

COLLABORATIVE GOVERNANCE, WHAT DRIVES IT AND WHAT MAKES IT WORK?

A CASE STUDY ANALYSIS ON TRANSFORMING FIELDLABS IN THE NETHERLANDS

Author

Anne Geertje Bouman

Student number

577413

Date

August 4, 2021

Word count

20000

Supervisor

Dr. L.T. Van den Dool

Second reader

Dr. M.J. Nederhand

Study programme

MSc Public Administration
Urban Governance

Institution

Erasmus University
Rotterdam

Institute for Housing and
Urban Development
Studies



TABLE 1: DIMENSION 1	34
TABLE 2: DIMENSION 2	35
TABLE 3: DIMENSION 3	36
TABLE 4: DIMENSION 4	37
TABLE 5: DIMENSION 5	38
TABLE 6: DIMENSION 6	39
TABLE 7: DIMENSION 7	40
TABLE 8: DIMENSION 8	41
TABLE 9: DIMENSION 9	41
TABLE 10: DIMENSION 10	42
TABLE 11: DIMENSION 11	43
TABLE 12: DIMENSION 12	44
TABLE 13: DIMENSION 13	44
TABLE 14: DIMENSION 14	45
TABLE 15: RESULTS STARTING CONDITIONS	56
TABLE 16: RESULTS DRIVERS	58
TABLE 17: RESULTS ELEMENTS	60

FIGURE 1: PLANNING TRANSITIONS NEIGHBOURHOOD (EIB, 2021)	7
FIGURE 2: PHASE MODEL (TEISMAN, 2000)	14
FIGURE 3: STREAM MODEL (TEISMAN, 2000)	15
FIGURE 4: ROUNDS MODEL (TEISMAN, 2000)	16
FIGURE 5: SIMPLIFICATION RESEARCH (SOURCE: RESEARCHER)	27
FIGURE 6: GARYP	33
FIGURE 7: VAN DER PEKBUURT	46
FIGURE 8: COMPLETE CONCEPTUAL MODEL AS RESULT FROM RESEARCH	67

ABSTRACT	5
1 INTRODUCTION	6
1.1 Background	6
1.2 Problem statement	8
1.3 Research relevance	10
1.4 Structure of the thesis	11
2 LITERATURE REVIEW	12
2.1 National Agreements to tackle climate change	12
2.2. Governance	12
2.3 Decision-making	13
2.4 Collaborative governance	17
2.5 Operationalization	25
2.6 Connecting the concepts	27
3 METHODOLOGY	29
3.1 Research design and methods	29
3.2 Data analysis	31
3.6 Reliability and Validity	31
3.7 Challenges and limitations	32
4 RESULTS	33
4.1 Case 1 Garyp	33
4.2 Case 2 Van der Pekbuurt	46
4.3 Major results	56
5 CONCLUSION	63
5.1 Starting conditions	63
5.2 Drivers	64
5.3 The elements of collaborative governance	65
5.4 Interrelatedness of the concepts	67
5.5 Main question	69
6 DISCUSSION	70
6.1 Recommendations for collaborative governance processes	70
6.2 Reliability, validity and limitations	71
6.3 Reflection	72
BIBLIOGRAPHY	75

APPENDIX	80
Appendix 1: Indicator table	80
Appendix 2: Analysed documents	84
Appendix 3: List of respondents	86
Appendix 4: Topic list	87
Appendix 5: Recognition words for coding	90
Appendix 6 Abstract Dutch Translation	96

Abstract¹

This research contains an in-depth research on collaborative governance processes in the transformation of neighbourhoods to gas-free districts. The national government introduced several fieldlabs in 2018 to experiment with both the technical aspects and social aspects. After three years of fieldlabs, this process showed itself as difficult because of technical dispute and governance issues. Collaborative governance is about bringing multiple stakeholders together and engage them in decision-making. The framework of collaborative governance used in this research is based on the framework of Ansell and Gash (2007) and Emerson et al. (2011) and investigates the importance of the starting conditions, drivers and elements of this form of governance. The research is conducted through a qualitative research method with two case studies: Garyp and Van der Pekbuurt, The Netherlands. The results show that good collaboration experiences in the past contribute to an easier course of the process, because a level of trust was already established. Also, to get all stakeholders on board in the process a balance between knowledge and power, especially between the professional and non-professional stakeholders is important. It is the role of the professional stakeholders to inform the involved residents. A clear institutional design has the strongest positive influence on collaborative governance processes. Clear rules and role definitions result in stakeholders know what is expected from them within the complex process. Next to this, transparency contributes to better insight in each other's' interest, ambitions and way of doing (mutual understanding). Within the collaborative governance process, this research found a relationship between mutual understanding, trust and commitment to the process. These elements are experienced as important for successful outcomes in the transformation of fieldlabs.

To implement collaborative governance, it is important to understand the context and identity of the case you are working in, also understand how complex this issue is and to reduce uncertainty a clear institutional design is necessary. Nevertheless, even though the complex is this complex, don't forget to make the process human and accessible for everyone involved.

Keywords: *collaborative governance process, starting conditions, drivers, complexity, fieldlab, stakeholder involvement, urban governance*

¹ A Dutch translation of the abstract is available in appendix 6

1 Introduction

1.1 Background

Global warming and the emission of CO₂ affects us all. The Paris Agreement of 2015, a global legal binding agreement to limit global warming, is a long-term strategy that provides direction for future development and limit global warming to 1.5 degrees Celsius. The countries that committed themselves to this agreement provide their own national strategies in line with this agreement (Paris Agreement, 2015). The Dutch government established 'Het Klimaatakkoord' (Dutch Climate Agreement). With this agreement the goal of the government is to reduce greenhouse gases with 49% in 2030 compared to 1990. A characteristic of this agreement is that for a large part of the implementation in the built environment, the municipalities are responsible. Residents, companies and governments all have their role in this strategy.

Since 2018, new buildings are no longer connected to the existing gas network. In the same year the intergovernmental organisation 'Programma Aardgasvrije Wijken' (PAW) is initiated. Together with the Ministry of the Interior and Kingdom Relations, the Ministry of Economic Affairs and Climate Policy, the Interprovincial Consultation (IPO), the Association of Waterboards (UWV) and the Association of Dutch Municipalities (VNG) they try involving municipalities in this quest to gas-neutral neighbourhood. PAW designated several neighbourhoods as fieldlabs to learn and understand how existing neighbourhoods can be disconnected from the gas infrastructure network. One of the key elements is the involvement and participation of stakeholders to support this strategy (PAW, n.d.). This is a relatively new approach, which makes decision-making more complex since it is unclear who is in charge (Bryson and Crosby, 1992 in Teisman and Van Buuren, 2013).

The participatory actors receive public funding to stimulate this transition – a progressive plan. However, after three years of fieldlabs the results are not significant. Issues around technical problems, support, expenses and collaboration occur. Both the municipality and the central government continue steadily, with subsidies of 435 million euros. The ambition is that in 2027 fifty-thousand households are disconnected from the natural gas (Van den Berg, 2021; EIB,

2021). This comes to disconnecting circa five-thousand houses a year. After three years of experimenting, the Netherlands is not even close of fulfilling this ambition (figure 1).

Field lab	Technical solution	Project size	Delivered according planning	Delivered in reality
Proeftuin	Techniek	Project omvang volgens aanvraag	Beoogd aantal aardgasvrije woningen dat thans volgens planning zou zijn opgeleverd	Opgeleverde aardgasvrije woningen ¹
Amsterdam	Warmtenet	2.495	*	38
Pekela	Groen gas	603	0	0
Tilburg	n.t.b.	2.140	280	0
Zoetermeer	WKO	1.117	*	0
Tytsjerksteradiel	All-electric	603	110-140	+/- 57
Den Haag	Warmtenet	848	848	0
Utrecht	n.t.b.	8.046	472	0
Oldambt	Groen gas	1.202	0	0
Drimmelen	Warmtenet	334	334	0
Eindhoven	Warmtenet	926	526	0
Purmerend	Warmtenet	1.276	629	411 ²
Assen	All-electric	428	216	28 ³
Groningen	Warmtenet	1.000	*	0

* In de aanvragen van deze proeftuinen is geen planning in aantal woningen gemaakt. De geplande projectduur van deze proeftuinen is nog niet verstreken.
¹ In enkele projecten zijn kleine aantallen woningen buiten de afbakening van de proeftuin opgeleverd zoals bijvoorbeeld in Groningen
² 323 van deze woningen waren al aangesloten op een warmtenet en zijn alleen van het kookgas afgehaald
³ Hierbij gaat het om de afronding van een project met 28 woningen dat al voor de start van de proeftuin is begonnen

Figure 1: Planning transitions neighbourhood (EIB, 2021)

Ambitious, urgent matters, real challenges, many actors and interdependencies are classic characteristics for complex issues. Scholars in public administration agree that decision-making became more complex due to these matters (Bryson & Crosby, 1992; Kickers et al., 1997 in Teisman, 2000). Yet, we have to make decisions to take steps forward and achieve our ambitions. Therefore, decision-making is an important feature of policy implementation: *“Decision-making is a sequence of steps which, if followed, should lead to the best solution; that is, to action which optimises the decision maker’s utility”* (Bulter, 1991, pp. 43 in Teisman,

2000). Ideas on how decisions should be made differ greatly over time. Scholars have different ideas on how to analyse complex decision-making processes and the role of stakeholders in these processes. Teisman (2000) has compared several models for complex decision-making and each model has its own on decision-making analysis. Where decision-making used to go from one phase to another, scholars nowadays conclude that decision-making is more complex with more actors and more interrelations (Teisman, 2000; Teisman and Van Buuren, 2013; Kingdon, 2013). Ansell and Gash (2007) stress the importance of the coordination between government bodies and other stakeholders as well. Collaborative governance can facilitate this complex research issue (Emerson et al., 2011).

1.2 Problem statement

1.2.1 Goal of the research

Agreements on (inter)national levels are ambitious and important concerning our current climate crisis. Yet, these agreements impose strategies which not only involves decision-makers but concerns all of us. To achieve the goals set in these agreements, the implementation and transition need to be done on lower scale levels where different stakeholders have interest at stake. The transition to gas-free neighbourhoods is a clear example of where the strategy is made on a higher level, but the implementation and operationalization of this strategy is carried out on a local level. Unfortunately, this transition evolves slowly. Fieldlabs show difficulties around support, technical disputes, expenses, but also the collaboration between different governmental levels and non-state stakeholders. At this pace, it will be difficult to achieve the national and international objectives. Nonetheless, some municipalities have greater success and are able to transform their neighbourhoods with the involvement of all stakeholders to gas-neutral neighbourhoods. The concept of collaborative governance aims at this inclusive decision-making with all stakeholders involved (Ansell and Gash, 2007; Emerson et al., 2011).

Scholars often discuss the role of stakeholders in decision-making. Especially when the idea of governance was introduced. A relatively new concept in decision-making is collaborative governance. There is a need to understand the interactions between the elements which drive decision-making and also how these elements within collaborative decision-making interact (Ansell and Gash, 2007). What elements are important and how can this contribute to a more

significant outcome of policy implementation? In light of the topic of the transition to gas-free neighbourhoods: Why are some municipalities successful in the decision-making process to gas-free neighbourhoods? Which conditions were necessary to start the process and what drives a successful process? Also, which elements are important for successful outcomes?

Therefore, the goal of this research is:

- a) to understand what context allows collaborative governance to happen;
- b) to understand which drivers positively influence the collaborative governance process;
- c) which elements of the collaborative governance process are important for successful outcomes;
- d) The interrelatedness between these elements.

This research focuses on the transformation of existing neighbourhoods to gas-free neighbourhoods, because three years of experimenting showed that this is more difficult to achieve than one expected.

1.2.2 Research question

In light of the goal of this research to strengthen the scientific knowledge around collaborative governance and the pressing issues around the transformation of neighbourhoods, the following research question is introduced:

Which starting conditions and drivers express themselves as important for collaborative governance to happen, and which elements within this process contributes to successful outcomes in the transformation to gas-free neighbourhoods in the Netherlands?

To get to the essence of this question, the following sub-questions are established:

- 1) Which starting conditions are present when initiating collaborative governance processes for the transformation to gas-free neighbourhoods?**

This research question is relevant in order to understand what conditions set the basis for the collaboration (Ansell and Gash, 2007). Which starting conditions were present in a certain way that the fieldlabs for the transformation to gas-free neighbourhoods are successful.

2) Which drivers positively influenced the collaborative governance process?

