to directions that stakeholders do not fully embrace, but feel pressured to conform to (Saarikoski, 2000). This commitment significantly depends on trust, as well as clear, fair and transparent procedures. After all, trust is required to ensure that others will respect your perspectives and interests, and to have confidence that the process of discussion and negotiation happens with integrity.

An additional dimension of commitment is “ownership of the process”, where decision-making is a shared collective with other stakeholders who may hold differing views (El Ansari, 2003; Geoghegan and Renard, 2002; Weech-Maldonado and Merrill, 2000). This shared ownership indicates having shared responsibilities, which in turn necessitate trust to guarantee that opponents do not take advantage of your willingness to act for the collective good.

4. Shared Understanding

In the collaborative process, stakeholders have to develop a shared understanding of what they can collectively achieve (Tett et al., 2003), a process that can be seen as part of a larger “collaborative learning process” (Ansell and Gash, 2008). This shared understanding is also described in various other ways, such as having a “common mission” (Alexander et al., 1998; Roussos and Fawcett, 2000), a “common purpose” (Tett, et al., 2003), “common ground” (Wondolleck and Yaffee, 2000), a “shared vision” (Manring and Pearsall, 2005; Walter and Petr, 2000; Wondolleck and Yaffee, 2000), “common objectives” (Padilla and Daigle, 1998), “clear goals” (Glasbergen and Driessen, 2005; Roberston and Lawes, 2005), a “shared ideology” (Waage, 2001), a “clear and strategic direction” (Margerum, 2002), or the “alignment of core values” (Heikkila and Gerlak, 2005). Additionally, having a shared understanding also includes initially reaching a collective agreement on the definition of the problem (Bentrup, 2001; North, 2000; Pahl-Wostl and Hare, 2004) and ensuring the necessary knowledge to address the defined problem.

5. Intermediate Outcomes

Lastly, collaboration is more likely to occur when the potential advantages and purposes of the collaborative process are relatively clear and concrete, and when small wins, in terms of critical process outcomes, are possible (Chrislip and Larson, 1994; Roussos and Fawcett, 2000; Warner, 2006; Weech-Maldonado and Merrill, 2000). These small wins are critical for building momentum and creating a virtuous cycle of trust-building and commitment (Rogers et al., 1993; Vangen and Huxham, 2003), essential for successful collaboration. These intermediate outcomes that produce small wins are especially important if prior antagonism is high and a long-term commitment to trust-building is required. However, stakeholders should not enter into a collaborative process if they cannot foresee these small wins.

3.1.2 Six Key Domains of Intervention for Successful Collaboration

Common Eye (2016) identified six key domains of intervention to facilitate successful collaborations, including in urban area development. These key domains are illustrated in the Common-Eye-Model in Figure 6 and discussed below.



Figure 6. The Common-Eye-Model. Recreated and adapted from Common Eye (2016).

Shared Ambition

The first and most fundamental domain is a *shared ambition*. After all, stakeholders within a collaboration share and work towards a common goal. A strong shared ambition ensures that each stakeholder benefits both individually and collectively from the collaboration. However, due to the varying individual ambitions and the diversity of stakeholders, collaborations often involve miscommunication. To address this, it is crucial not to remain vague or general when developing a shared ambition, but instead, the ambition should be broken down and deepened to ensure that all stakeholders truly understand each other and the shared ambition.

When a shared ambition is absent, the risk of pseudo-collaboration (Dutch: schijnsamenwerking) arises, a situation where stakeholders appear to collaborate, while support for collaboration diminishes over time. Therefore, an honest and clear shared ambition is essential to prevent this from happening.

Furthermore, creating a shared ambition involves establishing a balance between what parties contribute to the collaboration and what they aim to gain from it. Therefore, a well-defined shared ambition not only captures the mutual benefits but also the individual ones, as well as clear arguments

on what they contribute in terms of time, money, and knowledge. This helps to secure true commitment from all stakeholders involved.

Finally, a strong shared ambition cannot exist without actions from all involved. Thus, in short, *Shared Ambition = Promise + Commitment + Action*. Without a clear promise, commitment to the process, and/or action to execute these promises, many collaborations will struggle to achieve their mutual goal and ultimately fail (Hoorn, 2018).

Interests

To achieve sustainable collaborations, stakeholders need to discuss their *interests* at an early stage. Often, stakeholders discuss only collective interests and quickly move on to a contract, covenant or joint venture. However, it is equally important to address both the organisational interests and the individual interests of the representatives of the organisations involved in urban area developments. After all, “*Where you stand depends on where you sit*”. Organisational interests are typically linked with the goals and core values of the organisation, such as the goal to grow, achieve financial targets, and align their actions with their image. Additionally, the stakeholders involved in the area transformation carry personal interests shaped by their convictions, interests, and drivers, which also influence the direction and shape of a partnership.

Relationship

Collaboration goes beyond the individual level and incorporates all stakeholders in the process, therefore, a good *relationship* between all parties is important. Consideration of the relationship between the parties ensures a more stable working relationship, enables conflicts to be better managed and resolved, and creates a more conducive environment for feedback. Social psychological processes, group dynamics, inclusion and exclusion, power, leadership, conflict management, and trust all play an important role in building a good relationship.

Organisation

To realise the collective ambition, a collaboration should be established within a professional *organisation*. For this reason, the organisational structure of the cooperation must align with the collective ambition, ensuring that neither over- nor under-organisation occurs. Over- or under-organisation happens when too much or too little effort is spent on the organisation, with stakeholders relying too much on their own organisational procedures and routines instead of focusing on what is needed to achieve the collective ambition. This can lead to ambiguity in governance and the risk of pseudo-collaboration, both of which must be avoided.

Therefore, for a robust collaboration, it is required to establish a balance between decisiveness, focused on actions, and support, to gain the trust of all stakeholders involved. A set of ground rules or a contract should be established, outlining minimum preconditions, such as who decides what, who does what, and who belongs. Additionally, it is important to periodically evaluate the process to ensure ongoing development of the collaboration and relationship (Hoorn, 2018).

Process

A meaningful process should be developed in the early stages of cooperation to create clarity for the stakeholders involved. This includes issues such as who makes the decisions, when to deliberate, how to monitor progress and quality and, of course, how to achieve a good result. This avoids uncertainty and suspicion. Informing all stakeholders about what is coming and which phase they are in, while conducting periodic evaluations to demonstrate the benefits of collaboration, provides motivation and

energy to continue collaborating towards the shared goal. The phases of collaboration are illustrated in Figure 7.



Figure 7. Five Phases of Collaboration. Recreated from Common Eye (2016).

Collaboration Strategy and Collaboration Skills

A well-defined collaboration strategy and strong collaboration skills are essential for the effectiveness of collaborations. Therefore, organisations should proactively consider how cooperation can support them in achieving their internal goals and explore what cooperation opportunities exist. By integrating collaboration as a strategic alternative, organisations can move beyond solely relying on their own internal strategies to achieve their objectives.

The process of developing a collaboration strategy involves the following steps and is illustrated in Figure 8:

1. Define individual organisational strategy: establish a clear mission and vision, as well as a strategic plan;
2. Analyse trends and developments: Asses their potential impact on the individual organisation;
3. Develop a collaborative strategy: Identify which goals are best achieved through collaboration and incorporate these opportunities into the organisation's strategic plan;
4. Select and engage partners and collectively develop the strategy of the collaboration: Identify suitable collaboration partners and jointly shape the cooperation strategy, clarifying its purpose, structure and intended outcomes.

It should be noted that in urban area transformations, the possibility of selecting suitable cooperation partners is not possible, as these transformations are inherently associated with an existing situation and stakeholders.



Figure 8. Strategy and Collaboration. Recreated from Common Eye (2016).

3.1.3 Comparative Analysis of Collaborative Elements

Although the models of Ansell and Gash (2008) and Common Eye (2016) originate from different contexts, the former rooted in academic theory and the latter in practice, they share several crucial elements for successful collaboration. A comparative analysis reveals these overlapping elements, as

well as complementary distinctions. Together, they ultimately inform a set of variables relevant to this study, which are visualised in Figure 9.

The domain of *Shared Ambition* in the Common Eye Model closely aligns with the *Shared Understanding* variable in the Collaborative Governance Model of Ansell and Gash, which falls under the main variable *Collaborative Process*. Both models emphasise the importance of developing a clear and deepened vision, objective, understanding, or goal, to ensure that all stakeholders understand both the shared goal and the interests of others. Common Eye further complements this by highlighting that this shared ambition not only concerns shared benefits, but also those for the individual stakeholders, including the resources they contribute in terms of time, money, and knowledge. The emphasis on true commitment from all stakeholders touches upon the *Commitment to the Process* variable in the model of Ansell and Gash. Furthermore, along with commitment, Common Eye stresses the importance of clear promises and action from all stakeholders involved, essential for the success of achieving the shared ambition.

The second domain, *Interest*, in the Common Eye Model can be seen as an additional *Starting condition* in Ansell and Gash's model, while also relating to the *Face-to-Face Dialogue* variable as part of the main variable *Collaborative Process*. Common Eye stresses the importance of discussing not only the collaborative interests from an early stage, but also the organisational and individual interests of the stakeholders involved. These relatively fixed interests, often grounded in the goals and core values of the organisations and individuals, function as contextual factors that either discourage or facilitate the effectiveness of the collaboration, similarly to the starting conditions in the model of Ansell and Gash.

The *Relationship* domain in the Common Eye Model resonates with the process of *Trust Building* in the main variable of *Collaborative Process* in the model of Ansell and Gash. Both models stress that active and continuous relationship and trust-building among stakeholders are essential for true commitment, collective action, and a more stable working relationship. Ansell and Gash emphasise that trust-building is especially important when there is a history of antagonism among stakeholders. Effective *Facilitative Leadership* is critical in this process. Common Eye builds on this by recognising that social psychological processes, group dynamics, inclusion and exclusion, power, leadership, and conflict management are other important aspects of building a good relationship, all of which align with the *Leadership* tasks in the model of Ansell and Gash.

The fourth domain, *Organisation*, in the Common Eye Model aligns with the *Institutional Design* variable in Ansell and Gash's model. Both emphasise the importance of setting clear ground rules and protocols, often formalised through contracts, as well as ensuring process transparency and clarity in roles. This is not only important for trust building but also to ensure the legitimacy of the collaborative process. Common Eye adds that organisational structures should align with the collective ambition and that the related processes are periodically evaluated to ensure ongoing development of the relationship and collaborative process.

The *Process* domain in the Common Eye Model corresponds to the main variable of *Collaborative Process* in the Collaborative Governance Model of Ansell and Gash. Although the process described by Common Eye does not explicitly state the cyclical nature of collaboration or the role of leadership in guiding stakeholders through its inherent challenges, it does recognise the need to create clarity for all stakeholders, inform them, and evaluate periodically to demonstrate the benefits of the collaborative process, as also emphasised by the main variable *Facilitative Leadership* in the Collaborative Governance Model.

Finally, the sixth domain, *Collaboration Strategy and Collaboration Skills*, can also be considered part of the *Starting Conditions* in Ansell and Gash's model. Common Eye stresses that participating organisations need to have a well-defined collaborative strategy that considers how collaboration can

support their internal goals, and that they have strong collaboration skills for effective collaboration. These factors, brought into the process by individual stakeholders/organisations, can again discourage or facilitate effective collaboration, just like the other starting conditions in the Collaborative Governance Model of Ansell and Gash.

Adapted Model with Variables

Figure 9 presents an adapted version of the Collaborative Governance Model by Ansell and Gash (2008), integrating insights from the comparative analysis of the models of Ansell and Gash (2008) and Common Eye (2016). The adapted model highlights the variables relevant to this research. As shown in the figure, the three main variables, *starting conditions*, *facilitative leadership*, and *institutional design/organisation*, serve as critical contributors or context setters for the main variable, *collaborative process*.

Two new specific variables, *collaboration strategies and skills* and *organisational and individual interests*, have been added to the *starting conditions* of the original model. Furthermore, this model distinguishes itself from the original model through the observation that *facilitative leadership* extends its influence beyond the *collaborative process* to the specific *starting condition* variables, *power/resource/knowledge asymmetries* and *incentives for stakeholders to participate*. This can occur, among other things, through empowerment, ensuring equal influence and control and exploring mutual gains, thereby indirectly influencing the collaborative process.

Additionally, this model distinguishes itself from the original model by the observation that *facilitative leadership* can also influence the *institutional design/professional organisation*. This can occur, among others, through the facilitation of setting ground rules, contract formation, and promotion of inclusiveness, again indirectly influencing the *collaborative process*. While Ansell and Gash already explained the direct influence of *facilitative leadership* and the other two main variables on the *collaborative process*, insights from the Common Eye Model on Collaboration contributed to the refinement of the five specific variables within the *collaborative process*, as visualised in the figure.

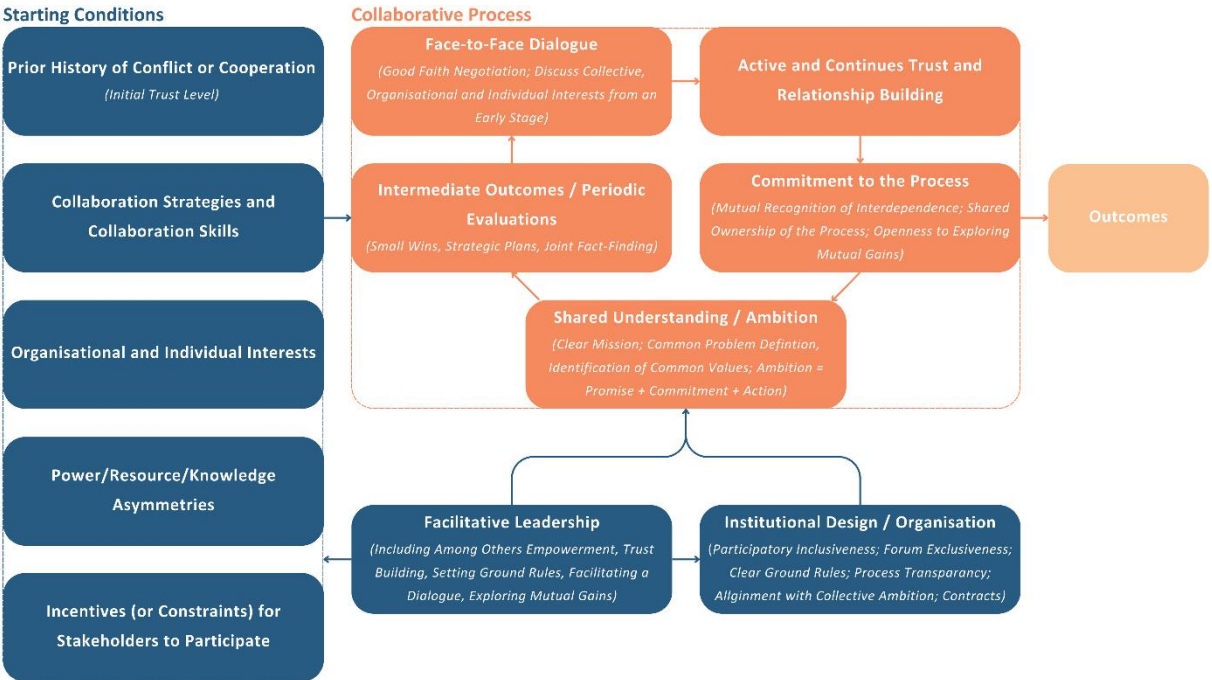


Figure 9. Collaboration Variables. Adapted Version of the Collaborative Governance Model of Ansell and Gash (2008).

3.2 Institutional Entrepreneurs

Sustainable urban transformations are highly context-dependent and associated with wicked problems (Camillius, 2008), making a universal ‘top-down’ approach impossible (Klein Woolthuis et al., 2013). Instead, a tailored approach is required to consider local factors such as people, ecosystems, and infrastructure (ibid.). The challenge is, therefore, not only to identify the ‘right solution’ but also to create the institutional conditions that enable such solutions to emerge (ibid.).

Institutional entrepreneurs play a crucial role in driving such institutional change and promoting sustainable development (Klein Woolthuis et al., 2013). Because of the lack of consensus on what sustainability is in the urban context, sustainability here is considered a strategy for action (Hooimeijer, 2011), an entrepreneurial vision to establish in concrete urban development projects (Klein Woolthuis et al., 2013). Klein Woolthuis et al. (2013), building on research by Pacheco et al. (2010), identify six tactics institutional entrepreneurs utilise to influence formal and informal institutions, thereby creating a more favourable institutional context for sustainable urban development. Mens et al. (2021) offer a complementary perspective by examining a typology of social entrepreneurs involved in bottom-up urban developments. Although their primary goal is to create social rather than sustainable value, these actors similarly challenge prevailing institutions (ibid.), offering valuable insights for this study.

The following section first introduces the concept of institutional change, and then discusses and compares the most relevant findings of both studies to explore the types of entrepreneurial actors, whether institutional or social, their roles, the strategies they employ, and their underlying motives. Ultimately, these two studies are compared to identify their overlapping elements and complementary distinctions relevant to this study.

3.2.1 Institutional Change

Institutional change is the process of deinstitutionalisation of existing institutions and the theorisation and institutionalisation of new ones (Greenwood et al., 2002) that support sustainable development (Klein Woolthuis et al., 2013). Institutions are defined here as the ‘rules of the game’ that drive routine behaviour (Jepperson, 1991) or rationalised myths (Meyer and Rowan, 1977). These rules may be taken for granted among stakeholders within a sector or might be reinforced by public opinion or legal authority (Dimaggio and Powell, 1983). A distinction can be made between soft, informal and hard, formal institutions, as illustrated in Figure 10. Soft, informal institutions, also referred to as socially embedded institutions (Edquist and Johnson, 1997; Johnson and Gregersen, 1994; Klein Woolthuis et al., 2005; North, 1990; Pacheco et al., 2010), include visions, understandings, norms and values surrounding urban development (Klein Woolthuis et al., 2013). The formal institutions include laws, rules, policies (Edquist and Johnson, 1997; Johnson and Gregersen, 1994; Klein Woolthuis et al., 2005; North, 1990; Pacheco et al., 2010), regulations, contractual forms and certificates that hinder or stimulate sustainable urban development (Klein Woolthuis et al., 2013). The primary focus of this study lies on the informal aspects, while also acknowledging the formal ones that might influence the collaborative process towards sustainable urban transformations.



Figure 10. Distinction Between Informal and Formal Institutions (own figure).

3.2.2 Six Tactics for Institutional Entrepreneurs to Influence Formal and Informal Institutions

Through a case study methodology, Klein Woolthuis et al. (2013), building on research by Pacheco et al. (2010), identified six tactics institutional entrepreneurs utilise to influence both formal and informal institutions to create a favourable institutional context for sustainable urban development. First, the role and examples of institutional entrepreneurs are described, whereafter the six tactics are outlined.

Role of Institutional Entrepreneurs

Institutional entrepreneurs are defined as influential groups of individuals or organisations (Fligstein, 1997; Garud and Karnøe, 2003) that challenge old institutions and initiate and accelerate new ones (Dacin et al., 2002). DiMaggio (1988) describes them as individuals who have enough resources (such as money, knowledge or influence) to pursue interests that are valuable to them. Other scholars highlight how entrepreneurs can participate in political strategies, such as establishing advocacy coalitions or lobbying to alter institutional constraints to their advantage (Bansal and Roth, 2000; Garud and Karnøe, 2003; Hillman and Hitt, 1999; Oliver and Holzinger, 2008).

Although institutional entrepreneurs can play a key role in initiating and accelerating institutional change, they should be viewed as promoters of institutional change and, therefore, a prelude (an initial step) to institutional change (Greenwood et al., 2002; Pacheco et al., 2010). After all, achieving real institutional change is not a straightforward but rather a complex process, and it's unclear whether it can be orchestrated or enforced (Klein Woolthuis et al., 2013). Furthermore, institutional change within the urban context cannot be established by institutional entrepreneurs alone, as a wide variety of actors are involved, including tenants, builders, developers, architects, and governmental bodies (ibid.), and a dynamic interaction exists between institutional entrepreneurs and their institutional

context (Bansal and Roth, 2000; Vermeulen et al., 2007). Because of this dynamic interaction, this study examines how institutional entrepreneurs can stimulate stakeholder collaborations towards sustainable urban transformations.

Examples of Institutional Entrepreneurs

In the research by Klein Woolthuis et al. (2013), three cases were selected where institutional entrepreneurs successfully realised sustainable urban developments, serving as inspirations for transformation. The cases differ in approach, underlying motivation, and development scale (ibid.). The first case occurs at a building scale, where the institutional entrepreneur is an individual, a former manager at a housing association, aiming to develop a mixed- and flexible-use building through the Solids concept (ibid.). The second case involves a small-scale, self-organised sustainable urban development that integrates social and urban quality with nature (EVA Lanxmeer) (ibid.). The institutional entrepreneur who initiated this project is an individual concerned citizen (ibid.). Lastly, the third case consists of a Cradle to Cradle business park, where material, waste, energy and water loops are closed (McDonough and Braungart, 2002). This project was initiated by an individual who is the CEO of a real estate development firm (Klein Woolthuis et al., 2013).

These cases illustrate the diversity of institutional entrepreneurs, from individuals to organisations, and the varying scales at which they establish sustainable urban developments, utilising the tactics discussed below.

Six Tactics to Influence Formal and Informal Institutions

Because of the key role of institutional entrepreneurs in sustainable urban development, it is important to determine how they can initiate and accelerate institutional change in both formal and informal institutions. The six tactics identified by Klein Woolthuis et al. (2013) to influence these institutions and create a favourable institutional context for sustainable urban development are illustrated in Figure 11.



Figure 11. Tactics Utilised by Institutional Entrepreneurs to Influence Formal and Informal Institutions (Own figure).

Institutional entrepreneurs can use *framing* to present their preferred institutional arrangements in a way that is appealing to the widest possible audience (Pacheco et al., 2010). Because sustainable urban developments are wicked problems, there is no shared view on what sustainable urban development encompasses, instead, institutional entrepreneurs frame their own vision (Klein Woolthuis et al., 2013). By linking innovative new ideas and technical solutions to narratives that stakeholders can relate to or are widely accepted (Lawrence and Philips, 2004), legitimacy and support are created for their proposed ‘right’ solution (Klein Woolthuis et al., 2013). Hereby, their solutions are mainly sold by referring to positive reasons, such as their profitability and resilience, instead of negative ones of former practices, such as environmental degradation (ibid.).

Another tactic that institutional entrepreneurs can use to gain support for their ‘right’ solution is *theorisation*, whereby cause-and-effect relationships are emphasised to validate their solution (Pacheco et al., 2010). This can be done by outlining why the old method is wrong and/or by demonstrating that their proposed change is greater based on pragmatic and moral grounds (Greenwood et al., 2002). Hereby, a pragmatic argument could be a better business proposition with being sustainable as a side effect, and a moral argument could be a better quality of life and environmental values (Klein Woolthuis et al., 2013). Additionally, demonstrating realised projects can

help to exhibit the superiority and feasibility of the new 'right' solution, both technically and financially, ultimately modifying existing formal and informal institutions (such as beliefs, business models, and physical and legal space) (ibid.).

As the wicked problem of sustainable urban development can only be solved by including a variety of stakeholders, *collaboration* through cooperation and collective action is another important tactic to employ as an institutional entrepreneur (Klein Woolthuis et al., 2013). These collaborations aim to align the interests of a variety of stakeholders by providing shared meanings or identities (Fligstein, 1997) or shared visions for development (Klein Woolthuis et al., 2013). Collaborations should happen with, among others, local authorities to influence macro-level institutions to create favourable conditions for sustainable urban development (Zucker, 1988). Furthermore, collaboration should take place with previously unengaged stakeholders such as universities, users, NGO's, and authorities (Scholz and Stiftel, 2005). Additionally, incorporating the expertise of innovative companies and an interdisciplinary group of experts can strengthen a collaboration towards the shared vision for development, as resources and skills from multiple domains can be incorporated (Klein Woolthuis et al., 2013). However, careful consideration of the different skills and interests each stakeholder brings is necessary, as aligning these can be complex (ibid.). Lastly, institutional change often involves the adoption of new practices, therefore, stakeholders must recognise and prioritise long-term learning, quality, and joint responsibility for the development (ibid.). Ultimately, this collaborative process enables the discovery and creation of opportunities, the accumulation of knowledge and tools, and the emergence of new development paths (ibid.).