Drivers for collaborative governance set the direction of the process (Emerson et al., 2011). As introduced in the PAW for the progress of the fieldlabs, support by all stakeholders is very important and therefore the collaborative process need to be initiated.

3) Which elements of collaborative processes contributes to successful outcomes?

Case study research can be used to understand the elements of collaborative governance process. There is a need in understanding the aspects of the collaboration process (Ansell and Gash, 2007). Therefore, this research question is useful to understand the elements of the process which contribute to a successful outcome in the transformation to gas-free neighbourhoods in the fieldlabs.

4) How do the elements within collaborative governance relate to each other for the transformation to gas-neutral neighbourhoods?

The issue of the transformation is new and complex. The goal of PAW is to learn from the lessons established by these fieldlabs (PAW, n.d.). With insight in collaborative governance and how the elements interrelate, lessons can be taken for future processes. Besides this, there is a need to understand the interrelatedness between these elements for academic relevance (Ansell and Gash, 2007; Emerson et al., 2011).

1.3 Research relevance

The relevance of this research manifests itself in social and scientific relevance. With the growing urgency of climate change it is very important to achieve the climate objectives. The transition to gas-free neighbourhood brings us one step closer to achieving this objective. As this process expresses itself as difficult, developing greater insight in successful collaborative processes can help to understand which elements needs to be strengthened.

The academic relevance of this research is to strengthen the knowledge around collaborative governance. Currently, there are multiple variations of the perspectives on collaborative governance, which vary in scale. There is additional research necessary to understand and examine the interrelatedness between the different variables of collaborative governance (starting conditions, drivers and elements), both within the process and what drives the

initiative of collaborative governance (Ansell and Gash, 2007; Emerson et al., 2011). Also, research around collaborative governance is trending, it would benefit to apply frameworks on cases of collaborative governance and hereby examine those interrelationships (Emerson et al., 2011).

1.4 Structure of the thesis

The follow chapter introduced the theoretical framework. Chapter 3 is the methodology chapter: information on how this research is conducted is presented in this chapter. In chapter 4 are the results and analysis of this research. In chapter 5 is the conclusion of this research. The 6th and final chapter focus on suggestions for further research and recommendations on how to implement collaborative governance in practice.

2 Literature review

2.1 National Agreements to tackle climate change

2.1.1 *Klimaatakkoord (Dutch Climate Agreement)*

The goal of this agreement is to reduce the emission of greenhouse gases with 49% in the year 2030 in comparison to 1990. The Dutch Climate Agreement made objectives around five themes: for this research the built environment (C1 Gebouwde omgeving) is most relevant. The Ministry of the Interior and Kingdom Relations (BZK) is in charge of the implementation of the ambitions for the built environment. The vision for 2050 is to transform 7 million houses and 1 million buildings. The strategy further entails to isolate houses, disconnect them from natural gas and implement the use of green energy. Stakeholders in this strategy are not only governments, but also inhabitants, owners and utility companies.

2.1.2 *Programma Aardgasvrije wijken (PAW)*

In 2018 a learning program was started to begin the transformation to gas-free neighbourhoods: 'Proeftuin Aardgasvrije Wijken'. This innovative program is initiated to learn and experiment around the objective to disconnect all houses from natural gas by 2050. In 2018, 27 neighbourhoods were designated as fieldlabs to start and learn within this transition. After two years of learning and experimenting, only four municipalities (Amsterdam, Tytsjerksteradiel, Purmerend, Assen) already disconnected one or multiple houses from the gas-network (EIB, 2021; Van den Berg, 2021).

The following section will introduce the different theoretical concepts which will be addressed during this research.

2.2. Governance

As introduced, the way of decision-making for the transformation of the neighbourhood is in a collective matter, not top-down implementation but horizontal decision-making with all stakeholders involved. This way of governing can be seen as governance and, in turn, can be seen as a form of governing where both public and private stakeholders make policies and provide public services. This definition both involves a traditional structure of the government and invites other bodies in decision-making (Lynn et al., 2001 in Ansell and Gash, 2007). A more general definition of governance emphasizes the role of collective decision-making

instead of on organization or individual making the decision (Stoker, 2004 in Ansell and Gash, 2007). The common idea on governance is the absence of a strong traditional government.

In the research of Klijn (2008) many governance definitions were brought together. The two elements all definitions had in common were:

- governance focusses more on limiting the governmental power and reduce the focus of the structure of government,
- there is more emphasis on the process of governing.

This process of governing is based upon interdependencies and interactions between the involved actors, which also makes it a complex issue (Teisman, 2000). What can be distilled from this, is that the role of governments is changing. Decision-making cannot be done by one individual organization. Instead, the complexity in our society is increasing and therefore the involvement of actors is complex, but inevitable (Klijn, 2008).

In this research I relate to governance as governing with the involvement of the public-, private actors and civil society for collective decision-making. This is relevant because collaborative governance focusses on the transformation of the neighbourhoods where different stakeholders (public, private and civil actors) are involved.

2.3 Decision-making

Understanding decision-making is one of the main themes in public administration. Mintzberg et al. (1976) indicates that a decision is a commitment to actions and the process of decision-making is a set of actions to reach this commitment. New insights around decision-making and the development of policy garnered different views on the definition of decision-making. *“Decision-making is an ongoing process that is not clearly demarcated by decisions (...) decisions are neither the starting nor the finishing points of a decision-making process”* (Van Buuren and Gerrits, 2008, p. 382). The decision-making process which is evaluated in this research concerns collective decision-making where all stakeholders are involved (Stoker, 1998 in Ansell and Gash, 2007). The following section illustrates how complex decision-making can be analysed and indicates important elements for the societal issue discussed in this research.

2.3.1 The phase model

The *phase model* is a well-known model when it comes to analysing decision-making. Mintzberg et al. (1976) illustrates that decision processes are complex and dynamic. The *phase model* framework is oriented around three phases: identification, development and selection. Altman and Petkus (1994) continue on this framework and indicate four stages: the problem definition, the policy formulation, the policy adoption and they add the evaluation stage. Evaluation is important because it allows learning within a process. This is also stressed by Teisman (2000). This *phase model* focusses on the different stages in a process of decision-making from defining the problem to choosing and implementing the right solutions. The different phases indicated in this model are the policy formation, the policy adoption and the implementation phase. Also, the effects of the decision are evaluated, which can be seen as a phase as well.

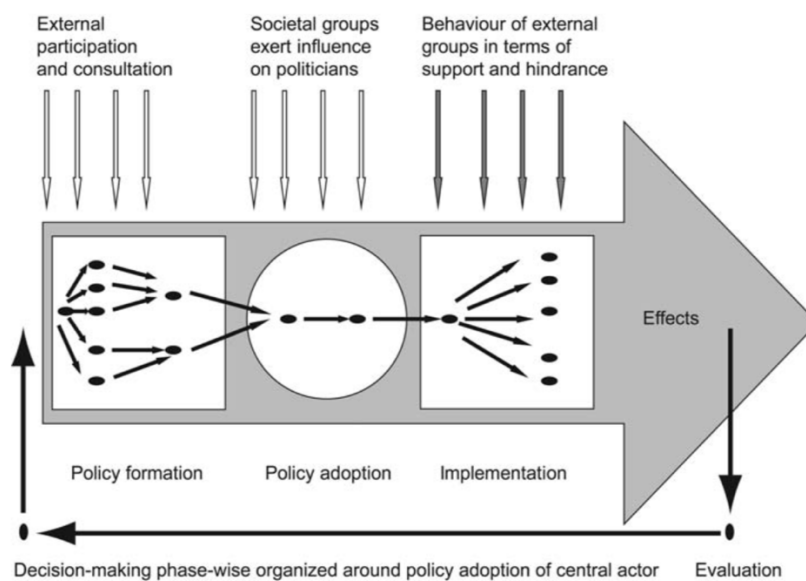


Figure 2: Phase model (Teisman, 2000)

The deficiency of this model is that it does not fully reflect the reality. Serious problems arise when this model is used when no one is in charge (Bryson and Crosby, 1992 in Teisman and van Buuren, 2013). Also, another problem with the model of Mintzeberg at al., as presented earlier, is the missing interrelatedness between decision and the missing relation between decision process and the structure of the decision process.

2.3.2 The stream model

Compared to the *phase model*, the *stream model* does emphasize on the connection between the different streams. A predecessor of the *stream model* is the *garbage can model* of Cohen et al. (1972). Similar to the *stream model*, this model has a stream with problem, solutions and participants, but it also has a separate stream for choices – which is not present in the stream model. This stream are fixed moments in time that the organization is expected to make a decision. The attention for this interaction is actually limited in the *garbage can model*. Therefore, Kingdom (2013) indicates that each active participant in the public policy process can be involved in each of the stream: the problem recognition, the policy generation and politics. The participants will specialize themselves in one of these streams and these streams run independently through an organization. The problem recognition stream draws our attention to why certain issues occupy the officials attention, compared to other issues. This model shows both the horizontal as the vertical activities in the decision-making process. The streams are largely independent of one another. Therefore, politicians can decide by themselves which issue they want to address, they have their rules and way of behaviour (Teisman and van Buuren, 2013). The decision-making process connections the different streams (Teisman, 2000).

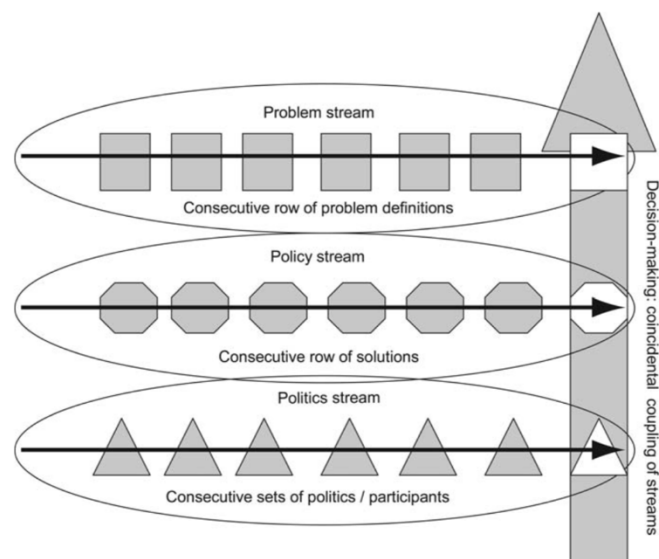


Figure 3: Stream model (Teisman, 2000)

These streams connect when a policy window appears. After this moment, a major policy change is likely to occur (Kingdon, 2013). In the *stream model*, these decisions are made at moments of coincidence (the policy windows) when the three different streams come and interact together. Therefore, participation is likely to vary and the process of decision-making can be unpredictable (March and Olsen, 1976 in Teisman, 2000). Policy windows allow opportunities for action. These windows open up frequently, but do not stay open for too long. It is important to understand when the window opens up, one should act quickly on it. Without any window opening up, it is often difficult for participants to invest their resources and energy (Kingdon, 2013). The streams will come together at critical times, but when the opportunity is not used, it may take a while for it to open up again. Various indicators, such as important events or feedback moments, set their focus to these events and brings the problems to their attention (Kingdom, 2013). Compared to other models this model does not take the different stages or moments of decision-making into account but focusses much more on the individual actors.

2.3.3 The rounds model

The *rounds model* assumes that several actors introduce problems and solutions to create progress in decision-making through interaction. Also, in each decision-making round, new actors, as well as new problems and solutions are introduced (Teisman, 2000). The emergence of this model is partly due to analyse decision-making in the context of complex networks.

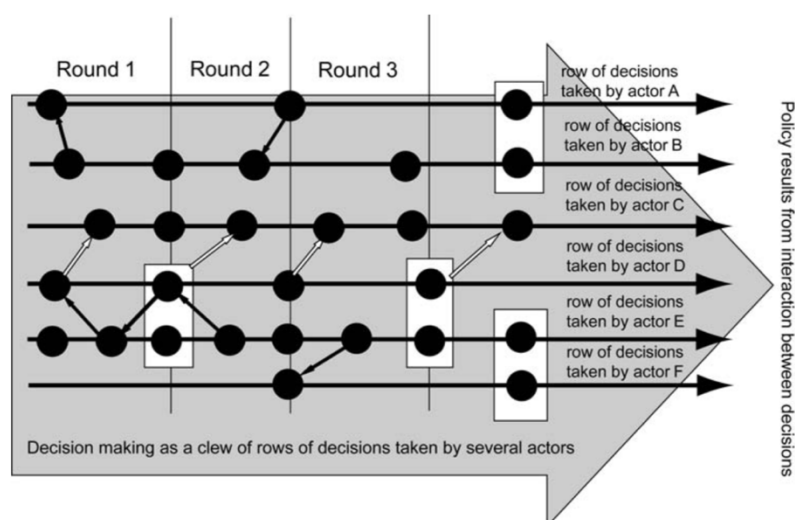


Figure 4: Rounds model (Teisman, 2000)

Compared to the other models, here the assumption is that problems and solutions are not linked to an actor and therefore it is difficult to find a solution for the problem. The involved actors will introduce their own ideas. When using this model to understand decision-making it is important to focus on the variety of actors and their goals, but also on the interactions between all these elements (Teisman and van Buuren, 2013). With this model, the actual interventions take place within society.