Fourthly, *lobbying*, by using political power and tactics, can be effective to advocate the visions and interests of the collective (Pacheco et al., 2010) or single institutional entrepreneurs (Levy and Scully, 2007). This is particularly essential as the built environment is tightly governed by regulations and rules (Loikkanen and Hyvonen, 2011), and an exception from these rules can result in legal issues (Klein Woolthuis et al., 2013). Therefore, lobbying can help to establish a supportive coalition, which helps to create support from governmental bodies as well as to get approval for the execution of the new plans that are inconsistent with current regulations and rules (ibid.). Hereby, the extent of such influence depends largely on an institutional entrepreneur's resources, social or network position (Dimaggio, 1988), and their ability to mobilise resources and actors (Dimaggio, 1988; Leblebici et al., 1991).

Negotiation is the fifth tactic that institutional entrepreneurs can use to change old business models and create new ones (Klein Woolthuis et al., 2013). After all, existing structures often reflect long-standing interest and ownership arrangements (ibid.), which create barriers to change. This tactic emphasises that revising property arrangements and contractual agreements can increase the feasibility of projects by adjusting incentive structures for stakeholders, aligning stakeholder interests, and resolving issues with split incentives and negative externalities, which are common in urban developments (Klein Woolthuis, 2010).

The sixth tactic is *standardisation* (certification), as it can facilitate the adoption of new practices (Boiral, 2007). By setting a technological standard, for instance, by creating an industrial norm, institutional entrepreneurs can establish a competitive advantage (ibid.). More importantly, they can force others to follow, therefore being an effective mechanism for successful and widespread sustainable urban developments (Klein Woolthuis et al., 2013).

3.2.3 Typology of Social Entrepreneurs

Mens et al. (2021) analysed and categorised the 'new' non-conventional actors involved in bottom-up initiatives through a multiple case study approach. First, a description is given of this non-conventional actor, also known as a social entrepreneur, whereafter the typology, consisting of three types of social entrepreneurs, is outlined.

Social Entrepreneurs

Social entrepreneurs aim to make a broad social impact on urban developments by addressing societal needs that are not sufficiently met by conventional actors (Mens et al., 2021). They do so by deliberately collaborating with multiple (conventional) actors (ibid.). Their initiatives are therefore considered as social entrepreneurial activities, characterised by the recognition of opportunities and proactively acting upon them to generate social value (Austin et al., 2012; Certo & Miller, 2008). These actors are 'hybrid' in nature, mixing characteristics of market and civil society, as illustrated in Figure 12, an adapted version of the welfare mix triangle (Brandsen et al., 2005; Pestoff, 1992).

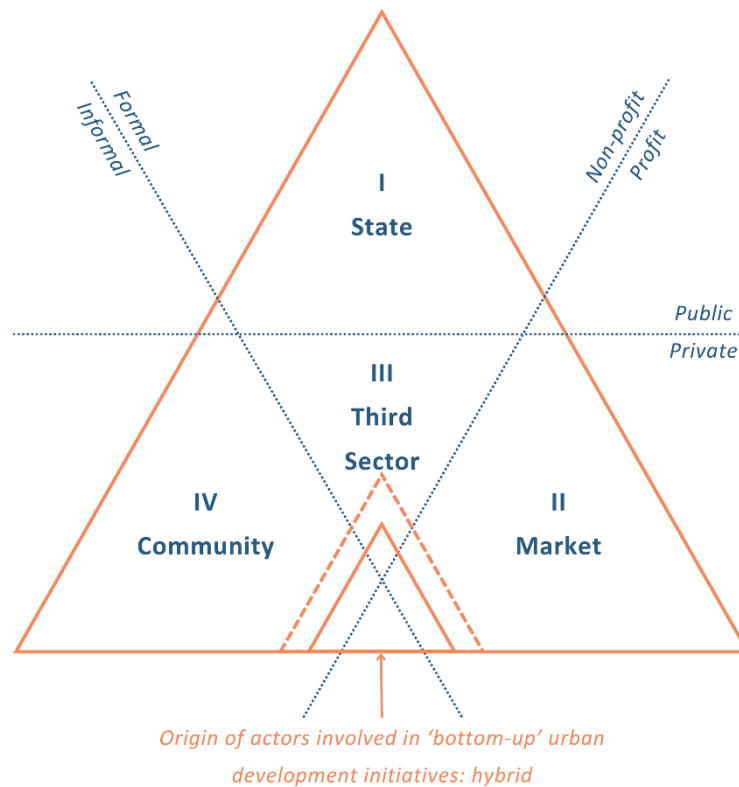


Figure 12. Adapted Version of the Welfare Mix Triangle (Brandsen et al., 2005; Pestoff, 1992). Recreated from Mens et al. (2021).

Social entrepreneurs are distinct from conventional commercial entrepreneurs by their primary goal, with the former aiming to create social value, and the latter seeking financial value (Mens et al., 2021). Commercial entrepreneurs often have better access to resources such as talent, financial institutions, and funding, which makes it more challenging for social entrepreneurs to access and utilise the resources required to achieve their ambitious goals (Austin et al., 2012). To overcome these barriers, social entrepreneurs need to build a large and solid social network, alongside the ability to effectively communicate the venture's impact, values and outcomes to mobilise resources from outside the organisation (ibid.). The first strategy aligns with the process of niche formation in social-technical innovations, as social entrepreneurs create a niche, environment, or habitat within urban development, in terms of social networks, resources and support (Pesch et al., 2017; Smith et al., 2016). The second strategy is closely tied to the development, adjustment, alignment and articulation of a vision and expectations that steer the initiative towards its desired goals (Mens et al., 2021). Furthermore, a continuous interactive and collective learning process across various dimensions (Pesch et al., 2017), such as the organisational structure, business models, and regulations (Schot and Geels, 2013; Pesch et al., 2017), is important to navigate the barriers faced by social entrepreneurs.

A typology

Mens et al. (2021) identified a typology of social entrepreneurs involved in urban development, differentiating three types based on their characteristics, motives and aims, primary and secondary roles, as well as their position and power. These three types are discussed below and presented in Figure 14. Since the previously discussed actions and strategies to navigate barriers primarily determine the secondary roles social entrepreneurs take on, subsequently influencing their position and power over several iterations (ibid.), these elements are also linked to the typology. This relationship is illustrated in Figure 13, the framework that Mens et al. (2021) utilised for analysis.

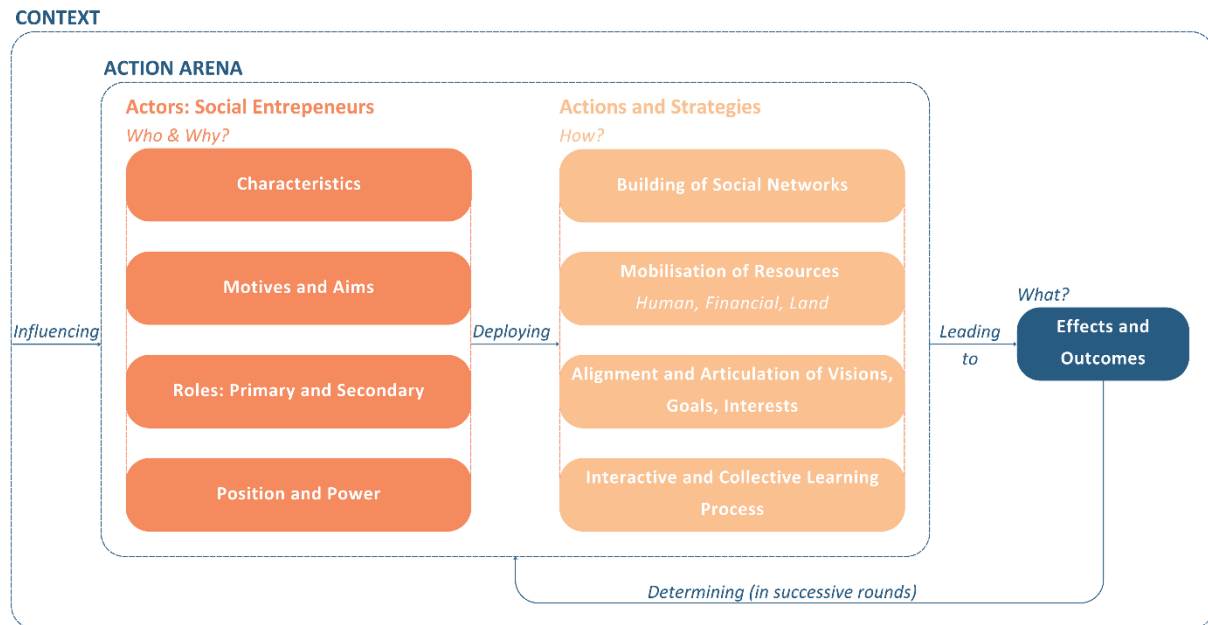


Figure 13. Framework for the Analysis of Social Entrepreneurs. Recreated from Mens et al. (2021).

Type A: Pioneers

The first type of social entrepreneur is the pioneer, characterised by informally collaborating individuals with a hybrid nature that combines characteristics of both the market and civil society, primarily operating within the creative industry (Mens et al., 2021). Examples observed in the study by Mens et al. (2021) include an architect/urban designer involved in the development of a creative breeding ground, an independent photographer with previous experience in project management who transformed a former war bunker into an exhibition space, and several young architects at the start of their career as independent professionals. The social motives and aims, referred to by Austin et al. (2012) as the Social-Value Proposition (SVP), are recognised in these cases but came after pragmatic, individual motivations, such as the desire to create their own working space (Mens et al., 2021).

In terms of roles, these pioneers primarily acted as developers, through the construction or transformation of real estate, and as end-users (Mens et al., 2021), because of the desire to create their own working space. Their secondary roles included that of boundary spanners, by establishing cross-sectoral collaborations, bridging different interests, negotiating and establishing trust within a network (Williams, 2002). Furthermore, their secondary role also included that of niche-entrepreneurs (Pesch et al., 2017), by deploying all four strategies as illustrated in Figure 13 to overcome barriers, including having limited resources, nor a large, relevant network, and therefore having little to no power (Mens et al., 2021).

Type B: Consolidated Organisation

The second type of social entrepreneur is the consolidated organisation, which emerges over time from the efforts of the pioneers, evolving into formalised, third sector organisations, as categorised in Figure 12 (Mens et al., 2021). Through the pioneers' strategic actions, these social entrepreneurs

acquired the necessary resources and evolved into a position of realising power (ibid.). This development underscores the transition from Type A to Type B, reflecting not only a shift in power and position, but also a change in aggregation, from informally collaborating individuals to a formal organisation (ibid.). These organisations often consist of the pioneers themselves, along with other end-users, volunteers from the community, and sometimes specialists and experts (ibid.). Examples observed in the study by Mens et al. (2021) include members who are simultaneously end-users within the cooperation, foundation or association, such as initial initiators and specialised partners.

In terms of roles, these consolidated organisations, like the pioneers, primarily act as developers and end-users, and to a lesser extent as builders (Mens et al., 2021). The role of end-user touches upon a key distinction between social and conventional entrepreneurs: while the latter typically transfers ownership after completion to an owner or end-user and therefore has limited bonding with a specific place, the former maintains a strong connection to the location, and therefore incorporates cultural-historic references into their plans (ibid.). Regarding the secondary roles, these are also the same as those of the pioneers, and include boundary spanners and niche entrepreneurs, mostly represented by the same actors as the pioneers (ibid.). However, it should be noted that although the actions and strategies they deploy are the same as those of the pioneers, their greater power and position mean that some activities require less effort over time (ibid.). Additionally, due to the development of the formal organisation, the activity of building a social network also requires the creation of the internal network, which involves assigning human resources to the venture, such as the labour and competences (ibid.). At the same time, maintaining a strategic relationship with the external social network remains essential to mobilising critical resources, such as finances and land, necessary to achieve their ambitious goals (Austin et al., 2012).

Type C: Intermediate Agent

The third and final type of social entrepreneur is the intermediate agent (Mens et al., 2021). This actor operates at a higher, area-wide scale level and collaborates both formally and informally with various stakeholders, functioning as an intermediate by communicating, facilitating network meetings, initiating interactive platforms, interpreting and aligning goals and interests, and more (ibid.). These actors are typically highly educated, with various professional backgrounds and experiences, and can be categorised as third sector or hybrid actors in the adopted welfare mix triangle in Figure 12. An example observed in the study by Mens et al. (2021) includes a duo of two female friends who work as independent freelancers with a professional background and experience in area development. They facilitated the area-wide network and communication to stimulate the overall development of the transformation of the Werskspoorkatherdraal (WSK), while also establishing collaboration between the municipality and the formal joint association of businesses in the area. Another example observed in the study by Mens et al. (2021) is Stadslab BSH (English: Citylab BSH), a foundation which emerged as a facilitator for the execution of the collectively developed circular vision of the area, Manifesto Circular Buiklosterham. This foundation connects stakeholders and identifies, acknowledges and links innovative ideas and best practices.

In terms of roles, these actors primarily serve as facilitators of urban developments, aiming to promote, express and execute specific social policy goals, a role inherent to organic urban development (Mens et al., 2021). Their secondary roles specifically include boundary spanners, as they realise cross-sectoral collaborations, establish trust, and bridge the various interests within a collaboration (Williams, 2002), as well as policy entrepreneurs, as they carry out tasks dedicated to achieving their main goal of realising specific social policy goals (Kingdon, 2011). Therefore, the actions and strategies they employ are limited to building a social network, and aligning and articulating visions, goals and interests (Mens et al., 2021). Their position and power are determined by the social network they manage to build and sustain, as well as their reputation within the network (ibid.).

Type	Characteristics	Motives and Aims	Roles	Position and Power	Actions and Strategies	Examples
A. Pioneers	Informally collaborating individuals; Hybrid nature, combining characteristics of both market and civil society; Primarily operating within the creative industry	Social motives and aims are recognised, but are secondary to pragmatic individual motives	Primary roles: Developer, end-user; Secondary roles: Boundary spanners, Niche-entrepreneurs	Limited resources, nor a large, relevant network, and therefore having little to no power	Building of social networks; Mobilisation of resources; Alignment and articulation of visions, goals and interests; Interactive and collective learning process	Architect/urban designer; Independent photographer with previous experience in project management; Several young architects at the start of their careers
B. Consolidated Organisation	Emerges over time from the efforts of the pioneers, evolving into formalised, third-sector organisations; Often consist of the pioneers themselves, other end-users, volunteers from the community, and sometimes specialists and experts	-	Primary roles: Developer, end-user, and to a lesser extent, builder; Secondary roles: Boundary spanners, Niche-entrepreneurs	Through the pioneers' strategic actions, these social entrepreneurs acquired the necessary resources and evolved into a position of realising power; Furthermore, their position is based on trust and reputation	Building of social networks (internal network, and external social networks); Mobilisation of resources; Alignment and articulation of visions, goals and interests; Interactive and collective learning process. <i>Their greater power and position mean that some activities require less effort over time compared to the pioneers</i>	Members who are at the same time end-users within the cooperation, foundation or association, such as initial initiators and specialised partners
C. Intermediate Agent	Operates at a higher, area-wide scale level and collaborates both formally and informally with various stakeholders; Highly educated individuals with various professional backgrounds; Third sector or hybrid actors	Realising specific social policy goals	Primary role: facilitator; Secondary roles: Boundary spanners, Policy Entrepreneurs	Determined by the social network they manage to build and sustain; Based on trust and their reputation within the network	Building of social networks; Alignment and articulation of visions, goals and interests	A duo of two female friends who work as independent freelancers with a professional background and experience in area development; Foundation Stadslab BSH (English: Citylab BSH)

Figure 14. Overview of the Three Types of Social Entrepreneurs (Own figure), based on Mens et al. (2021).

3.2.4 Comparative Analysis of Institutional and Social Entrepreneurs

Although Klein Woolthuis et al. (2013) and Mens et al. (2021) focus on different types of entrepreneurs, the former on institutional entrepreneurs and the latter on social entrepreneurs, they share several crucial similarities. A comparative analysis reveals both overlapping elements and complementary distinctions, which together inform a set of variables relevant to this study. These variables are summarised in Figure 15.

Both social entrepreneurs (Mens et al., 2021) and institutional entrepreneurs (Klein Woolthuis et al., 2013) aim to make a positive impact on urban development. For social entrepreneurs, this impact is focused on meeting societal needs that are not sufficiently met by conventional actors. In contrast, institutional entrepreneurs aim to address sustainable needs that are constrained by existing formal and informal institutional structures. Mens et al. (2021) emphasise that the primary distinction between conventional and social actors lies in their primary goal; while conventional actors seek financial value, social entrepreneurs are primarily driven by the creation of social value. Institutional entrepreneurs demonstrate similarities with both; some are profit-driven and incorporate sustainable development as a secondary goal, whereas others are primarily motivated by sustainable value creation.

Both studies also emphasise that entrepreneurs can take the form of individuals or organisations. In Mens et al. (2021), the organisational social entrepreneurs, types B and C, can be seen as mature versions of the individual social entrepreneur, type A. These matured types emerge as a result of strategic actions taken by the individual entrepreneur to overcome barriers, including limited resources, weak position, and low power. As a result, these organisational types gain stronger positions, greater power, and improved access to resources.

Similarly, in Klein Woolthuis et al. (2013), while institutional entrepreneurs are described by some scholars as individuals with enough resources in terms of money, knowledge, or influence, an analysis of the cases still reveals a variation in their maturity levels. One of the three case studies, for example, describes an institutional entrepreneur who is merely a concerned citizen, instead of a professional organisation such as a housing association or real estate developer found in the second and third case studies. This variation also supports the recognition of the hybrid nature of institutional entrepreneurs, similar to the social entrepreneurs in Mens et al. (2021), who combine characteristics of both the market and civil society.

Both papers also acknowledge that these entrepreneurs, whether social or institutional, can participate in political strategies. Klein Woolthuis et al. (2013) describe *lobbying* as a tactic through which institutional entrepreneurs use political power and tactics to establish a supportive coalition, which helps to create support from governmental bodies and approval for the execution of new plans that may conflict with current regulations. The extent of this influence largely depends on the entrepreneur's access to resources, social or network position, and ability to mobilise resources and actors. Similarly, in Mens et al. (2021), the most mature type of social entrepreneur, type C, the *intermediate agent*, undertakes tasks dedicated to achieving specific social policy goals. Their position and power are likewise shaped by the social network they manage to build and sustain, as well as their reputation within the network.

When examining the tactics institutional entrepreneurs use to influence formal and informal institutions, as outlined in Klein Woolthuis et al. (2013), similarities can be seen with the actions and strategies deployed by social entrepreneurs in Mens et al. (2021). The first two actions in Mens et al. (2021), *building a social network* and *mobilising resources*, are closely interrelated, as a large and solid social network is often needed to mobilise resources from outside the organisation. To achieve this, social entrepreneurs need to effectively communicate the venture's impact, values and outcomes.

These two actions reflect the four tactics in Klein Woolthuis et al. (2013): *framing, theorisation, collaboration, and lobbying*, aimed at advocating a vision, validating solutions, aligning interests, and combining knowledge and tools, all to gain legitimacy and support. In addition, the fifth tactic, *negotiation*, also interrelates with the second action of *mobilising resources*, as the adaption of existing business models and agreements can increase the feasibility of projects by adjusting incentive structures for stakeholders, aligning stakeholder interests, and resolving issues, all to the advantage of mobilising resources from outside the organisation.

The third action in Mens et al. (2021), *alignment and articulation of visions, goals and interests* to guide an initiative in a certain desired direction, interrelates with Klein Woolthuis et al.'s (2013) third tactic: *collaboration*. These collaborations aim to align the interests of a variety of stakeholders by providing shared meanings, identities or visions for development. Klein Woolthuis et al. (2013) add that institutional entrepreneurs must carefully consider the different skills and interests of stakeholders, as aligning these can be complex. They further stress that institutional change often involves the adoption of new practices, which means stakeholders must prioritise long-term learning, quality, and joint responsibility for the development. This closely aligns with the fourth action of the *interactive and collective learning process* in Mens et al. (2021).

Adapted Model with Variables

An adapted version of the framework by Mens et al. (2021) has been developed, integrating insights from both studies into variables relevant to this study, as shown in Figure 15.

The comparative analysis revealed significant similarities between institutional and sustainable entrepreneurs. Therefore, the typology of Mens et al. (2021) is used as a starting point for examining the institutional entrepreneurs in this study. In addition, overlap was identified between the actions and strategies described by Mens et al. (2021) and the six tactics formulated by Klein Woolthuis et al. (2013).

Since the actions and strategies in Mens et al. (2021) focus specifically on the secondary roles social entrepreneurs adopt to overcome barriers such as limited resources, weak position, and limited power, it has been chosen to apply the tactics of Klein Woolthuis et al. (2013) in this study. These tactics are better aligned with this study's focus, as they challenge both formal and informal institutions within the action arena (where the collaborative process takes place) as well as the broader institutional context beyond it. However, the tactic of standardisation has been excluded from this framework. It focuses on setting technological standards or industrial norms to facilitate the adoption of new practices and gain a competitive advantage. Therefore, it is more product- or market-oriented and less relevant to the collaborative process being studied in this research.

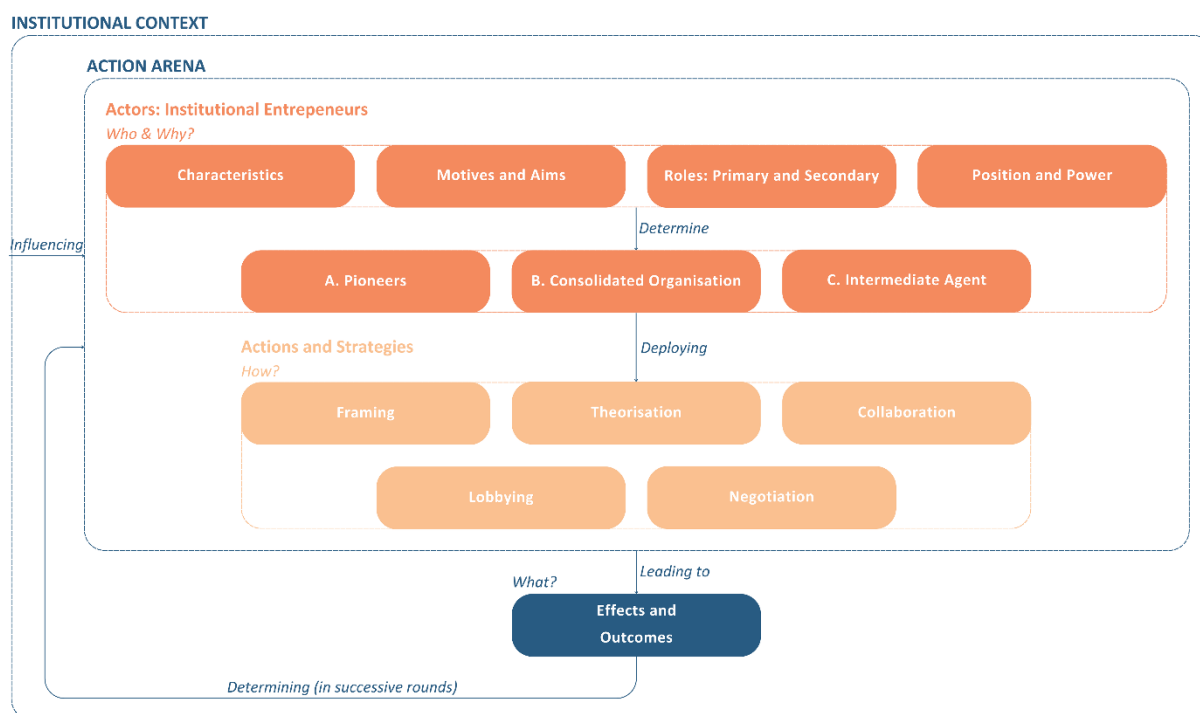


Figure 15. Institutional Entrepreneur Variables. Adapted Version of the Social Entrepreneur Framework by Mens et al. (2021).