2.3.4 Important elements from decision-making models

To understand collective decision-making, different models to analyse decision-making are addressed in this previous paragraph. The *phase model* has several shortcomings but nevertheless, the element of the evaluation is addressed as important (Teisman, 2000; Van Buuren and Gerrits, 2009). The *stream model* introduced the concept of policy windows and how these windows allow for change to happen. The *rounds model* underlines elements from complex decision-making, the interactions and interdependencies of different actors (Teisman and Van Buuren, 2013). These elements of decision-making will be taken into account for this research. The following sections will go in depth on a framework of decision-making in comparison to governance.

2.4 Collaborative governance

Governance is used in different ways and as Klijn (2008) describes “(...) *often presented as an attempt to improve co-ordination between relatively dependent actors for the purpose of solving societal problems*” (Klijn, 2008, p. 505). The societal issue introduced in this case greatly depends on multiple stakeholders, who have to co-operate in the transformation of neighbourhoods. For this reason, understanding collaboration through collaborative governance frameworks could be helpful to understand the process.

Ansell and Gash (2007) describe collaborative governance as follows: “*A governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets*” (Ansell and Gash, 2007, p. 544). This definition has some specific characteristics: collaborative governance is initiated by public agencies, the process includes both public and private

stakeholders, all stakeholders are directly involved, and the process is formally organized, all decisions are made on the basis of consensus and the collaboration is for public policy and public management. In response on this definition Emerson et al. (2011) define collaborative governance broader:

“The processes and structures of public policy decision making and management that engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private and civic spheres in order to carry out a public purpose that could not otherwise be accomplished” (Emerson et al., 2011 p. 2).

This definition allows more cross-boundary governance with all involved stakeholders, not only the public and the private stakeholders. The definition of collaborative governance varies often along who collaborates, who the sponsors are, what type of collaboration is presented, and how the collaboration in general is organized. In the end, it is all about the idea that participants have a concrete role in decision-making (Ansell, 2012). The general agreements around collaborative governance are the engagement among different participants with open and inclusive communication, and all possible conflict of interests should be balanced out and equally representative. In this way, everyone is informed by the perspective and knowledge of all participants (Emerson and Gerlak, 2014). Based on these definitions on collaborative governance, the following definition is used in this research: a process of public decision-making that involves stakeholders from public, private and civic spheres that aim to implement a public policy or manage a public program (derived from a combination of Ansell & Gash, 2007; Emerson et al., 2011).

Collaborative governance is initiated to have combined greater advantages, while resolving problems and coordinate problems. Due to increasing complexity in our society, this poses difficult to achieve. Collaborative governance comes from the persuasion that it adds value and results in benefits which otherwise would not have been achieved (Doberstein, 2016). Decisions should strengthen one another. Therefore, they can have only significant impact if they are made and supported by different and varied actors (Van Popering-Verkerk & Van Buuren, 2015). Scholars stress the importance of the involvement of stakeholders in the

decision-making process. One could argue, this is often very difficult to manage and it is more likely that these processes fail or takes a long time (Doberstein, 2016). As seen in the societal issue discussed in this research, this makes sense. After three years just several fieldlabs disconnected houses from the natural gas-network, and all are still behind the initial planning (EIB, 2021).

2.4.1 A model of collaborative governance

For collaborative governance the framework of Ansell and Gash (2007) (figure 5) has been critically evaluated. Elements from a later framework of collaborative governance by Emerson et al. (2011) is used to redefine the model of Ansell and Gash. In this research, the decision is made not to use the later framework, because this newer framework is a more complex meta-focused framework, rather than a focus on the different elements which result in the outcomes of collaborative governance. While the goal of this research is mainly to understand the different elements of collaborative governance.

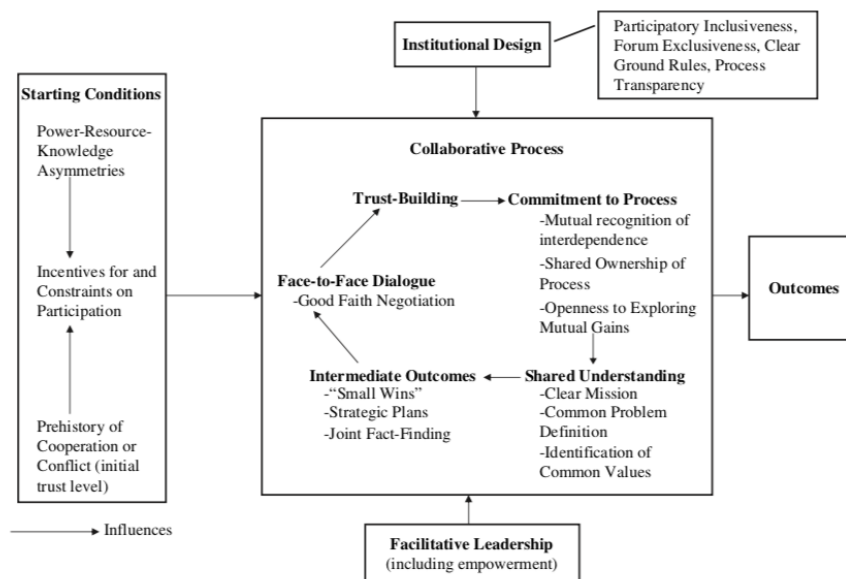


Figure 5: Collaborative Governance model (Ansell and Gash, 2007)

In this section the framework will be separated in two parts. The first part entails all the elements which influences the collaborative governance process; the second part entails the elements within the collaborative governance process which result in successful outcomes.

2.4.2 Drivers and Starting Conditions

This framework of Ansell and Gash consists of *starting conditions*, the *institutional design*, *facilitative leadership* which influence the *collaborative process*. The framework of Emerson et al. (2011) has more dimensions which are separated in the *system context*, the *collaborative governance regime* and the *collaboration dynamics*. This shows that the framework of Emerson et al. also focusses on the meta-analysis of the collaboration process. In this research the focus lays more on a lower scale at municipality level and the stakeholders involved in the decision-making process. Nevertheless, important elements of Emerson et al. will be highlighted as they are important and useful for this research.

The *starting conditions* of the process can either facilitate or discourage the process and are the resources to rely upon (Ansell and Gash, 2007). In other words: it is the starting point of the collaboration between stakeholders. The variables presented in these starting conditions are power/resources imbalances, the incentives to participate, and the history of cooperation or conflict of the stakeholders. Imbalances in resources occur when the stakeholders are not representative for the group, if they lack skills and expertise to engage in the process, or when they do not have the time and energy to collaborate (Ansell and Gash, 2007).

The second variable is about the incentives to participate. If these incentives balance out against the time and energy the process requires, and if the decision-making is exclusive enough, the stakeholders are able to press their input on different areas on the same subject. When the outcomes of the process depend on the cooperation of the stakeholder, there is a certain interdependency between all stakeholders (Ansell and Gash, 2007; Emerson et al., 2011). Emerson et al. (2011) indicate this as the *consequential incentives* which are internal or external. These external incentives are an important element to take into account, since the context may vary where the collaboration takes place. External incentives are situational or institutional crises, threats or opportunities. Also, they indicate this as a driver and not as a starting condition.

The third variable concerns if there has been conflicting interaction during previous collaboration. High conflict is not a barrier for collaboration, but if this results in a low level of trust, the process is unlikely to succeed, unless there is a high interdependency or there are steps taken in trust building (Ansell and Gash, 2007). What is missing in this framework is the

context in which the collaboration is going to take place. The policy window introduced by Kingdon (2013) can be an important condition as to why this collaboration process is going to take place in its current context. Also, Emerson et al. (2011) makes a distinction between the conditions of the context and the drivers which influence the collaborative governance process in a positive or a negative way. Therefore, the starting conditions in this research are both the political, legal, socio-economic context and conditions which allow the collaboration process to happen, and the resources the stakeholders bring in where the collaboration process is built upon, together with the incentives which moves them to participate and their previous collaboration (derived from a combination of Ansell and Gash, 2007; Emerson et al. 2011).

The two other elements outside the collaborative governance process in the framework of Ansell and Gash (2007) are the *institutional Design* of the process and the *facilitative leadership* of the process. These elements influence the collaboration process and have similarities to the *drivers* illustrated in the model of Emerson et al. (2011). These set the directions for the process and can influence it in a positive or negative way. Therefore, in this research a combination is made between the model of Ansell and Gash and the model of Emerson et a. (2011) to understand which drivers can positively or negatively influence the collaboration process. These drivers are the *institutional design*, the *leadership* (both derived from a combination of Ansell and Gash, 2007; Emerson et al., 2011) and *interdependency* and *uncertainty* from Emerson et al., (2011).

The characteristic of the *institutional design* of the collaborative governance process is based on three variables: the inclusiveness for the participants, the exclusiveness of the forum, and the set rules for the process and the legitimacy and transparency of the process. When focussing of the inclusiveness of the participants it is important that there is a broad-based inclusion where there is the opportunity to deliberate with others about the policy outcomes and the claim that these outcome presents a broad-based consensus. This also entails that the initiator of the process actively tries to involve all stakeholders in the process.

The previous variables of the starting conditions already touched upon the exclusives of the forum. Only through the process the actors can influence the outcomes of the collaborative governance process. This is a major part for the incentives of stakeholders to participate. The basics for participation are set in the initial design of the process. Participation is more likely to happen when the process is focused around a specific issue. Within this driver also clear rules and process transparency are illustrated. This means that the stakeholders feel confident that the collaboration is real, their input is taken into account, the roles of each stakeholder is clearly defined, and the process incorporated several deadlines to scope the discussion and make the process manageable. Often timetables are suggested (Susskind and Cruikshank, 1987; Gunton and Day, 2003 in Ansell and Gash, 2007).

Leadership is seen as a critical factor for a sufficient collaborative governance process. In this way all involved stakeholders are brought together to engage. The leaders of the process can have three roles within the process. They can facilitate the process: in this way they enable the collaboration to take place. They can mediate the process: their role increases and they are actively searching for the benefits of all involved parties (Sussenkind and Cruikshank, 1987 in Ansell and Gash, 2007). The largest role a leader can take within the process is to intervene within the process: to make clear goals and set the agenda (Vangen and Huxham, 2003 in Ansell and Gash, 2007). In the framework of Emerson et al., leadership is seen as an essential driver and is very similar to the concept of leadership of Ansell and Gash. What they add is the commitment and willingness of a leader for a high collaboration effort in the collaboration. Moreover, leadership is not only an important driver to start the collaboration, but also during the process it can contribute significantly to the process (Emerson et al., 2011). The leader is part of one of the stakeholder parties.

Another essential driver Emerson et al., (2011) mentions which is not very present in the model of Ansell and Gash (2007) is *uncertainty*. This also relates to an incentive for stakeholders to participate. Problems are often so complex that without collaboration for policies they will not result in a sufficient outcome. But none of the stakeholders know how the collaboration will take place and what the outcome will be. This results in the collective

interdependency as a driver for collaboration. Uncertainty due to the complex issue, drives stakeholders to collaborate.

The *interdependency* between actors is an element which is already addressed several times in this research. It is the key factor as to why societal issues are complex, because all actors depend on each other. Emerson et al., (2011) sees this as another driver for the collaborative governance process. If stakeholders are unable to accomplish something on their own, this drives them to collaborate.

The following section will go in depth on the process of collaboration.

2.4.3 The process of collaborative governance

The *collaborative process* aims at different stakeholders who engage in decision-making. As seen earlier, decision-making can take place in different phases and/or rounds (Mintzberg et al., 1976; Gray, 1989 in Ansell and Gash, 2007; Teisman, 2000; Edelenbos, 2005 in Ansell and Gash; Teisman and van Buuren, 2013). However, since decision-making processes became more complex due to the increase of participation between stakeholders and interdependencies, we can conclude that input from the stakeholders and their interactions are necessary to understand the decision-making process (Teisman, 2000; van Buuren and Gerrit, 2009; Teisman and van Buuren, 2013). Insights in decision-making will contribute to strengthening the knowledge on collaborative governance, both because of its nature and they have a similar purpose. Also, there is a need to understand the complex feedback effects within the collaborative governance process (Bryson et al., 2006) Collaboration processes have an interactive character, where positive and negative outcomes can influence further collaboration.

Ansell and Gash (2007) stresses the importance for more research on collaborative governance and especially which conditions facilitates the outcome of processes. These conditions concern trust-building, commitment to the process, a shared understanding, intermediate outcomes, and face-to-face dialogue. Emerson et al., (2011) describes this collaborative process as the collaborative governance regime with dynamics and actions. For this research the collaborative governance process is described as: A process of public

decision-making that involves stakeholders from public, private and civic spheres that aim to implement a public policy or manage a public program and depends on several elements (Derived from a combination of Ansell & Gash, 2007; Emerson et al., 2011). The collaborative dynamics are similar to the process described below.

Trust was already introduced as an important variable for the starting conditions of collaborative governance. Within the process it is a necessary element for long-term commitment and therefore it is also very time-consuming (Ansell and Gash, 2007). Trust is present in the collaboration process when there is enough time to build a relationship between the stakeholders which result in mutual trust.

A second variable that contributes to the outcome of the collaboration is *commitment to the process*. This is about the idea that all stakeholders assume that working together has a positive influence on the outcome of the policy. This is not only trust, but also respect towards each other's interest, even when this differs from their own point of view. With this in mind, all stakeholders have a certain ownership of the process. This also implies shared responsibility and interdependencies between stakeholders (Ansell and Gash, 2007). This makes the collaborative governance process a complex process.

A third variable is *shared understanding*. Scholars describe this as the one thing the stakeholders have in common, such as a mission, purpose, objective or values and what they collectively can achieve (Tett, Crowther and O'Hara, 2003 in Ansell and Gash, 2007). For the process it is important that the stakeholders *discover* both their individual interest as well as their shared interest, but also concerns and values for the process and its implications. Also, they define their common purposes and objectives (Emerson et al., 2011). Scholars argue that shared understanding is not comprehensive enough. Due to the complexity of the process, it is simply not possible to agree on all values and interest. With *mutual understanding* as introduced by Emerson et al., (2011), stakeholders understand and accept each other's interest when they do not agree with all of them but understand that they have a common goal to achieve.

The fourth variable Ansell and Gash addresses in their framework are the *intermediate outcomes*. These are outcomes during the process which are essential for further collaboration, also marked as small wins. If these small wins are not achieved, the collaboration will probably not last. These small wins can be both tangible outcomes, such as

plans or arrangements, or intangible outcomes like an increase in social capital (Innes and Booher, 1999).

The last variable Ansell and Gash (2007) illustrate in their framework is the *face-to-face dialogue*. This direct tool for communication contributes to identifying the mutual gains or the similarities in the process as described in *shared understanding*. It contributes to building trust, respect, shared understanding and the commitment to the process (Gilliam et al., 2002; Lasker and Weiss, 2003; Plummer and Fitzgibbon, 2004; Scheider et al., 2003; Tompkins and Adger, 2004; Warner, 2006 in Ansell and Gash, 2007).

An element which is not included in this framework of Ansell and Gash (2007), but explicitly is mentioned in Emerson et al., (2011) is *legitimacy*. According several scholars, a process is legitimate when all stakeholders and participants are trustworthy and credible. It is important that their interests are compatible and interdependent. All their interest together explains and motivates the collaboration (Bryson, Crosby and Stony, 2006 in Ansell and Gash, 2007).

2.5 Operationalization

Operationalization means making the concepts introduced in the theoretical framework measurable (Van Thiel, 2014). The concepts used for this research are explained below and the indicators are visible in appendix 1 and also form the basis for the interviews and desk research.

2.5.1 Starting conditions

The starting conditions indicate the situation which is present before the collaborative governance is starting. It not only expresses the background of the stakeholders, but also the context in which they operate. From the literature the following starting conditions are researched: equal power and resource balances between the stakeholders, the incentives to participate, the history of cooperation between the stakeholders, and lastly, the contextual factors. In other words, the starting conditions show the starting point or situation for further collaboration (Ansell and Gash, 2007). This condition can influence how further collaboration is taking place. When there is balance between the power and resources of the stakeholders, it is more likely that all stakeholders can participate in the process. When there are incentives to participate it is more likely that the stakeholders will invest in the process to collaborate.

When previous collaboration took place and these were experienced positive, it is more likely that the stakeholders are willing to participate again and will have confidence in a successful new collaboration (Ansell and Gash, 2007). The contextual factors influence the point of view of the stakeholders towards the policy implementation or the societal issue which is addressed in the process (Emerson et al, 2011). Also, a policy window helps to address a certain issue on the agenda (Kingdon, 2013).

2.5.2 Drivers

Drivers are the elements which ensure that the process successfully unfolds and are different from starting conditions due to the fact that how they function can influence the process (Emerson et al., 2011). A good institutional design will influence the process positively because there is no unclarity on the process and the roles of the different stakeholders. Also a high degree of transparency has, according to the literature, an overall positive influence on the process. The leadership role has a strong influence on the process (Ansell and Gash, 2007; Emerson et al., 2011). Also, interdependency and uncertainty are two drives where, according to the literature, a high amount of drives the stakeholders to work together (Emerson et al., 2011).

2.5.3 Elements of collaborative governance

Collaborative governance is a complex process and multiple elements come forward in this process, the elements which are derived from the literature are visible in appendix 1. According to the literature levels of trust, commitment to the process by the different stakeholders, mutual understanding, intermediate outcomes and legitimacy of the process are important to achieve successful outcomes of the collaborative governance process (Ansell and Gash, 2007).

2.6 Connecting the concepts

This research will investigate elements of the collaborative governance framework of Ansell and Gash with adjustments of Emerson et al. on case studies in the process of neighbourhood transitions. Collaborative governance is a relevant tool for complex societal issues and, as introduced in chapter 1, municipalities face difficult issues with a multi-stakeholder characteristic for these transitions. The scope of this research will have four elements:

- 1) To understand what starting conditions allows collaborative governance to happen
- 2) To understand which drivers positively influence the collaborative governance process and
- 3) Which elements of the collaborative governance process are important for successful outcomes?
- 4) What relations are visible between the drivers, starting conditions and elements of collaborative governance in the transformation to gas-free neighbourhoods

Derived from the literature, the most important elements from collaborative governance are brought together in a conceptual model. A simplification of this research is visible in figure 6.

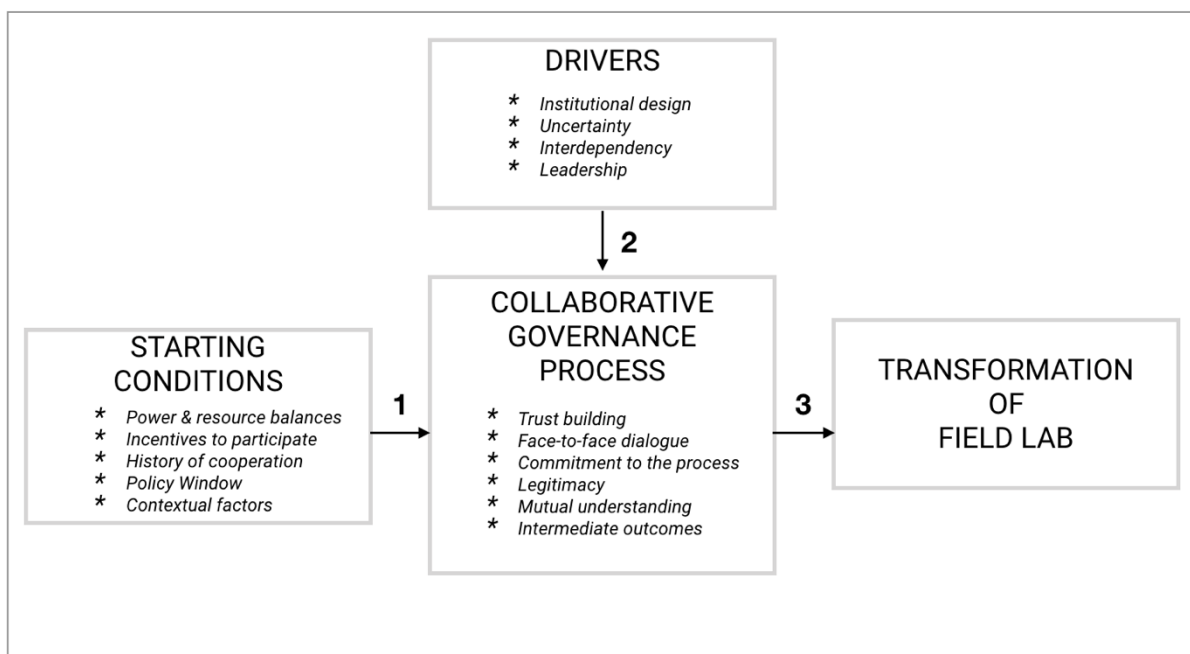


Figure 5: Simplification research (source: researcher)

To explain this figure:

- Which starting conditions are important (arrow 1);
- Which drivers have a positive influence on the collaborative governance process (arrow 2);
- Which elements express themselves as important for successful outcomes in the transformation (arrow 3)?

Also the interrelations will be researched.

3 Methodology

3.1 Research design and methods

3.1.1 Case study

For conducting this research qualitative data is obtained through a multiple case study design. Qualitative research allows itself for describing phenomena of different actors in a specific context (Van Thiel, 2014). The goal of this research was to understand the drivers for collaborative governance and the elements within collaborative governance for successful outcomes, therefore a qualitative research method posed useful for this thesis. The data is collected from multiple cases. Case study research is highly relevant when the research is part of an already larger existing knowledge (Yin, 2003). As explained, this research will strengthen the knowledge on collaborative governance. Most case study research is based on data from interviews and desk research (Taylor, 2016). In this research, semi-structured interviews are done, and policy documents are analysed during desk research.

The cases selected for this research are **Garyp** and the **Van der Pekbuurt** both located in the Netherlands. These cases are part of the first round of fieldlabs for the PAW-program and are ongoing processes. The cases contrast the other: one is located in a smaller countryside municipality, while the other case is located in the capital of the Netherlands. Also, for the case of the Van der Pekbuurt there are much more stakeholders involved and the preferable technical solution is an urban-heat-grid, while for the case Garyp the residents choose an all-electric solution. The last contrasting element is that, even though both fieldlabs already disconnected houses from natural, Van der Pekbuurt experiences much more difficulties than the case Garyp.

A contrasting case study design can be used to understand important variables, which is valuable for this research due to the many (inter)dependent elements involved (Van Thiel, 2014).

3.1.2 Desk research

The second research method is desk research. Already existing data can be useful in public administration to explore the context of a research problem (Van Thiel, 2014). This secondary

data used in this research is visible in appendix 2. The data is not selected randomly and some policy documents are similar because both cases were fieldlabs from the first round of transition. This desk research is done in advance of the semi-structured interviews, but also the respondents were asked if they have contributing policy documents for this research. Similar codes are used to analyse these documents as were used to analyse the interviews.

3.1.3 Semi-structured interviews and respondents

The second part of the data collection consisted of semi-structured interviews. A variety of key stakeholders whom are involved in the transformation of the fieldlabs were interviewed, appendix 3 illustrates the list of selected respondents, thirteen interviews were taken. In this research there is an attempt made at creating a representative sample of the stakeholders who are involved in the fieldlabs for both cases. Both professionals as non-professional stakeholders were interviewed. The primary results of this research were discussed with two external experts. In this way, different layers of the organization of the fieldlabs are representative in this research (Van Thiel, 2014). These respondents have experienced the same events. The transformation fieldlabs selected as cases in this research are already operational since 2018 (EIB, 2021).

The questions for these interviews are based upon the operationalization presented in par 2.5 and appendix 1. Semi-structured interviews allow researchers to have certain flexibility in the research. In this way I was able to verify certain answers and grasp why certain elements were more important than others, and especially their interrelatedness. Collecting data through semi-structured interviews suits case study research well as a strategy (Van Thiel, 2014).