3.3 Sustainable Urban Transformations

Despite increased awareness of climate change, reductions in greenhouse gas emissions remain inadequately prioritised and achieved (IEA, 2011). At the same time, cities, especially urban areas, are recognised as playing a central role in achieving sustainable development and climate change solutions (UN-Habitat, 2010; ICLEI, 2011; Beatley and Wheeler, 2010; Roseland, 1997). Although there is increasing awareness, it has not yet resulted in powerful initiatives that bring structural changes in urban development towards a sustainable, resilient and low-carbon direction (McCormick et al., 2013). Research emphasises that sustainable urban transformations at the district scale are essential for effectively moving urban development towards ambitious sustainability goals, and learning from them (ibid.).

To understand the concept of sustainable urban transformations, this research builds on a review paper by McCormick (2013), which comprises 20 articles that explore 35 cases of city initiatives towards sustainable urban transformations. This source is particularly relevant to this study as it integrates theoretical insights with empirical case studies to understand the concept of sustainable urban transformations, aligning with this research's approach. Furthermore, this research builds on insights from Ernst et al. (2016) and Geels (2002) to position sustainable urban transformations within a broader context, thereby clarifying the scope of this research.

The following section first distinguishes sustainable urban transformations from sustainable urban developments and then discusses the key dimensions of these transformations according to McCormick (2013). These will form the variables relevant to this study. Subsequently, its positioning within the broader context is explained.

3.3.1 Distinction Between Sustainable Urban Developments and Transformations

To understand the concept of sustainable urban transformation, it is useful to distinguish it from sustainable urban development (McCormick et al., 2013). According to Camagni (1998) and Raworth (2012), sustainable urban development involves integrating and balancing economic, social, environmental, and physical dimensions of urban areas, with respect for ecological systems and

without compromising the well-being of current and future generations. This concept focuses on development in urban areas, improving them without structural change (McCormick et al., 2013).

In contrast, sustainable urban transformation encompasses a more structural change of urban areas (McCormick et al., 2013). It involves multi-dimensional and radical change processes that transform both the drivers of radical change, including governance and planning, lifestyle and consumption, and innovation and competitiveness, and the sustainable urban structures, including resource management and climate mitigation and adaptation, transport and accessibility, buildings, and the spatial environment and public space (ibid.). These two dimensions of sustainable urban transformations, along with their respective elements, are illustrated in Figure 16. Importantly, the interaction between these dimensions and their underlying elements is significant, as changes in physical structures are closely linked to economic, social, and environmental shifts (ibid.). The following section describes the elements of each dimension in more detail.

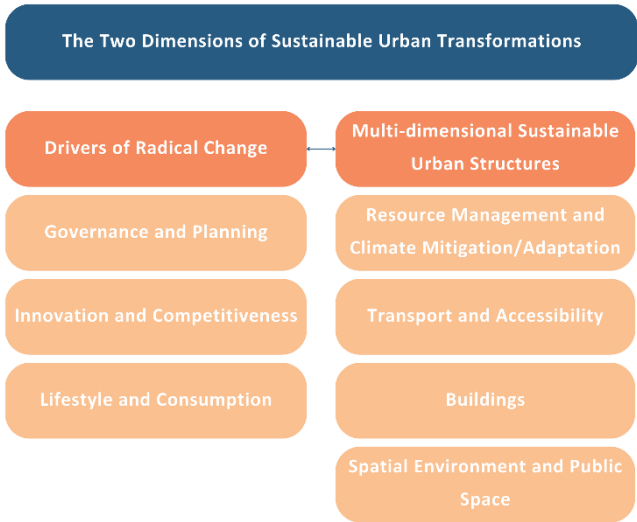


Figure 16. Two Dimensions of Sustainable Urban Transformations (Own figure), based on (McCormick et al., 2013).

3.3.2 The Dimensions of Sustainable Urban Transformations

The drivers of radical change can be understood as processes that bring about change in urban contexts and include governance and planning, innovation and competitiveness, and lifestyle and consumption (McCormick et al., 2013).

To achieve ambitious sustainability goals in cities and urban areas, *governance and planning* must critically analyse and adapt their approaches to support these ambitious objectives (McCormick et al., 2013). This involves effective strategic planning, integrating policy instruments, and actively engaging key stakeholders in these processes (ibid.). Key policy challenges include balancing ambitions with political and economic feasibility, eliminating contradictory policies, and ensuring flexibility to respond to the rapidly changing urban conditions (Bugliarello, 2010).

Secondly, *innovation and competitiveness* are recognised as essential for establishing sustainable development and realising urban competitiveness within the global economy (McCormick et al., 2013). This is especially important as cities face tensions between stimulating economic growth and maintaining or restoring the local and global environment (Beatley and Wheeler, 2010). A key aspect is the establishment of collaborations between industries, governments, and universities to explore possibilities for sustainable urban economic development (Bhagavatula et al., 2013; Prado-Lorenzo et al., 2012). This includes managing ecological, economic, and human resources sustainably, and optimising urban density and systems to achieve eco-efficiency (ibid.).

Lastly, *lifestyle and consumption* are also important processes to be adapted to effectively support the planning and implementation of sustainable urban governance strategies (McCormick et al., 2013). After all, the negative effects of overconsumption are especially noticeable in cities and urban areas (Rode, 2009). Therefore, it is essential to define an improved quality of life and visions for sustainable lifestyles in order for sustainable practices to succeed (McCormick et al., 2013).

Regarding the multi-dimensional sustainable structures, these can be understood as the domains shaped by sustainable urban transformations. They include both physical aspects, such as transport and accessibility, buildings, and the spatial environment and public space, and non-physical aspects, such as resource management and climate mitigation and adaptation, which nonetheless have a considerable impact on the physical environment.

Starting with *resource management, climate mitigation and adaptation*. These are critical but crucial challenges cities must address in the transition towards sustainability. Key areas include shifting urban energy systems towards renewable energy solutions, improving the efficiency of energy and material use, rethinking waste management as a circular process that recovers energy and materials, and ensuring a sufficient water supply (Hawkey et al., 2013).

Secondly, *transport and accessibility* are other key physical aspects that can be shaped through sustainable urban transformations. After all, the transportation sector in cities has substantial social and environmental impacts (McCormick et al., 2013). To establish sustainable transportation, aspects such as energy security, environmental and social impacts, accessibility, urban conditions, and equitable economic development must be managed simultaneously (Sukhdev, 2009; Mejía-Dugand et al., 2013).

Buildings are a third physical aspect that can be shaped through sustainable urban transformations. The challenge lies in creating buildings and other structures in the built environment that are simultaneously attractive, affordable, efficient, comfortable and sustainable (Rode et al., 2011). Achieving this requires, among others, adopting renewable energy sources, minimising material use, incorporating circularity principles, and adapting to changing environmental conditions (ibid.).

The final urban structure that can be shaped through sustainable urban transformations is the *spatial environment and public space*. This involves the revitalisation of urban areas and public spaces, along with improving the connectivity of fragmented urban landscapes (UN-Habitat, 2008; Roseland, 1997). Key aspects involve, among others, preserving and innovatively integrating “blue” and “green” structures to stimulate social interaction and support a healthy environment (McCormick et al., 2013).

3.3.3 Components of Sustainable Urban Transformations

Ernst et al. (2016) argue that transitions can occur across various societal systems, such as energy, transport, and ecological systems (De Haan and Rotmans, 2011), to fulfil societal functions like transportation and housing (Geels, 2005). These functions are carried out by *socio-technical regimes*, which can be understood as semi-coherent sets of rules and routines sustained by different social groups (Ernst et al., 2016). Regimes provide guidance and coordination for actors’ activities and create a dynamic stability of socio-technical configurations (ibid.). Because of this stability, innovations can occur, but are typically incremental (Geels, 2002). Regimes consist of several dimensions, including technology, user practices, infrastructure, symbolic meanings, industry structure, techno-scientific knowledge and policy (ibid.).

These regimes are embedded within a broader *socio-technical landscape*, which refers to a diverse set of deep structural trends and external factors (Ernst et al., 2016), such as oil prices, economic growth, wars, global politics, cultural values, and environmental problems (Geels, 2002). This landscape is harder to change than regimes, and shifts happen more slowly (ibid.).

In contrast, radical innovations, which have the potential to transform existing regimes and ultimately socio-technical landscapes, are typically generated and developed in *niches* (Geels, 2002). Within these niches, actors working in unstable networks develop a variety of radical innovations (ibid.). While many of these radical innovations fail to scale up, some gradually accumulate through application in subsequent market niches and eventually break through the niche level, ultimately leading to transformations at the regime level (ibid.).

The interrelation between niches, a specific regime, and the landscapes, referred to as Multi-Level-Perspective (Geels, 2002; Ernst et al., 2016), is illustrated in Figure 17. The figure shows how the emergence and success of radical innovations within niches are strongly shaped by existing regimes and the broader landscapes (Geels, 2002) (see the bidirectional dotted arrows between the levels). When tensions arise within a social technical regime or when shifts occur at the landscape level, pressure is put on the regime, creating a window of opportunity (ibid.). Such moments allow niche innovations to break out of the niche level, challenging existing regimes, and potentially leading to true transformations (ibid.).

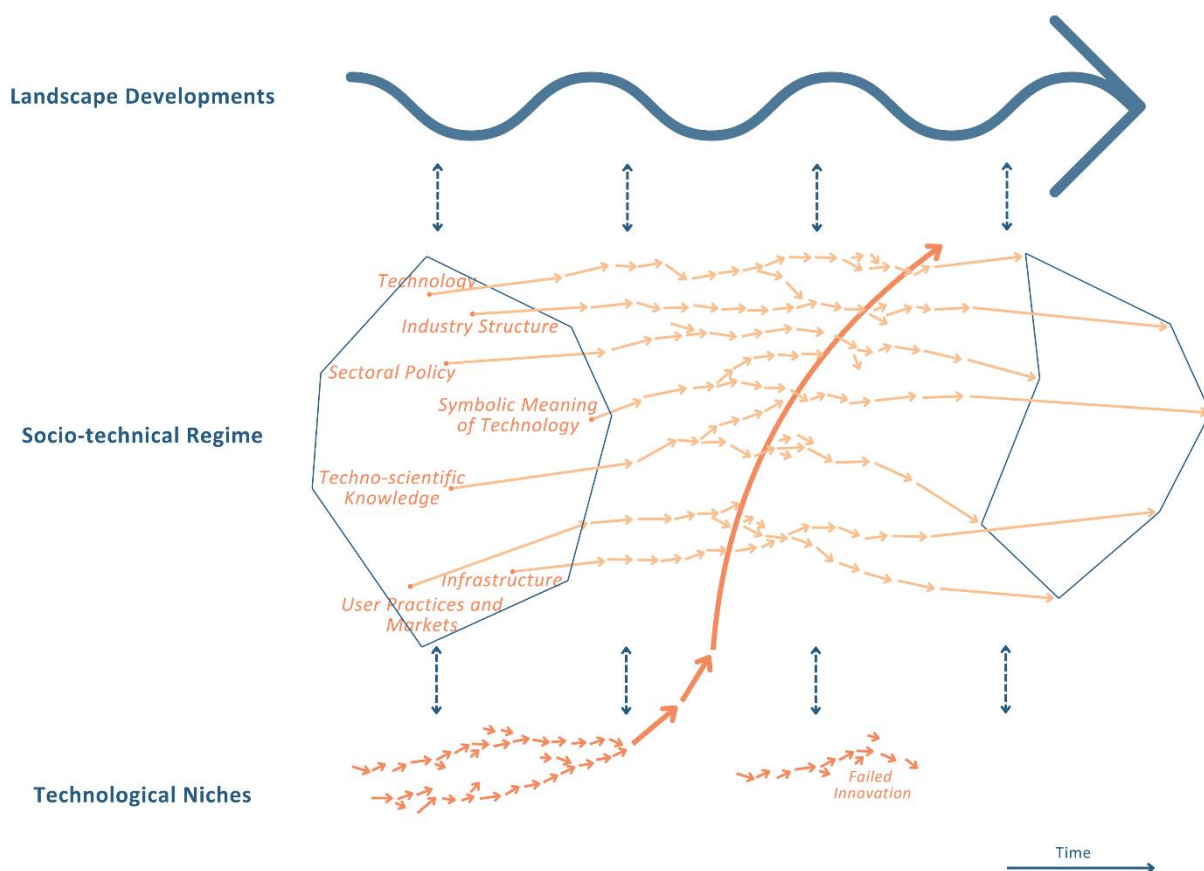


Figure 17. Multi-Level Perspective. Recreated from Geels (2002).