The respondents were contacted by mail or phone and after each interview the respondent were asked if they had contact details of one of the respondents from their case. Due to the COVID-19 restrictions, the interviews were mostly taken online through ZOOM, and two interviews were held in person. The respondents were asked for their permission to record the interviews.

3.2 Data analysis

All interviews were recorded and transcribed. For purpose of understanding this data, the interviews were coded to understand to which concept of collaborative governance they belonged. These recognition words can be found in appendix 5. The (policy) documents were analysed in this same strategy. Seeing that the two cases are different from each other, it is important that the researcher really invested in the answers given by the respondents, because of contradictory answers on a specific topic. Due to the need to strengthen the body of knowledge on collaborative governance, the results of the case study can contribute to further development of the knowledge. It also might be possible that the theory needs certain adjustments afterwards (Ansell and Gash, 2007; Van Thiel, 2014).

3.6 Reliability and Validity

To ensure the reliability and validity of this research, there was a topic list which was used for all interviews (appendix 4). In this way an attempt was made to ask consistent questions. Yet, some questions were more relevant for professionals and other questions more relevant for residents, but the overarching general structure was similar across all interviews. All data gained during this research was documented well and interviews were recorded and fully transcribed to prevent misinterpretation. The reason why semi-structured interviews are held is because of the fact that there is often more behind someone's answer (Van Thiel, 2014). The reliability of the research will increase by the use and verification of multiple methods of data collection.

For analysing all data, the same codes and operationalization was used (van Thiel, 2014). The different data methods which are used are semi-structured interviews, desk research and discussing the results with experts (van Thiel, 2014). In this way the internal validity increased. Also, it can be difficult with case studies to distinct the results from the case, therefore a multiple case study is held. External validity relates to which extent the study can be generalized. It is well known that this is difficult for case study research. Therefore, I tried to keep methodological coherence and transparency as much as possible. Also, at the end of this report, I reflect upon this research.

3.7 Challenges and limitations

Limitations of this research might arise due to the fact that this is still a new process – the respondents are not sure about how the process exactly *should* operate and identify which elements are considered *important*. Also, if at the moment of writing the process seems to be a success or a failure, it is difficult to say for certain what will happen in a couple of years because this is time dependent (Van Thiel, 2014). Furthermore, the cases received positive or negative attention in the media and are approached by several researchers. This might have resulted in that they do not have of want to take the time for another researcher.

4 Results

4.1 Case 1 Garyp

Garyp, located in the municipality of Tytsjerksteradiel in the north of The Netherlands, is a town which aims to become completely gas-neutral and is part of the first round of fieldlabs (Aardgasvrij Garyp, n.d.) (figure 6). The largest part of the buildings in Garyp are privately owned with a minor part owned by the housing corporation WoonFriesland. There is a large variety typology and building year which results in some technical disputes.

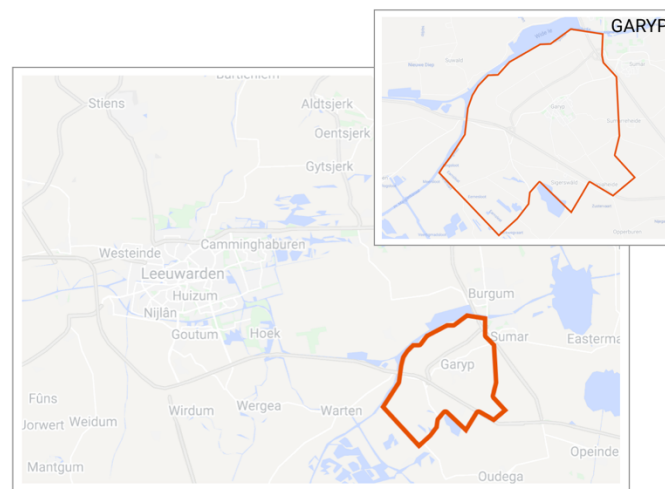


Figure 6: Garyp

Characteristic for Garyp is that they have an active association life, many residents are active in multiple associations. The perceived social cohesion and trust between the residents in the neighbourhood is high (Bouw et al., 2021). Between 2008-2012 an investigation was done on how to cluster the facilities in Garyp, to keep Garyp attractive for (younger) inhabitants and entrepreneurs. After this research, this group was also asked to investigate the local sustainable ambitions.

A group of intrinsically motivated residents formed the EKG: and energy cooperation which has the ambition to create a liveable and sociably sustainable future for its residents and make sustainable projects as accessible as possible (EKG, n.d.). In 2017 they achieved to exploit a collective solar field and from 2018 onwards they directed the fieldlab. Currently, circa 70 houses are already disconnected from natural gas. Residents were able to get information about the fieldlab and the process of disconnecting their property from natural gas via the so-

called Energzyhûs in Garyp. This is an information centre, which itself is already disconnected from natural gas, that allows residents to pass by at any time (EKG, n.d.).

The different stakeholders in this neighbourhood are: EKG, village council (dorpsbelangen), the association for entrepreneurs (OVG), the municipality of Tytsjerksteradiel, the housing corporation WoonFriesland, and the utility companies Liander and Stedin.

4.1.1 Starting Conditions

In this research starting conditions were addressed as the starting point of the collaborative governance process and have influence on how the process expresses itself. These conditions were related to the context of the stakeholders, the balance between resources & power between the stakeholders, the incentives to participate and the history of previous collaboration between the stakeholders. The results of each dimension are presented below.

The first dimension of the starting conditions which is analysed are the equal power & resources balances between the stakeholders (table 1).

Table 1: Dimension 1

	Indicator
Equal power & resource balances between stakeholders	The stakeholders have time to participate
	The stakeholders have the knowledge to participate
	The stakeholders share the same information for participation
	The stakeholders are representative for the whole stakeholder group

Time to participate is not an element which is specifically addressed by the *respondents*. It is addressed that the process is time-consuming. The *documents* confirm this by addressing the labour-intensive process of transformation which should not be forced (Lauwers, 2019; PAW¹, 2019).

Respondents do address that the stakeholders have the knowledge to participate. The directors of the process (municipality and EKG) are both professional organisations and other respondents address that there is a high level of professionalism on this process and the strategy which have a positive impact. Also, the strategy includes informing and guiding residents through this process, elements such as free energy scans, consultations from start

to implementations and the availability of accessible knowledge and professionals in the Energzyhûs contributes to this. The residents confirm this and also in the *documents* this comes forward, the local community and its stakeholders are executing, they are willing to and they have the *know how* to participate. The municipality is supporting this strategy (PAW¹, 2019).

Through this strategy, the stakeholders attempt to have a shared level of information with all stakeholders.

Multiple *respondents* also address that a unique aspect of this process is, that all stakeholders are represented during the process. People who participate in this process are people from Garyp themselves and are involved in different associations. One respondent explains the strategy on how to make their organisation representative for the involved actors in Garyp: “*We brought all the relevant organisations of Garyp together. This entails the OVG, the neighbourhood associations, the church, the schools and village council*” (R2). From the *desk research* also emerges that the project is represented by residents themselves (Gemeente Tytsjerksteradiel^{1,3}, 2018).

The second dimension of the starting conditions which is analysed are the incentives to participate (table 2).

Table 2: Dimension 2

	Indicator
Incentives to participate	The stakeholder only benefits from the outcomes if he participates in the process
	The stakeholder is aware that his participation is necessary for the success of the collaborative governance process

Subsidies for disconnecting houses from natural gas are only assigned when natural gas is completely disconnected. Also, *respondents* from the municipality and EKG explained that the intention was to decrease the subsidy by each year, to have residents involved early in the process. These incentives and benefits are also confirmed by residents from Garyp (due to COVID-19 this strategy is slightly adjusted). Other benefits from this process is learning what this process entails and achieving (personal) sustainable ambitions, with participation these are easier to achieve. These benefits are also confirmed by the *documents* (PAW¹, 2019).

Also, the *respondents* are aware of the fact that this process is complex and that all stakeholders should be involved to achieve successful outcomes. Residents address the climate change issue and also EKG agrees upon this. The municipality is mostly interested to see how large this matter in the built environment is. The *documents* studied for this research do not give much information on this element.

The third dimension of the starting conditions which is analysed is the history of cooperation between the stakeholders (table 3).

Table 3: Dimension 3

	Indicator
History of cooperation between stakeholders	Previous experiences of collaborations influences the current collaborative governance process

The importance of this dimension was mentioned by all *respondents*. Successful collaboration for the collective solar field in 2017 resulted in intensive coordination and involvement of stakeholders. EKG managed with support of other stakeholders to successfully achieve this complex project. This success influences the current process, a respondent illustrates this by the following claim:

“They told us, we cannot just drop this issue in the village, it is important to have a solid board who can take the lead in this project. We already worked together quite often, they knew what we were able to and that really worked in our advance” (R2)

All *respondents* refer to this project and also the *documents* elaborate on this. This initiative is locally organized and therefore has a large local support (Gemeente Tytsjerksteradiel¹, 2018). Also, previous activities resulted in the formation of village interest and later on EKG, therefore there is a high support for projects of collaboration in the village, and tangible results like the solar field contribute to this (Gemeente Tytsjerksteradiel², 2018; Lauwers, 2019).

The fourth dimension of the starting conditions are the contextual factors (table 4).

Table 4: Dimension 4

	Indicator
Contextual factors	The political, legal or socio-economic context of the stakeholders allow the collaborative governance process to happen
	A policy window allows the collaborative governance process to happen

The respondents from the municipality addresses that there is not a complex bureaucratic system between policymakers and aldermen, these short lines between actors allow issues to be discussed easily. This relation also expresses itself between the municipality and organisation within the different villages. EKG and the municipality have no problems to approach each other, an example of this is the shared *Whatsappgroup* where elements of the fieldlab can be shared easily.

The strategy of EKG (local, bottom-up, accessible, no obligations) has a large influence on the current process, these elements are very appealing for residents to become member of EKG because benefits are invested in the village itself. This was confirmed by *residents* but also the *documents* address that the ‘way of doing’ is the key to success:

“We make visible what is necessary to disconnect from natural gas. (...) The supervision of residents is part of our strategy to keep an eye on the process quality. We want to relieve as much stress as possible to avoid disappointments, these complicate the communication and support for the process” (Gemeente Tytjerksteradiel³, 2018. Pp. 23)

Respondents mostly addressed the social factors from this fieldlab as contributing to successful outcomes. Garyp is very association oriented, almost all members are member of (multiple) associations, EKG is locally organized, and people are very familiar with each other and Garyp has typical village characteristics. This high level of social cohesion results in high support for different project. Also, both residents and the professional organisations are willing to invest in sustainable ambitions (Gemeente Tytsjerksteradiel^{1,2}; Bouw et al., 2021).

The policy window for this process was the letter from the Ministry in the search of fieldlabs for the program of PAW. Due to the short lines between the stakeholders, the municipality of Tytsjerksteradiel knew who would be interested in this project.

How often the respondents and documents address certain elements are visible in par. 4.3. For starting conditions, contextual factors were addressed most often.

4.1.2 Drivers

In this research drivers were addresses as powers which influence the collaborative governance process and give direction to the process. The different drivers are the institutional design of the process, leadership, interdependency and uncertainty.

The following dimension discussed is institutional design (table 5).

Table 5: Dimension 5

	Indicator
Institutional Design	The initiator of the process includes all stakeholders and ensures that the group is representative
	The collaborative governance process is the way to influence the outcomes of the process
	There are clear rules for the process
	The process is transparent
	There is a clear definition of roles
	The scope of the process is defined by deadlines and a planning

Elements of this driver were addresses as important. As explained earlier, EKG established an organisation which represents the whole village and its associations, this strategy is continued with the process of the fieldlab. The *respondents* of EKG and the municipality express the importance of the involvement of all stakeholders. However, not all stakeholders need to participate at all time, therefore the two directors EKG and the municipality decide when which organisation is involved. Also, the *documents* relevant for this case highlight that the project leaders inform and align with the other stakeholders when necessary (Gemeente Tytsjerksteradiel², 2018).

Only through this process one can claim the subsidies, however residents are free to decide if they use the fieldlab to disconnect their houses from natural gas.

Strict rules are not addressed by *respondents* or *documents*. Yet, the stakeholders agreed upon the strategy for this fieldlab and made a clear definition of roles for all involved stakeholders (PAW¹, 2019). A respondent clarifies this by saying:

“Together with the municipality we wrote a plan, the implementation plan, the municipality immediately said: you are in the lead. We want to facilitate and support everything, but your organisations need to do it” (R1).

These roles are also defined in the strategy (Gemeente Tytsjerksteradiel³, 2018).

An element which is addressed as important by the municipality is the transparency of the process. The structure of the process is organised in a certain way that through a working group and a steer group information is shared both ways. Keywords which are addressed as important were: *“Trust, transparency, open attitude and loose up”* (R1). This element also comes forward in the *documents*, mostly when it is about provision of information. Information about what the results are from the process, but also make sure that you are clear which information you are sure about and what not (Gemeente Tytsjerksteradiel², 2018; PAW¹, 2019).

The *respondents* do not emphasize on a strict process planning; however, it is introduced in the strategy to give the process a direction. If a planning or deadlines are important, the respondents are unsure. They address the complexity of the process where other elements should be more important than the number of houses disconnected.

The next dimension discussed is leadership (table 6).

Table 6: Dimension 6

	Indicator
Leadership	There is a stakeholder/organisation who takes the lead
	Energy and means are invested in the process
	Facilitating leadership
	Mediating leadership
	Intervening leadership

For the *respondents* of this case, is EKG clearly the organisation who takes the lead in the process. A project leader monitors the process and stays in touch with all involved stakeholders (Gemeente Tytjerksteradiel^{1,2}, 2018).

All *respondents* clearly sense the feeling of time and energy investments by EKG in the process and their high quality of implementation: *“In my opinion, the group EKG is highly involved”* (R5). A successful element in the strategy of EKG is that profits are invested again in the growth of the village itself, this is also confirmed by the *desk research*. They call this the ‘mienskip’ (community) and this again works out in a strong sense of community feeling (Gemeente Tytjerksteradiel^{1,3}, 2018).

The most dominant role of leaderships addressed by the *respondents* is facilitative leadership and this expresses itself in twofold a) the municipality facilitating EKG in their activities (organizational burden, financial model, advising) and b) EKG facilitating the residents in the transformation (energy scan, unburden, accessible information). This strategy is clearly highlighted in one of the *documents* *“The municipality facilitates, and the local community executes. Keywords are trust and professionalism, it is about willingness and being able to.”* (PAW, 2019, pp. 3).

The dimension discussed is interdependency (table 7)

Table 7: Dimension 7

	Indictor
Interdependency	The amount of interdependency that drives the stakeholders to collaborate

The largest part of the houses is private owned and therefore the fieldlab depends upon private homeowners. The process is quite new and for now many residents are interested. Therefore, therefore the professional *respondents* address that they first invest time and energy in people who want to participate. As successful outcomes also trigger other residents. Other expressions on interdependencies are not addressed evidently. The municipality confirms that lessons learned from this fieldlab will only contribute to future processes. In the *desk research* interdependency is not a large topic, however it is highlighted that there are many elements important in this process of transformation (Lauwers, 2019). Currently the strategy is involving stakeholders who are willing to join the process.

The next dimension discussed is interdependency (table 8).

Table 8: Dimension 8

	Indicator
Uncertainty	The amount of uncertainty that drives the stakeholders to collaborate

The *respondents* from professional organisations do not address many matters of uncertainty in this case. What they do address, but this is more related for ambitions on a higher scale level, is how many people are needed for the whole sustainable transition. Both practical and administrative level. In contrast to the resident respondent indicate that the level of uncertainty does expresses itself with other residents, for them it is sometimes unclear what the process entails on the long run, he claims: *“I think the biggest hustle is when people are looking in the future, they do not know what to invest.”* (R5)

To conclude, the importance of institutional design was addressed most often. Other elements are visible in par 4.3.

4.1.3 Elements of Collaborative Governance

This research investigates which elements within the collaborative governance process express themselves as important. These elements are trust, commitment to the process, mutual understanding, intermediate outcomes, face-to-face dialogue and legitimacy.

The following dimension is trust (table 9).

Table 9: Dimension 9

	Indicator
Trust	There is mutual trust between stakeholders
	There is enough time to built a relationship between the stakeholders

The *respondents* from the municipality and EKG indicate that due to experience in the past and the contextual factors such as a high level of support, the short lines because of the

association character and the drive for sustainability there was already a high level of trust in this case. Also, *documents* highlight this high level of trust between the stakeholders, between the professional and non-professional stakeholders (PAW¹, 2019; Bouw et al., 2021). In other words, there was already trust and time to build a relationship and this translates also in the current process.

The next dimension is commitment to the process (table 10).

Table 10: Dimension 10

	Indicator
Commitment to the process	The amount of trust between the stakeholders
	The amount of mutual respect for each other's interests
	The amount of shared responsibility
	The stakeholders are aware of their interdependency

The *respondents* address a high level of trust between the different stakeholders. Only the respondents of municipality addresses that by understanding the interest of the other stakeholders, they try facilitating the stakeholders within their municipality. No other respondents or documents elaborated on this.

Shared responsibility is an element which is addressed multiple times by EKG and the municipality. For the success of the fieldlab a bottom-up approach is highly important for support and local participation. Yet, EKG tries to emphasize to other stakeholders that their success is also owed to the municipality. They share the responsibilities but also the successes. In one of the documents this is illustrated as well, that the respondents of the village Garyp feel responsible and are involved (Lauwers, 2019).

Again, the *respondents* illustrate their awareness of interdependency not only in advance of the process (starting conditions) but also during the process. Without each other's support, the successes in the past but also the current fieldlab would have been worked out less efficient. Also, EKG illustrates the transformation is still a bridge too far. This shows the interdependency between stakeholders for success. Nevertheless, awareness for the residents is a good start.

Next dimension, mutual understanding (table 11).

Table 11: Dimension 11

	Indicator
Mutual understanding	The stakeholders share a goal
	The stakeholders have shared values
	The stakeholders agreed upon the objectives
	The stakeholders understand each other's interest due to transparency
	The stakeholders understand the need to collaborate to achieve the objectives

The *respondents* illustrate the feeling that everyone is going in the same direction and therefore share a goal. All respondents address the importance of a healthy planet for future generations. Remarkable is that all respondents also have their own goal, and they have to align this with the overarching goal. From the *document study*, a set goal was made for the number of buildings which they wanted to disconnect within 5 years. During the interviews it came forward that this goal might slightly change due to COVID-19 and some difficulties with other buildings (Gemeente Tytsjerksteradiel¹, 2018). Despite these sustainable expressions of the *respondents* from this research, in different research only 30% illustrates that they want to contribute to the process (Bouw et al., 2021).

Values for this fieldlab are shared, confirmed by both *respondents* and *documents*. This are in line with the set objectives to disconnect 80% of the buildings within 5 years and by achieving this contribute to a healthier planet (Gemeente Tytsjerksteradiel^{1,2,3}, 2018; Bouw et al., 2021).

The *respondents* from EKG and the municipality indicate that this process has a high transparency and that the stakeholders are open towards each other, lines are short, and ambitions are shared (Gemeente Tytsjerksteradiel³, 2018).

Three different *respondents* indicate that they understand that it is important to work together to achieve the objectives. Yet, they illustrate that this is a fieldlab, and it is important to learn from the current process and what it all entails. The respondent from EKG illustrates that now the process is running, also external actors are monitoring the process. These actors are not immediately involved, but they want to understand what is necessary for a transition like this. These actors are the Ministry, province but also network operators. This shows that

actors both within the process as outside the process have a certain amount of interdependency.

The next paragraph discusses intermediate outcomes (table 12).

Table 12: Dimension 12

	Indicator
Intermediate outcomes	The number of intermediate outcomes which influence the process (tangible, intangible)

As earlier introduced, successful experiences in the past, set a positive direction for the current collaborative governance process. Also, intermediate outcomes within the process can give the process a boost and are therefore considered as important. All *respondents* can specify intermediate outcomes from this process and are able to illustrate if they have a positive influence or delay the process. An interesting outcome to highlight in this analysis is the role of ambassadors, this are residents who share their experience and inform other residents. Why this is successful is explained by one of the residents: *“I have this persuasion, just because I saw the results myself”* (R5). The positive intermediate outcomes mentioned by the respondents are also confirmed in the *document analysis*. Especially the role of residents within the process and the facts that now there is a connection between community and energy transition (Lauwers, 2019; PAW¹, 2019). The outcomes which complicate the process are mostly related to technical aspects.

The following dimension is the face-to-face dialogue (table 13).

Table 13: Dimension 13

	Indicator
Face-to-face dialogue	There is a direct form of communication
	Direct communication contributes to mutual understanding
	Direct communication contributes to trust-building

Regular meetings between the professional organisations is something which is addressed by the *respondents* as very useful. This allows them to increase their mutual understanding and share the same level of information.

Other meetings related to the fieldlab where also residents and other stakeholders are involved are useful for multiple aspects such as increasing the social cohesion, transfer of information and also visibility for entrepreneurs as address by the *respondent* of OVG. This because many requests concerning the transformation can be done by local entrepreneurs. The respondents from EKG and the municipality illustrate that due to the fact that they have many direct communications they understand each other interest and also know when to find each other for collaborations like the current one. One of the *documents* which was analysed also illustrate that communication is essential, especially to get the residents on board (Gemeente Tytsjerksteradiel³, 2018).

Both *respondents* and *documents* confirm that direct communication contributes to trust-building (R1, R2, Bouw et al., 2021). COVID-19 influences this negatively because of the restrictions, meetings and therefore also transfer information was more difficult.

The last dimension is legitimacy (table 14).

Table 14: Dimension 14

	Indicator
Legitimacy	The stakeholders can motivate why they participate in the process
	The stakeholders are trustworthy
	The stakeholders are credible
	The process is credible

From the analysis, it seems that this process has a high legitimacy. All *respondents* can motivate why they participate and give clear examples why, especially EKG, is a trustworthy stakeholder. This due to the local approach and the strategy which benefits the village. Experiences in the past (the solar field) also make them a credible organisation. Also, sending a shared message with all involved stakeholders was part of the strategy (Gemeente Tytsjerksteradiel³, 2018).

The process is credible because there is a lot of transparency, all stakeholders are treated the same. As mentioned in the *documents*, the strategy is set up like this to maintain

the quality of the process, to inform through local canals all residents and other stakeholders and both professional meetings as resident meetings are organised to keep everyone involved (Gemeente Tytsjerksteradiel³, 2019; PAW¹, 2019).

To sum up, the *respondents* and *documents* emphasized the importance from many elements, especially mutual understanding and trust.

4.2 Case 2 Van der Pekbuurt

The Van der Pekbuurt is located in the north of Amsterdam, in the district of Amsterdam-Noord (Province Noord-Holland, The Netherlands) and one of the oldest neighbourhoods of this area (figure 7).



Figure 7: Van der Pekbuurt

The largest part of the houses are built around 1920. The housing corporation Ymere owns the largest part of the houses in the Van der Pekbuurt. Other housing corporations Alliantie, De Key and Eigen Haard own a small amount of properties in the neighbourhood. Next to these housing corporations there is a small number of private tenants and also circa 180 private owners. In 2019, the Gentiaanbuurt was the first area where Ymere started the renovation of the neighbourhood. Next to the renovations, these buildings block were also disconnected from natural gas (EIB, 2021; Gemeente Amsterdam^{1,2}, 2018). The timespan of the renovations in the Van der Pekbuurt is planned for 2018 till circa 2027. Due to the already

planned renovations in the Van der Pekbuurt, the municipality of Amsterdam designated this neighbourhood as suitable for the fieldlab in the PAW program. In February 2021 Ymere announced that the further renovations of the neighbourhood are postponed due to higher-than-expected costs (Ymere, 2021).

The renovation was seen as a co-opportunity for the municipality to appoint this neighbourhood as fieldlab. The plan was to involve all other stakeholders as well in the fieldlab such as the other housing corporations, energy cooperation Vattenfall, Westpoort Warmte, Alliander, !Woon and the residents of the area (EIB, 2021). The currently preferred technical solution by governance and politics is an urban-heat-grid. However, a final decision on this will be made in the summer of 2021 (EIB, 2021).

4.2.1 Starting Conditions

In this section, the starting conditions of the case Van der Pekbuurt will be analysed.

The first dimension of the starting conditions which is analysed are the equal power & resources balances between the stakeholders (table 1, all these tables are visible in par. 4.1 or appendix 1).

The indicators derived from the literature relate to the idea that all stakeholders have the time, knowledge and information to participate. Also, according to the literature the involved stakeholders should represent the whole stakeholder group.