For a transformation, including sustainable urban transformations, to occur, a regime must undergo a radical change in its culture, structure, and practices (Loorbach, 2007). *Culture* can be understood as the ethics, norms, and values that determine the behaviour and actions of actors (Ernst et al., 2016). *Structures* refer to the standardised rules, laws, and routines (ibid.). *Practices* encompass the ways actors carry out their work, often supported by physical entities, resources, and artefacts (ibid.).

Furthermore, for sustainable urban transformations to occur, the three levels, niches, regimes, and landscapes, must interact with one another (Ernst et al., 2016). The types of interactions that can occur, referred to as transition patterns, are illustrated in Figure 18 and can be understood as the bidirectional dotted arrows in Figure 17. It is important to understand that institutional entrepreneurs,

as extensively discussed in Paragraph 3.2, can carry out the transition patterns, both from bottom-up and from top-down, to establish a radical change in a regime’s culture, structure, and practices, for sustainable urban transformations to take place.

However, since this research is focused on the role of institutional entrepreneurs in stimulating stakeholder collaborations, these kinds of institutional entrepreneurs are beyond the scope of this study. Nonetheless, it is important to remain aware of them during the case study analyses, as institutional entrepreneurs active in stakeholder collaborations might also take on these kinds of roles.

Empowerment: Niches gain power (bottom-up)	Reconstellation: New regime is installed (top-down)	In squeezed (top-down and bottom-up)
Reconfiguration: Niches scaling up and becoming empowered by the regime	Radical reform: Regime is reformed according to the cultures and structures outside of the constellation	Teleological: Regime adapting by allowing outside influences to reconstellate and simultaneously incorporating novel functioning in these processes
Substitution: Niches scaling up and becoming empowered despite the regime	Revolution: A constellation outside the regime invades the societal system and replaces the current regime	Emergent: niche functioning and influences from outside the societal system team up without active influence of the incumbent regime
Backlash: Niches initially gain power or popularity but fail to become the new mainstream	Collapse: The reconstellation does not lead to a new stable societal system	Lock-in: An innovation gains influence in the societal system but fails to completely replace the regime, co-existing with it in a locked-in state

Figure 18. Transition patterns. Adapted from De Haan and Rotmans (2011), recreated from Ernst et al. (2016).

3.4 Conceptual Framework

After exploring the three concepts of collaboration, institutional entrepreneurs, and sustainable urban transformations, and identifying key variables for each, this paragraph integrates the insights into a conceptual framework. This framework includes variables relevant to conducting the empirical research, consisting of document analysis, interviews, and an expert meeting. The framework is illustrated in Figure 19 and discussed in more detail below.

The framework uses colour-coding to distinguish between the three concepts. Variables related to institutional entrepreneurs are marked in blue, collaboration in orange, and sustainable urban transformations in light orange. Arrows illustrate the interrelation between the concepts and variables.

The analysis of the concept of institutional entrepreneurs revealed significant similarities with the concept of social entrepreneurs. Therefore, the typology of social entrepreneurs, consisting of pioneers, consolidated organisations, and intermediate agents, is adopted as a starting point to examine institutional entrepreneurs in this study. Additionally, the analysis revealed that the described actions and strategies by Mens et al. (2021) specifically focus on the ones related to the secondary roles of social entrepreneurs. Therefore, it has been chosen to apply the broader and more operational tactics of Klein Woolthuis et al. (2013) as a starting point. These tactics align better with this study’s focus, as they challenge both formal and informal institutions within the action arena, where the collaborative process takes place (inner dotted outline) as well as the broader institutional context beyond it (outer dotted outline). The tactic of standardisation was excluded, as it is more product- or market-oriented, and therefore less relevant to the collaborative process being studied in this research.

The analysis of the concept of collaboration revealed that facilitative leadership, interpreted in this study as the role of the institutional entrepreneur, along with the starting conditions and institutional design/professional organisation, serve as critical contributors or context setters for the collaborative process. Therefore, these three main variables have a direct influence on the collaborative process (arrows from each main variable to the collaborative process). The comparative analysis of the models

by Ansell and Gash (2008) and Common Eye (2016) helped refine the framework's variables related to starting conditions, institutional design/professional organisation, and collaborative process.

Additionally, the analysis revealed that facilitative leadership, interpreted as the role of the institutional entrepreneur, extends its direct influence on the collaborative process, by also having a direct influence on the institutional design/professional organisation and the variables of resource/knowledge/power asymmetries and incentives or constraints to participate, both part of the main variable starting conditions. Concerning the former, the institutional entrepreneur has a direct influence by facilitating, among other things, the setting of ground rules, contract formation, and the promotion of inclusiveness. Regarding the latter, influence is executed through actions, such as empowerment, ensuring equal influence and control and exploring mutual gains. In this way, the institutional entrepreneur also indirectly influences the collaborative process (arrows from actions and strategies to the two starting conditions and the institutional design/professional organisation).

Moreover, the type of facilitative leadership, interpreted as the type of institutional entrepreneur, required for effective collaboration, appears to depend on the specific situation, including factors such as conflict levels, trust, power distribution and stakeholder incentives. These factors are related to the starting conditions and the collaborative process. As such, the framework includes feedback arrows from the starting conditions and collaborative process back to the institutional entrepreneur.

The analysis of the concept of sustainable urban transformations reveals that they involve multi-dimensional and radical change processes that transform both the drivers of radical change and the sustainable urban structures. The drivers of radical change include governance and planning, lifestyle and consumption, and innovation and competitiveness. The sustainable urban structures include resource management and climate mitigation and adaptation, transport and accessibility, buildings, and the spatial environment and public space. To qualify as sustainable urban transformation, change must occur in at least one element of both dimensions. This conceptualisation supports the assessment of whether a sustainable urban transformation has taken place within the action arena through the collective efforts of all stakeholders (arrow from collaborative process to SUT), and also helps to determine the shared goal for institutional entrepreneurs and other actors in the collaborative process (arrows from SUT back to institutional entrepreneurs and collaborative process).

Finally, the entire framework is embedded within the action arena (inner dotted outline), representing a specific collaboration between stakeholders, including the institutional entrepreneur, aiming to achieve a sustainable urban transformation. This action arena is situated within the broader institutional context (outer dotted outline). This broader institutional context influences the action arena, and therefore the collaborative process, while the action arena also influences the broader institutional context (arrow between both). This broader institutional context is considered external, while the variables within the action arena are internal, both consisting of formal and informal institutions. Although this study mainly focuses on the informal institutions within the action arena, it also acknowledges the formal ones and the institutions outside of the action arena that might influence the collaborative process towards sustainable urban transformations.

Given the limited time of this research and the aim to answer the main research question as outlined in Paragraph 1.1, the case study analyses will place less emphasis on examining the first three variables of the starting conditions in Figure 19. This decision is based on the insight that institutional entrepreneurs cannot influence these variables, in contrast to the other two variables. Nevertheless, these variables are still included in the framework, as they directly influence the success of stakeholder collaborations, and therefore, indirectly influence the realisation of sustainable urban transformations. Furthermore, as argued in Paragraph 2.2.2, the decision was made to analyse two cases rather than more, allowing for a more in-depth analysis of a variety of variables within and across the two cases.

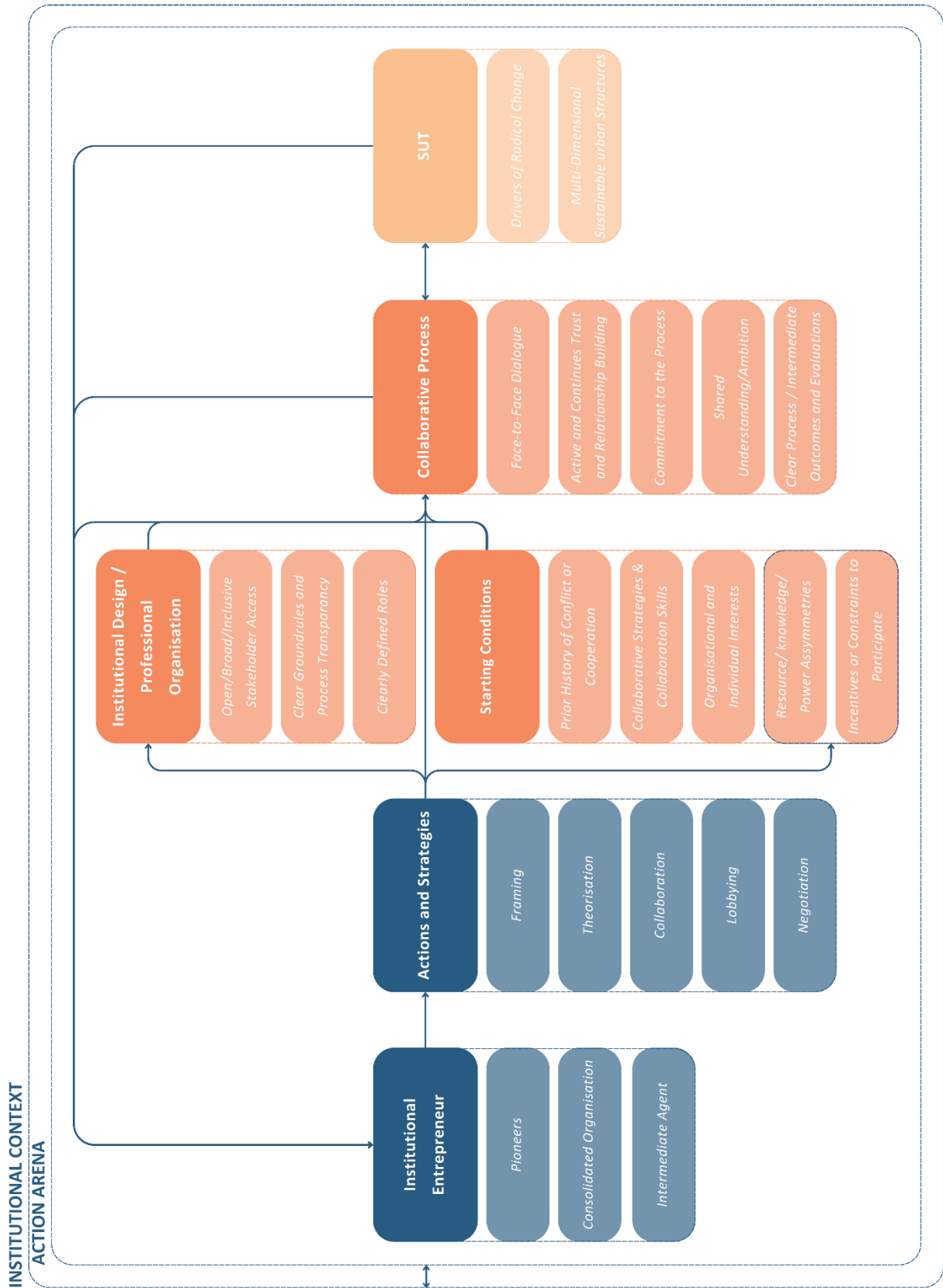


Figure 19. Conceptual Framework (Own figure).

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APPENDICES

Appendix 1 – Deductive and Inductive Codes

Group	Deductive Code	Description of Code	Example From Data
Institutional entrepreneur	Pioneers	Characterised by informally collaborating individuals with a hybrid nature that combines characteristics of both the market and civil society, primarily operating within the creative industry (Mens et al., 2021). Primarily act as developers, and as end-users (ibid.). Secondary roles include boundary spanner and niche-entrepreneur (ibid.).	t.b.d.
	Consolidated organisation	Emerges over time from the efforts of the pioneers, evolving into formalised, third-sector organisations (Mens et al., 2021). Acquired the necessary resources and evolved into a position of realising power (ibid.). Primarily act as developers, end-users, and to a lesser extent as builders (ibid.). Secondary roles include boundary spanner and niche-entrepreneur (ibid.).	t.b.d.
	Intermediate agent	Operates at a higher, area-wide scale level and collaborates both formally and informally with various stakeholders, functioning as an intermediate (Mens et al., 2021). Typically highly educated, with various professional backgrounds and experiences, categorised as third sector or hybrid actors (ibid.). Primarily act as facilitators, secondarily as boundary spanners and policy entrepreneurs (ibid.).	t.b.d.
Actions and Strategies	Framing	Presenting their (institutional entrepreneur) preferred institutional arrangements in a way that is appealing to the widest possible audience; framing their own vision (Klein Woolthuis et al., 2013)	t.b.d.
	Theorisation	Emphasising cause-and-effect relationships to validate their solution (Pacheco et al., 2010).	t.b.d.

	Collaboration	Cooperation and collective action (Klein Woolthuis et al., 2013), to align the interests of a variety of stakeholders by providing shared meanings or identities (Fligstein, 1997).	t.b.d.
	Lobbying	Using political power and tactics to advocate the visions and interests of the collective (Pacheco et al., 2010) or single institutional entrepreneurs (Levy and Scully, 2007).	t.b.d.
	Negotiation	Changing old business models and creating new ones to stimulate change (Klein Woolthuis et al., 2013).	t.b.d.
Institutional design/professional organisation	Open/broad/inclusive stakeholder access	Collaboration must be open and broadly inclusive (Andranovich, 1995; Burger et al., 2001; Chrislip and Larson, 1994; Gray, 1999; Gunton and Day, 2003; Lasker and Weiss, 2003; Margerum, 2002; Martin et al., 1999; Murdock et al., 2005; Plummer and Fitzgibbon, 2004; Power et al., 2000; Reilly, 1998, 2001). This broad inclusion must be actively sought, and therefore, proactive strategies to include less-represented and weaker stakeholders are often important (Weech-Maldonado and Merrill, 2000).	t.b.d.
	Clear ground rules and process transparency	For trust building but also to establish procedural legitimacy (Busenberg, 1999; Geoghegan and Renard, 2002; Glasbergen and Driessen, 2005; Gunton and Day, 2003; Imperial, 2005; Murdock et al., 2005; Rogers et al., 1993).	t.b.d.
	Clearly defined roles	To increase the effectiveness of the collaboration (Alexander et al., 1998).	t.b.d.
Starting Conditions	Prior history of conflict or cooperation	While a history of successful cooperation can build high levels of trust and social capital, creating a virtuous cycle of collaboration, a history of conflict can have the opposite effect, resulting in low levels of commitment,	t.b.d.

		manipulation and dishonest communications (Ansell and Gash, 2008).	
	Collaboration strategies and collaboration skills	Organisations should proactively consider how collaboration can support them in achieving their internal goals and explore what collaboration opportunities exist (collaboration strategies) (Common Eye, 2016). Furthermore, strong collaboration skills are important for effective collaboration (ibid.).	t.b.d.
	Organisational and individual interests	Discussing not only the collaborative interests from an early stage, but also the organisational and individual interests of the stakeholders involved (Common Eye, 2016).	t.b.d.
	Resource/knowledge/power asymmetries	If stakeholders lack the capacity, status, organisation, resources, expertise, skills, energy, time, or liberty to participate on an equal footing, the collaborative governance process will be vulnerable to manipulation by stronger stakeholders (Ansell and Gash, 2008; Gunton and Day, 2003; Lasker and Weiss, 2003; Merkhofer et al., 1997; Murdock et al., 2005; Warner, 2006; Yaffee and Wondolleck, 2003).	t.b.d.
	Incentives or constraints to participate	Incentives to participate are shaped by power and resource imbalances (Gunton and Day, 2003; Imperial, 2005), and stakeholder expectations, especially regarding the results of the collaborative process, in relation to the required time and energy (Bradford, 1998; Geoghegan and Renard, 2002; Rogers et al., 1993; Schneider et al., 2003; Warner, 2006).	t.b.d.
Collaborative Process	Face-to-face dialogue	To identify mutual gain opportunities (Ansell and Gash, 2008), to break down stereotypes and other barriers to identifying mutual gains (Bentrup, 2001), and to build a shared understanding,	t.b.d.

		trust, mutual respect, and a commitment to the process (Gilliam et al., 2002; Lasker and Weiss, 2003; Plummer and Fitzgibbon, 2004; Schneider et al., 2003; Tompkins and Adger, 2004; Warner, 2006). Furthermore, to discuss not only the collaborative interests but also the organisational and individual interests of the stakeholders involved (Common Eye, 2016).	
	Active and continuous trust and relationship building	collaborative leaders must build trust among their former opponent stakeholders before they are willing to take risks; the stakeholders, on the other hand, must assign sufficient time for effective trust building; it requires a long-term commitment from all involved stakeholders (Ansell and Gash, 2008).	t.b.d.
	Commitment to the process	Closely linked to the original motivation to participate; however, commitment to the process goes beyond initial intentions and requires a psychological shift, towards the belief that mutual gain thinking, is the best approach to achieving desirable outcomes (Ansell and Gash, 2008).	t.b.d.
	Shared understanding/ambition	Stakeholders have to develop a shared understanding of what they can collectively achieve (Tett et al., 2003), a process that can be seen as part of a larger “collaborative learning process” (Ansell and Gash, 2008).	t.b.d.
	Clear process/intermediate outcomes and evaluations	Collaboration is more likely to occur when the potential advantages and purposes of the collaborative process are relatively clear and concrete, and when small wins, in terms of critical process outcomes, are possible (Chrislip and Larson, 1994; Roussos and Fawcett, 2000; Warner, 2006; Weech-Maldonado and Merrill, 2000). Furthermore, a meaningful process should be	t.b.d.

		developed in the early stages of collaboration, including issues such as who makes the decisions, when to deliberate, how to monitor progress and quality, and how to achieve a good result (Common Eye, 2016).	
Sustainable Urban Transformations	Drivers of radical change	Processes that bring about change in urban contexts, include governance and planning, innovation and competitiveness, and lifestyle and consumption (McCormick et al., 2013).	t.b.d.
	Multi-dimensional sustainable structures	The domains shaped by sustainable urban transformations. Including resource management and climate mitigation and adaptation, transport and accessibility, buildings, and the spatial environment and public space (McCormick et al., 2013).	t.b.d.

Figure 20. Overview Deductive Codes (Own figure).

Group	Inductive Code	Description of Code	Example From Data
t.b.d.	t.b.d.	t.b.d.	t.b.d.
t.b.d.	t.b.d.	t.b.d.	t.b.d.

Figure 21. Overview Inductive Codes (Own figure).

Appendix 2 – Research Plan

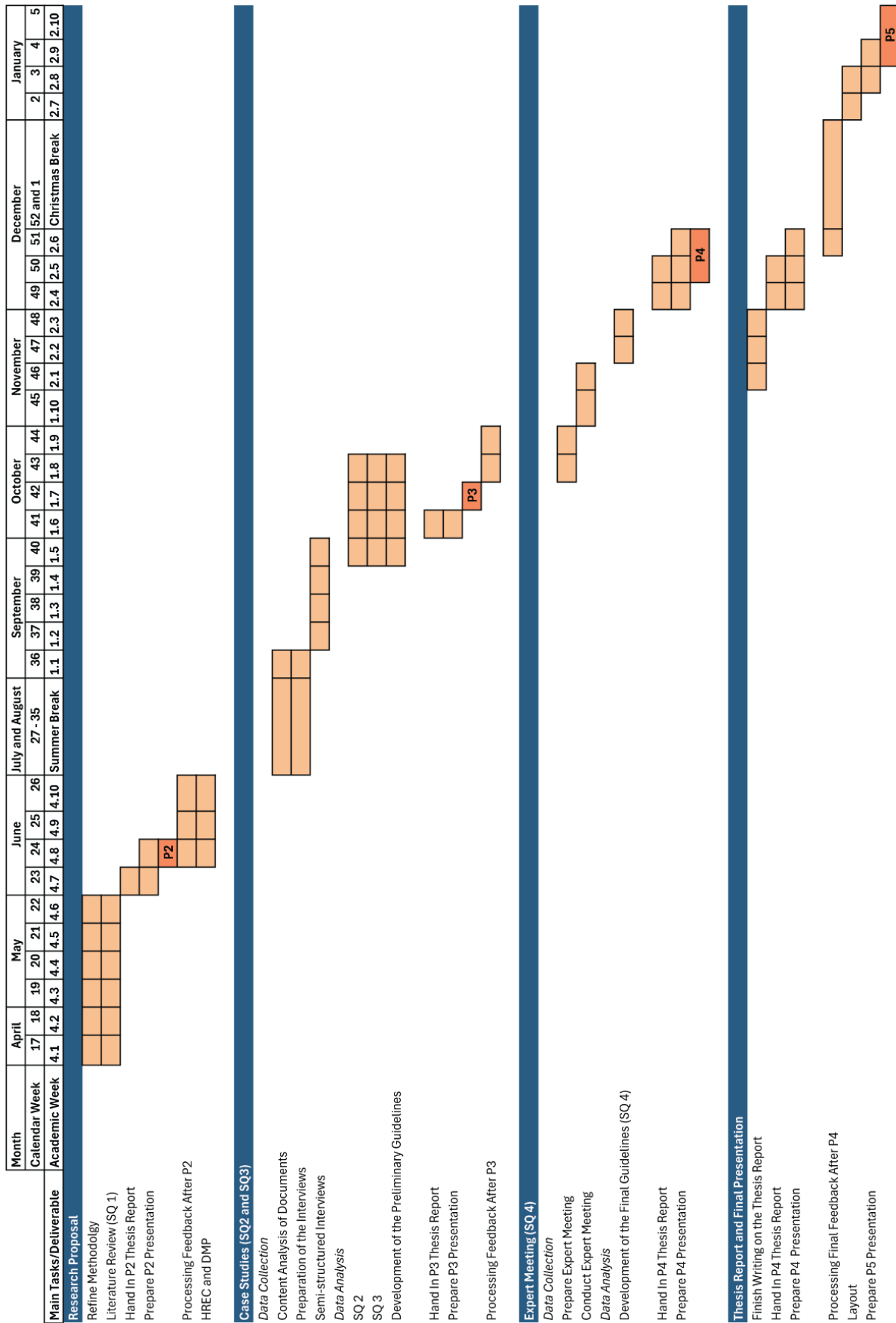


Figure 22. Research Plan (Own figure).

Appendix 3 – Potential Cases

This Appendix consists of three potential cases for the empirical research, which have been discussed with the organisation mentor. These should be seen as examples, as after the P2 in consultation with the supervisors and organisation mentor, this list and other options will be discussed to ultimately decide on the two most appropriate cases for this study. The descriptions of the three cases below are based on project-related information retrieved from the project reports and websites. Therefore, direct quotations have been used.