The *respondents* of the tenant association and a previous research address the difficulty for stakeholder residents to participate in this process. Residents have to participate in their spare time, with no mandate and on personal title. Personal issues and the complexity of the issue resulted in the fact that many stakeholders cancelled their participation (RICO, 2020). Many *respondents* address that not all stakeholders have the knowledge to participate. The respondents from the organisation !Woon emphasize on the importance of a shared knowledge level between all stakeholders. Currently, there is too much unclarity in reasoning of choices made by professionals and also the information is sometimes incomplete as claimed by a homeowner: *“If they can’t tell me what the planning and costs are, we are walking in circles. As soon as we as VVE want to achieve something, we need to know what these costs are and what the planning is!”* (R11)

Other respondents also express their opinions on the importance that all stakeholders should be informed well. The documents confirm this frustration about imbalance of information and unclarity as well (PAW², 2020; RICO, 2020).

It is unclear if the stakeholder group is representative for the whole group due to a group of passionate tenants who stand up for the voices of the other tenants. The *documents* illustrate that several key players are involved in the process, this was a diverse group but it was not the intention to make this group representative for the whole neighbourhood. They do indicate that it is aimed to bring all relevant groups together (Gemeente Amsterdam², 2018; PAW², 2019). This is not completely in line with the answers of the respondents who are unsure if all relevant stakeholders are participating in the process.

The second dimension of the starting conditions which is analysed are the incentives to participate (table 2). The indicators derived from the literature for this dimension are that stakeholders only benefit from the outcomes by participating and that they are aware of the importance of their participation. The indicators derived from the literature are that stakeholders have enough incentive to participate when they only benefit from the outcomes if they participate in the process and if they feel that their participation is necessary for successful outcomes.

The largest part of the property in de Van der Pekbuurt belongs to the housing corporation Ymere and they make the decision of the transformation (when 70% of the tenants agrees). However, *respondents* from !Woon, municipality and the homeowner address that many residents would like participate in the process to understand what the process entails, participating in the process can contribute to this.

The *respondent* from Ymere illustrate that it is highly important to get the tenants on board in this process for the success of the fieldlab. This also illustrates the complexity of the issue, due to the fact that is in someone's personal homes where the adjustments should be made.

The third dimension are this history of cooperation between the stakeholders. According to the literature do previous experience of collaboration influence new collaboration processes.

The indicator derived from the literature is how previous experiences of collaborations can influence the current collaborative governance process.

All *respondents* illustrate that they experiences some kind of collaboration with the stakeholders in the past. Yet, the current form of collaboration is completely new and is experienced as complex with many uncertainties. The respondent from the municipality illustrates this by saying that: *“If I look at the complexity of the issue and what is necessary for the integral cooperation, we are still at the beginning”* (R6). The respondents from !Woon, Ymere and the homeowner indicate that they are aware of negative experiences which happened in the past in the Van der Pekbuurt. They point out that this is still tangible. This does not mean that they cannot work together, but influences the current collaboration.

The last dimension of the starting conditions are the contextual factors, both the context and the appearance of a policy window (table 4).

Difficulties in the context experienced by the *respondents* of the municipality and Ymere is the lack of hierarchy and tools to intervene in this complex process, they miss legal direction for decision-making. Both !Woon, Ymere and Vattenfall illustrate that this is a neighbourhood who have certain sustainable ambitions and also a sustainable mindset. Nonetheless, also a large part of the neighbourhood has a difficult economic situation, this is also confirmed by the respondent from tenant association and therefore do not always have the time and energy to be involved in complex issues like the transition to gas-neutral. Socio-economic contextual and the fact that the residents of the neighbourhood are divers was also confirmed by documents from the analysis (PAW², 2019; PAW 2020).

The policy window illustrated for this process are the planned renovations from the buildings of Ymere which will go hand in hand with disconnecting the buildings from natural gas. Also, respondents address that it is unfortunately that these renovations are addressed with two years (Ymere, 2021).

How often the respondents and documents address certain elements are visible in par. 4.3. For starting conditions, the importance of balance of power and knowledge was addressed most often.

4.2.2 Drivers

In this section the drivers for the collaborative governance process will be analysed for the Van der Pekbuurt. The first dimension discussed is institutional design, the indicators derived from the literature are visible in table 7. The indicators for this dimension are the inclusiveness of the stakeholders, how this process is designed in a certain way that the stakeholders can influence the comes, if there are clear roles and rules, the process transparency and how the scope of the process is defined.

As introduced earlier, the *respondents* !Woon, homeowner and the tenant indicate that more effort could have been invested in involving stakeholders in the process. Also, the *documents* indicate that this element is important to create support from the community for the process and the implementations of this process (EIB, 2021). Also, all stakeholders should be involved to create this support (RICO, 2020).

Some *respondents* sense ambiguity in the process. This is expressed in two ways a) ambitions from higher scale levels and strategies made on a higher level (City Green Deal) also have influence on the process and stakeholders have difficulties to work with this and the other complexities in the process and b) rules within the process are unclear. Ymere illustrate that it is difficult that there are not enough tools on how to handle a process like this. Also, about the fact that this neighbourhoods was a 'fieldlab' resulted in a asymmetry of what could be done with the subsidies for this neighbourhood as implied by the respondent of !Woon.

Therefore, the importance of transparency was suggested as important by multiple *respondents*. Transparency about ambitions and reasoning for decisions. This also came forward from the *documents*, a lack of transparency influenced the process negative (PAW², 2019; RICO, 2020, EIB 2021).

Also, multiple *respondents* illustrate the lack of role definition and even sometimes role confusion. Controversially, the homeowner points out that the roles were clear, but the difficulty was that not all stakeholders agreed upon this. Also, in previous research on citizen participation in the Van der Pekbuurt, was concluded that the municipality of Amsterdam was still searching what their role was within the process (RICO, 2020).

In the beginning there was a planning for the process (Gemeente Amsterdam², 2018). The difficulty what was addressed by the *respondents* was that the planning depends on

multiple factors and stakeholders and therefore constantly had to be modified to the new situation.

The second dimension discussed is leadership, the indicators derived from the literature are visible in table 6. The indicators for this dimension are if there is a stakeholder or organisation who takes the lead, invest in the process and what this leadership role entails, facilitating, mediating and/or intervening.

Based on the answers of the *respondents*, it is unclear which organisations or multiple organisations are taking the lead in the process and what this leadership role entails. A result from this, is that other stakeholders are also confused about their role. Multiple claims were made on who was taking the lead in the process: Ymere, the municipality or a combination of the municipality, Ymere and Vattenfall. The homeowners claim that nobody takes the lead and therefore decision are not really made. The *documents* illustrate the municipality as director of the whole process, Ymere as the leader of the transformation (BZK, n.d; Gemeente Amsterdam², 2018; PAW, 2019). Later research indicates that it was indeed unclear who was responsible for which elements in the research (RICO, 2020).

According to the *documents*, both the municipality and Ymere will invest time, energy and money in the whole process (Gemeente Amsterdam², 2018; PAW², 2019; EIB, 2021).

In this process, the facilitative, mediating and intervening leadership role all came forward, but none of these roles stand out.

The third dimension discussed is interdependency, the indicators derived from the literature are visible in table 7. The indicator for this dimension is the amount of interdependency that drives the stakeholders to collaborate.

The *respondents* explain the complexity of this process due to the number of involved stakeholders and the fact that this form of co-collaboration is new. Multiple actors from inside and outside who influence the process. These many interdependencies is experienced as a negative influence on the process: *“There is no progress, it does not work, why? Who told you that something like this would work out? It is one of the most difficult things you can imagine, this short amount of time, with this many actors?”* (R6). Also, the *documents* analysed for this

research come to the conclusion that it is a complex issue with different interest, different actors and ambitions (PAW², 2019; EIB, 2021).

The fourth dimension discussed is uncertainty, the indicators derived from the literature are visible in table 7. The indicator for this dimension is the amount of uncertainty that drives the stakeholders to collaborate.

The concerns on this elements is also expressed by the *respondents*. There is confusion about who is the stakeholder group, the roles, the rules and what the process entails. The respondents of Ymere explains with a certain enthusiasm the excitement to work on new ambitions, however, these uncertainties make it difficult. Also many issues and changing circumstances are illustrated as elements who contribute to a higher uncertainty. For the private homeowner respondents, these uncertainties make it unattractive to participate:

“When is it happening? They cannot tell me. What are the expenses? They don’t know. I told them, if you ask someone to buy a car and you cannot tell them the colour, the brand, you can’t sell them anything... Well, you need to know what you are selling, and this is exactly what they can’t” (R11)

Institutional design was mentioned most often by the *respondents* and the *documents*. The other elements are visualised in par 4.3.

4.2.3 Elements of Collaborative Governance

In this section the elements of the collaborative governance are analysed for the case Van der Pekbuurt.

The first dimension is trust, the indicators derived from the literature are visible in table 9. This indicator relies on the fact if there was already mutual trust between the stakeholders and if there was enough time to build a relationship.

Two *respondents* address that mutual trust was not yet established. Also, *documents* for this study confirm this, this was mainly because there was not enough transparency about the interest between the stakeholders (RICO, 2020).

As introduced earlier, the professional stakeholders address that this is a completely new way of working together and therefore there has not been enough time yet to build a relationship. The respondent from the municipality analysed this clearly by saying: *“You ask a lot of trust from a lot of people; would you want to stick out and take risks immediately? You ask a lot of commitment and this takes time”* (R6). One should also not forget that some institution might worked together in the past. Yet, if you worked together with different stakeholders, it always takes time to get to know each other. The stakeholders need to invest time and energy in building a relationship (PAW², 2019; RICO, 2020; EIB, 2021).

The second dimension is commitment to the process, the indicators derived from the literature are visible in table 10. Indicators for this dimension also relies on the amount of trust, the amount of mutual respect and shared responsibility and if the stakeholders are aware of their interdependency.

Respondents address that mutual trust still need to be established.

The elements which did not came forward strongly during the interviews and documents were mutual respect and shared responsibility.

Interdependency was again also within the process addressed as important by the *respondents*. The *respondents* from the municipality, Ymere and !Woon highlight that the progress of the process depends on the interactions of the stakeholders involved. What was addressed as something which was relevant in this case is that everyone has their own background and objectives which need to be answered. The respondents from Ymere summarised this clever by saying: *“Because you have to take care of so many actors, you should work together closely because everyone has its own budgets and its own interest”* (R9). To keep the interest of the tenants in mind, it is legally organized that at least 70% of the residents should agree with the decisions which need to be made (EIB, 2021).

The third dimension is mutual understanding, the indicators derived from the literature are visible in table 11. The indicators for this dimension are the fact that the stakeholders share a goal, share values, agreed upon objectives, understand each other’s interest due to transparency and understand that if they want to achieve the objectives set for the process, that they have to work together.

The overarching goal, a better environment, is shared by the *respondents*. However, all stakeholders do have different objectives within the process and goals they want to achieve. From the *documents* it becomes clear that the message of Amsterdam concerning the transition is top down, yet the strategy on how they want to achieve this should be bottom-up with all involved stakeholders (PAW², 2019). This is not experienced by all the stakeholders and the ideas on how to achieve this transition vary along different routes (Respondent Ymere; PAW², 2019).

Nonetheless, the *respondents* do not emphasize that all stakeholders agreed upon objectives for this process. There are regular meetings with the professional stakeholders, but the residents are excluded from this. The *documents* give more answer to this and there was a co-operation between the tenants and Ymere (Gemeente Amsterdam², 2018). Also, there was a participation process for different options for the technical solutions to disconnect the houses from natural gas, which resulted in some insight but not significantly increased the support. The stakeholders indicate that early involvement of all stakeholders would have contributed to the support for the process (RICO, 2020). This is also something which came forward during the interviews.

Notable is that the *respondent* who is homeowner illustrates that it is for the inhabitants in his VVE are not attracted to the idea of disconnecting from natural gas and ambitions to do this are low. This also showed itself by a small participation group during an online meeting for homeowners. It was and still is a difficult process, this is what was sensed and explained during the interviews but also confirmed by the documents (EIB, 2021).

Transparency was already addressed earlier, however, lacking transparency has influence on the mutual understanding concerning each other ambitions. This is something would improve significantly within this ongoing process. Currently, as implied by the *respondents* from Ymere and !Woon, the stakeholders keep what they want to achieve, why they make certain choices and their interest too much for themselves. Interest and ambitions can vary, this is also something what the *respondents* and *documents* for this case explain. It would be for all involved stakeholders worthwhile to explain the why (RICO, 2020; EIB, 2021).