A. Energy Hubs

“Grid congestion is rapidly becoming one of the largest obstacles in the transition to a net-zero economy. For industries and municipalities, it creates significant challenges in balancing energy demand and supply, delaying developments in renewable energy adoption.” (Haskoning, 2024b)

Energy Hubs: Decentralised Energy Systems

“Energy hubs are smart, decentralised systems that combine renewable energy production, energy storage, and peak-shaving to optimise the flow of electricity within a particular region. These smart hubs are both a technical solution and a framework for stakeholders – industries, municipalities and energy providers to collaborate and effectively balance energy supply and demand. These hubs are capable of reducing peak loads on the grid, particularly in industrial areas and high-demand locations.” (Haskoning, 2024b)

“There are four main types of hubs: (1) Energy hubs on industrial estates: Designed for industrial zones with significant energy consumption and renewable energy generation; (2) Energy hubs for large-scale energy users: Focused on balancing the energy needs of individual large-scale energy-intensive businesses, such as factories or data centre; (3) Energy hubs in the built environment: Engineered for urban areas, these hubs help manage the energy demand of residential and commercial buildings; (4) Energy hubs for sustainable mobility: Geared towards supporting electric vehicle charging infrastructure and other mobility solutions.” (Haskoning, 2024b) “Significant differences between the types of hubs can be found in the organisation, governance, and legal safeguarding of the Energy Hubs, and consequently in the processes of their development and operation.” (Haskoning, 2024a)

Collaboration in Complex Systems

“The successful implementation of energy hubs requires close collaboration between industries, grid operators, and governments. In many cases, it also involves navigating complex energy data and regulatory challenges, particularly when multiple stakeholders collaborate on a common goal. Establishing an energy hub demands a great deal from participating companies, grid operators and governments, due to the high level of complexity involved.” (Haskoning, 2024b)

The Future of Energy Hubs

“The development of an energy hub is a multifaceted process that requires the careful integration of technology, organisation, legislation and project realisation. This complexity requires a process filled with innovation, problem-solving and trust. For industries and municipalities alike, the first step involves exploring the potential of energy hubs to meet their unique needs.” (Haskoning, 2024b)

Leading the Way in Energy Hub Solutions

“At Haskoning, we are at the forefront of Energy Hub implementation, having played a pivotal role in their successful deployment in the Netherlands. This includes identifying the essential technical and organisational building blocks needed for various Energy Hub types, and developing a tool to quantify and track societal benefits, including peak load reduction and carbon reduction, at the regional and national levels. Energy Hub services include: (1) Insights into Energy Hub potential and feasibility at national and regional levels; (2) Energy system modelling and analysis; (3) Technical design of Energy hubs at plant, industrial park or regional level; (4) Grid congestion and carbon reduction impact

analyses; (5) Finance, organisational, governance and legal advisory; (6) System integration, conversion to heat, hydrogen and seasonal storage (7) Permitting and consents; (8) Project and process management (9) Programme management” (Haskoning, n.d.-b)

Energy Hubs in North-Holland (21 Cases)

The province of North Holland has launched the Energy Hub Incentive Programme to create space for new sustainable initiatives that make more efficient use of grid capacity (Provincie Noord-Holland, 2025). “The programme supports the accelerated development of local energy hubs by disseminating available knowledge, helping to reduce the number of bottlenecks in the local electricity grid. The province supports 21 energy hubs in North Holland to make their realisation easier for the initiators. These initiators are entrepreneurs collaborating to tackle energy-related challenges, such as grid congestion” (ibid.)

“To manage the programme through mid-2025, the province has hired Ron de Graaf (programme manager) and Ester de Graaff (both from Haskoning). Hub coordinators play a central role in the programme. A hub coordinator is an expert in establishing energy hubs or possesses the experience, skills, and knowledge to quickly grow into the role. They connect various parties, such as business collectives aiming to establish an energy hub, municipalities, grid operators, and the province. The hub coordinator identifies what knowledge is needed at which moment and meets this need either by providing their expertise or, in some cases, by outsourcing the questions to a specialised party.” (Haskoning, 2025)



Figure 23. Smart Energy Hub at Business Park “De Mars”, Zutphen, The Netherlands (Haskoning, n.d.-b).

B. De Caai Eindhoven

“De Caai is the 3.5-hectare site of the former ‘Campina dairy factory’ located on Kanaaldijk-Zuid in Eindhoven. Since 2017, it has been undergoing a transformation into a sustainable urban district with 700 homes and nearly 18.000 m² of commercial facilities. Living, working, and leisure come together; high- and low-rise buildings are integrated with the characteristic historical structures, preserving municipal monuments and industrial heritage. In this way, BPD maintains the historical significance of the site: the authentic DNA of the cooperative wrapped in the modern style of a community. Haskoning was and continues to be fully responsible for realising the complete, future-proof civil engineering foundation for the vibrant new residential environment.” (Haskoning, n.d.-a)

“De Caai will become a sustainable, healthy, and inclusive community. This means conscious living and actively working towards a more sustainable and healthier lifestyle in all aspects, from food and drinks to heating and mobility. De Caai also brings together innovative entrepreneurs and residents. It is a place in Eindhoven where we are building an inclusive and healthy vision for the future, with respect for the history of the former Campina site.” (De Caai, n.d.)

“The support provided by Haskoning’s multidisciplinary team ranged from the technical design of above and underground infrastructure to the sewer system design, and from developing the landscape plan to conducting soil research and drafting the mobility plan. Haskoning was part of the design team that developed solutions for sustainable energy generation, such as thermal energy storage in the ground and the adjacent Eindhoven Canal. We translated abstract ambitions into concrete solutions, for example, in collaboration with the landscape architect: the water system was designed in such a way that the vegetation on the site receives everything it needs. In this way, we continuously sought collaboration with the other involved parties to ensure an optimal transformation.” (Haskoning, n.d.-a)

“Sustainability is addressed in part through the redevelopment of five existing buildings, thereby preserving heritage. De Caai is becoming a vibrant new urban district where themes such as climate adaptation and the energy transition are an integral part of the development.” (Haskoning, n.d.-a)
“Furthermore, there are also plans to transform one of the buildings into an urban farm with a food market: a place where locally grown products can be purchased and consumed. Additionally, there are plans for a restaurant that prepares meals using its own products.” (BPD, n.d.)

“Moreover, the area will be almost fully car-free and will not have sidewalks or streets, but rather shared spaces for pedestrians, cyclists, and other road users. Parking will be as much as possible at the edges of the area and within the existing buildings. The planners anticipate a decline in car ownership: parking spaces can easily be repurposed for other functions. For instance, the area will feature a lot of greenery, which creates favourable living conditions for plants and animals, improves water retention, and helps mitigate urban heat.” (BPD, n.d.) Hereby, much of the green space will eventually be owned by homeowners (Haskoning, n.d.-a).

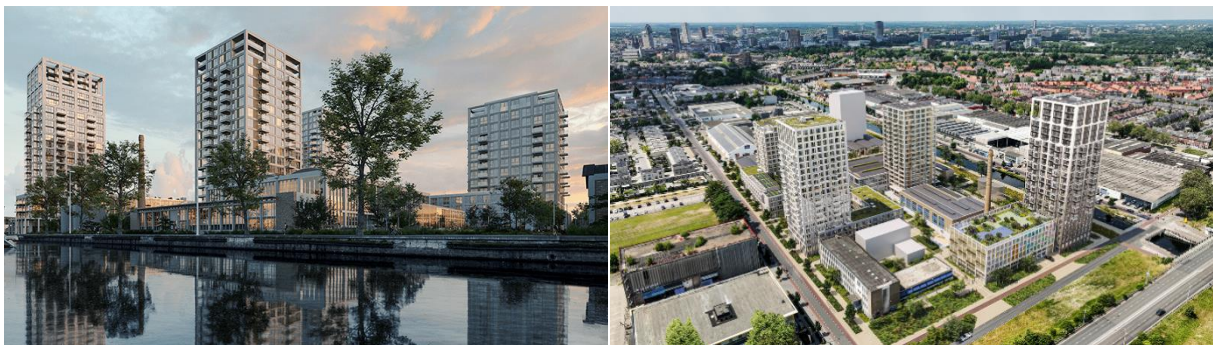


Figure 24. De Caai (Haskoning, n.d.-a).

C. EnergieRijk Den Haag

“EnergieRijk Den Haag (ERDH) is a collaboration between the national government, the Province of South Holland, the Municipality of The Hague, and various (semi-)public and private partners, aimed at the complete sustainability transformation of the most important government buildings in the city center of The Hague.” (ERDH, n.d.)

Central Area and World Forum Area

“ERDH was initiated based on the insight that sustainable installation and energy concepts can be implemented more intelligently when they transcend individual buildings, rather than following the

usual 'building-by-building approach'. This requires collaboration and coordination between different parties/owners within an area, which is no easy task. ERDH's higher goal is to share knowledge about the 'what and how' by being an inspiring and replicable example for others." (ERDH, n.d.)

"In the first program period, ERDH focused on real estate in the city center of The Hague. As of 2024, the World Forum area has been added to this. The partners in ERDH also hold significant real estate positions in this area, which offer opportunities for an area-based approach. In addition, both areas have been designated by Stedin as grid congestion areas, which increases the urgency to accelerate the energy transition in these locations." (ERDH, n.d.)

Area-Based Approach

"The area-based approach of EnergieRijk Den Haag unfolds along three lines, referred to as the "Trias Territoria." First, buildings must use less energy. This can be achieved through measures such as improving the building envelope (insulation), applying smart building technologies, and influencing user behavior. The second line of the Trias focuses on making optimal use of local opportunities; for example, by connecting thermal energy sources in smart aquifer thermal energy storage (ATES) networks. What cannot be saved or generated locally is, through the third line of the Trias, purchased "at scale." This involves renewable energy from additional sources, with a preference for local sources." (ERDH, n.d.)

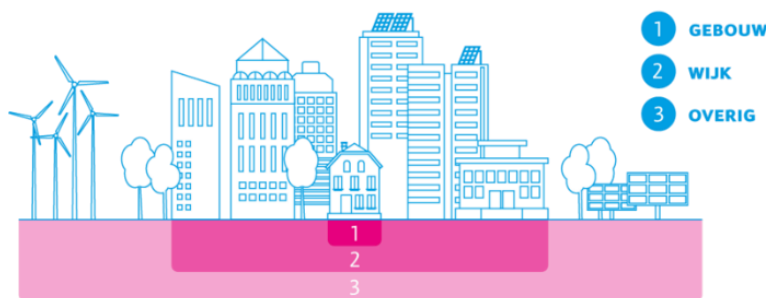


Figure 25. Trias Territoria (ERDH, n.d.).

Thermal Energy Storage (ATES)

"An important prerequisite for the area-based development of Aquifer Thermal Energy Storage (ATES) solutions is a shared understanding among stakeholders. This insight acknowledges the various interests that naturally play a role in such initiatives. A business case supports its financial feasibility. However, the value created (learning, collaboration, serving as a role model, and achieving true sustainability) also proves to be a key driver for these kinds of innovative projects." (ERDH, 2023)

Sustainable Heat

"District heating networks are essential to achieving the ambitions of the energy transition. However, these networks themselves also need to become more sustainable. This requires effort on two fronts: on the one hand, reducing the use of (high-temperature) heat on the building side, and on the other, supplying the district heating network with increasingly sustainable heat sources. To make progress, ERDH, together with heat supplier Eneco, explored whether a lower supply temperature would be sufficient for buildings connected to the district heating network. Based on the initial tests, a deeper collaboration between ERDH and Eneco was explored and developed. Concrete agreements were laid down in a covenant signed on October 24, 2023, by multiple officials, including the Minister for Energy and Climate and the CEO of Eneco. Concrete steps toward sustainability can only be taken through the integration of building management and energy supply." (ERDH, 2023)

Innovation

"ERDH is about innovation, which is why there is a dedicated Innovation theme that provides important impulses to the program. Innovation involves both new forms of collaboration and innovative technical

solutions. An example of innovation in collaboration is the innovative governance model developed with the governing partners. This structure enables decision-making by, between, and within organizations. We developed a management model through which the partners, based on their natural positions within the distribution of roles across government levels, became ‘owners’ of part of the task—and together, we became joint owners of the whole. For more technical innovations, we use an innovation funnel divided into four phases: exploring innovations, encouraging innovations, and scaling them up both within and beyond EnergieRijk Den Haag.” (ERDH, 2023)

“More than 20 innovations have been explored, such as a self-learning biodigester, a green facade, and urban wind turbines.” (ERDH, 2023) Several innovations have been implemented within EnergieRijk Den Haag, including the City Battery and thermal PV panels (ibid.).

Procurement

“Market parties are willing to come up with innovative propositions, but the scale of demand needs to be large enough. By presenting ourselves as the ERDH bloc during the development of one of the wind farms at Maasvlakte II, we were able to both contribute to the park’s development and secure 85,000 MWh of additional, sustainable, and local electricity for ERDH buildings”. (ERDH, 2023)

Knowledge Sharing

“Accelerating by sharing, using acquired knowledge and experience to inspire similar initiatives elsewhere. We bring this to life through a series of practical guides, the development of a training program on area-based working, and practice-oriented scientific publications. We have published guides on topics such as Alliance Formation, Building Transition Pathways, Temperature Reduction Testing, Wind Turbine Innovation, City Battery Innovation, Trias Territoria, and Thermal and Circular PV. Several of these guides are also used in the training program Area-Based Collaboration in the Energy Transition, which we developed. This program is intended for owners and managers of (social) real estate in the Netherlands and is now being offered by the Netherlands Enterprise Agency (RVO) on behalf of the Ministry of the Interior and Kingdom Relations (BZK). We also actively collaborate with higher education institutions, as this is where the professionals of the future are being trained.” (ERDH, 2023)