The fourth dimension are the intermediate outcomes, the indicators derived from the literature are visible in table 12. The indicator for this dimension is the number of intermediate outcomes which influence the process.

The *respondents* illustrated intermediate outcomes carefully due to difficulties within the process. Most outcomes which were addressed by *respondents* as positive were the fact that the process has been started and that these lessons can be taken into account in the future. Also, there is more attention for this neighbourhood. From the *documents* was illustrated that the excessive project of participation did bring the professional and non-professional stakeholders closer together (PAW², 2019). The outcomes of the process indicated by the *respondents* which had a negative influence was that not all stakeholders experienced the participation trajectory as positive (RICO, 2020). The communication but also the information imbalance had a negative influence on the process. The fact that the renovations from Ymere are delayed do not contribute positively to the process.

The fifth dimension is the face-to-face dialogue, the indicators derived from the literature are visible in table 13. This indicator is about the direct form of communication between the stakeholders and how this communication contributes to mutual understanding and trust-building.

The *respondents* address that due to COVID-19 the communication between the stakeholders is more difficult, physical meetings before the restrictions were visited by a large group and informing all stakeholders is experienced as difficult now. This was confirmed by both the respondents from !Woon and the tenant association. The *respondents* indicate that they would prefer to have physical meetings again because it allows to make the information transfer easier, which contributes to mutual understanding and therefore also more trust. By excessive discussions, the trust between stakeholders will increase (PAW², 2019).

The last dimension is legitimacy, the indicators derived from the literature are visible in table 14. The indicators for this dimension are the motivation to participate, if stakeholders are trustworthy and credible and if the process is credible.

This was a difficult element to analyse due to unilateralism. The non-professional *respondents* indicated that they wanted to participate in the process to give the residents of

the neighbourhood a voice within the process, to get to know the neighbourhood and also to understand what this process entails and how decisions were made. Both of these arguments were also confirmed in another research (RICO, 2020).

During the interviews, mostly the *respondent* from tenants associations expressed distrust over the involved organisations. Also, the respondent from !Woon illustrated that this is what is experienced among the stakeholders and claims that this does not influence the process positively. Other respondents did not elaborate on this.

On credibility was also not really elaborated during the interviews.

Elements during the process which were illustrated by respondents from the tenant association, Vattenfall and !Woon was that sometimes there was some information asymmetry on the process.

The *respondents* and *documents* emphasized on the importance mutual understanding and legitimacy the most, however legitimacy was not emphasized on by all the respondents. The following paragraph gives more insight on the number of times the respondents illustrated on certain elements.

4.3 Major results

The following tables illustrate the main results for each concept and each case study. The number behind each dimension is the sum of times this dimension is mentioned in each case.

Table 15: Results starting conditions

Starting conditions		Results
Equal power & resource balances between stakeholders (89)	Garyp (25)	<ul style="list-style-type: none"> Professional stakeholders accompany residents in the process Directors of the process are very professional and involved in the process Stakeholder group is representative because representatives of all organisations are brought together
	Van der Pekbuurt (64)	<ul style="list-style-type: none"> Imbalance in time and knowledge between the professional stakeholders and the residents of the neighbourhood Not all information available or known by all stakeholders

		<ul style="list-style-type: none"> • Unclear if stakeholder group is representative for whole neighbourhood
Incentives to participate (26)	Garyp (12)	<ul style="list-style-type: none"> • Subsidy only available if the whole building is disconnected from natural gas and therefore stakeholder only benefits from outcomes when participating • Stakeholders want to participate to learn from process or because of sustainable ambitions
	Van der Pekbuurt (14)	<ul style="list-style-type: none"> • Transformations starts together with the renovations of the buildings from Ymere • Many stakeholders also outside of the process are involved, this complicates process
History of cooperation between stakeholders (29)	Garyp (15)	<ul style="list-style-type: none"> • Good experience due to previous collaborations and the success of a solar field in Garyp
	Van der Pekbuurt (14)	<ul style="list-style-type: none"> • Previous experiences in the past between Ymere and residents difficult current collaboration • All stakeholders worked together in the past, however this new form of collaboration complicates the process
Contextual factors (73)	Garyp (46)	<ul style="list-style-type: none"> • Strong social cohesions • Association character • Short lines between professional stakeholder and non-professional stakeholders • Socio-economic contextual factors influence the way of doing • Legal structure through EKG results that profits are invested again in the village
	Van der Pekbuurt (27)	<ul style="list-style-type: none"> • Large part of the neighbourhood is owned by Ymere • The tenant are represented by an involved tenant association • Many residents have difficult socio-economic backgrounds • Window of opportunity for the transformation is the renovation of the buildings of Ymere

The major differences between the starting conditions of Garyp and Van der Pekbuurt is that Garyp has a local consortium (EKG) which really guides the stakeholders through the process and tries to reduce the gap in knowledge as much as possible (BZK, 2021). In case of the Van der Pekbuurt, there is a larger imbalance between the different stakeholders. The fieldlab in Purmerend also has a consortium located within the neighbourhood. This consortium is

established by the municipality. The respondent from Purmerend addressed that it is very helpful to have a model house in the neighbourhood which functions as meeting point and information centre. This increases accessibility and it shows what it takes to implement these changes in people their own house. Garyp organized something similar with the Energzyhûs.

Garyp experienced successful collaborations in the past and this facilitates the current collaboration, while in the Van der Pekbuurt some new (and for them unexpected) difficulties occurred.

What emerged from this research is that contextual factors are important for the progress of the process and that they have a large influence on the way the stakeholders operate. This is also confirmed by both the respondents from PAW and Purmerend. The municipalities who signed up for the fieldlabs are often progressive municipalities with stakeholders that pursue sustainable ambitions. Policy windows are not specifically necessary to initiate the process, because stakeholders often try to match the opportunities with other renovations in the neighbourhoods. This is also relevant for homeowners when people want to renovate their own homes or when they just bought a new house. These ‘natural’ moments make it for both institutions as residents more accessible to participate in these processes.

Table 16: Results drivers

Drivers		Results
Institutional Design (107)	Garyp (49)	<ul style="list-style-type: none"> • The directors of the process ensured a representative stakeholder group • There was a clear definition of roles and therefore all stakeholders knew what was asked from them. This influenced the process positively
	Van der Pekbuurt (58)	<ul style="list-style-type: none"> • There was unclarity on the rules of the process. This influenced the process negatively • There was a lacking transparency, and this influenced the commitment to the process
Leadership (65)	Garyp (37)	<ul style="list-style-type: none"> • There was a clear leader in the process • The municipality allocated the process at local level and facilitated the stakeholders where needed

	Van der Pekbuurt (28)	<ul style="list-style-type: none"> • There were various opinions who was taking the lead in the process this resulted in unclarity and uncertainty
Interdependency (30)	Garyp (14)	<ul style="list-style-type: none"> • The respondents did not experience a difficulty in interdependency because the largest part of the stakeholder group was private homeowners
	Van der Pekbuurt (16)	<ul style="list-style-type: none"> • The respondents were very aware of their interdependency • Also, interdependencies with ambitions and strategies outside the process have influence on the current process
Uncertainty (18)	Garyp (5)	<ul style="list-style-type: none"> • Uncertainty was not really experienced by the respondents from this case • Only the residents have uncertainties about how large the implementation of the transition is
	Van der Pekbuurt (13)	<ul style="list-style-type: none"> • Elements and information of the process are not always clear, this results in the fact that stakeholders do not always want to commit to the process

The institutional design of Garyp incorporates a clearer definition of roles where the stakeholders were more transparent and communicative towards each other. There was a clear definition in leadership as well. The respondent from PAW addresses that the roles for the municipalities differ for each fieldlab and that this is something which needs to be sorted out before the process takes off. Simply put: who takes the lead and in what kind of role? This implies that the other roles also should be defined clearly.

In the case of the Van der Pekbuurt this definition of leadership was unclear, and this resulted in uncertainty. The respondent from PAW addressed that for citizens to fully participate it is essential to have clarity about what the process entails and what choices can or cannot be made. This reduces uncertainty. A similar strategy was used for the fieldlab in Purmerend: the respondent illustrated that the from the get-go the team made clear which subjects should and should not be discussed within the process. These clear rules reduced uncertainty as well.

The respondents of the Van der Pekbuurt indicated that they were fully aware of their interdependency and that exactly that made the collaboration more difficult than anticipated beforehand.

Table 17: Results elements

Elements		Results
Trust (31)	Garyp (18)	<ul style="list-style-type: none"> • There is a high level of trust between the different stakeholders during the process • Due to earlier collaborations, there was already time to build trust between the stakeholders, this influences the current process positively
	Van der Pekbuurt (13)	<ul style="list-style-type: none"> • There has not been enough time yet to build a relationship between the stakeholders and this influences the level of trust • Due to lacking trust/transparency stakeholders don't want to commit to the process
Commitment to the process (49)	Garyp (29)	<ul style="list-style-type: none"> • Due to high levels of trust, professional attitude of the leaders of the process and the associations character, are stakeholders committed to the process • There is a large shared responsibility between the municipality and EKG
	Van der Pekbuurt (20)	<ul style="list-style-type: none"> • Stakeholders are aware of their interdependency and this makes the process difficult • The stakeholders do not yet expressed shared values and responsibilities
Mutual Understanding (67)	Garyp (30)	<ul style="list-style-type: none"> • The stakeholders share a goal and values • Due to transparency the stakeholders are aware of their interest and ambitions
	Van der Pekbuurt (37)	<ul style="list-style-type: none"> • Due to lack of transparency, stakeholders do not understand their motivations for certain decisions this influence the commitment to the process, but also the levels of trust
Intermediate outcomes (64)	Garyp (42)	<ul style="list-style-type: none"> • Positive experience concerning the transformations and residents who illustrate their experience give the process a boost • COVID-19 slowed down the association live and therefore also the worth of mouth within the village
	Van der Pekbuurt (22)	<ul style="list-style-type: none"> • The postponing of the renovations of the buildings of Ymere delays the process of the transformation

Face-2-Face Dialogue (33)	Garyp (21)	<ul style="list-style-type: none"> • Direct forms of communications increased trust and mutual understanding
	Van der Pekbuurt (12)	<ul style="list-style-type: none"> • Pre COVID-19 the stakeholders experienced direct communication as valuable and could increase the commitment to the process and mutual understanding
Legitimacy (59)	Garyp (38)	<ul style="list-style-type: none"> • Due to high levels of trust, stakeholders are assumed as trustworthy • Previous experience and the strategy of EKG makes the process and the stakeholders credible
	Van der Pekbuurt (21)	<ul style="list-style-type: none"> • The legitimacy of the process is difficult to analyse due to unilateralism of the data • Some respondents do think the process is not completely credible or the institutions involved are not fully trustworthy

The respondents of both cases emphasized upon the importance of mutual understanding and commitment to the process. While in the case Garyp there is a high amount of mutual understanding and commitment to the process, the contrary was the case in the Van der Pekbuurt where due to lack of transparency and lack of trust this amount of mutual understanding a commitment was underdeveloped. The respondent of Purmerend illustrates that to establish trust between the different stakeholders, you need a lot of time. Professionals should reserve this time in the process. The respondent claimed that when you want to get people on board, you need to understand what their situation is. This mutual understanding increases the trust between the stakeholders and therefore results in a higher amount of commitment to the process. What was helpful in Purmerend, and what also came forward in the case of Garyp, was the human touch to the process. The process was accessible: the stakeholders operated on personal level. This increased the level of trust and as a result was beneficial for other elements in the process, which were constantly changing (but, again, that is exactly what a collaborative governance process entails). As the respondent from

Purmerend claims: *“It is a process, not a project. Companies, municipalities and other governmental institutions are used to push these processes in a project format” (R13).*

5 Conclusion

5.1 Starting conditions

Which starting conditions are present when initiating collaborative governance processes for the transformation to gas-free neighbourhoods?

The starting conditions indicate the situation which is present before the collaborative governance has taken off. The following conclusions can be made concerning the starting conditions.

Based on the analysis it appears that in collaborative governance processes not all stakeholders have the same power and knowledge. It is beneficial for the progress of the process if these imbalances are reduced. When the professional stakeholders ensure that the non-professional stakeholders are informed, it results in a better and more equal start between all stakeholders. Elements that contribute to the reduction of these imbalances are: the fact that the process is made accessible for stakeholders to participate since it will otherwise cost too much time to be involved; and all the stakeholders involved should share the same information on the process.

The history between the involved stakeholders is a starting condition, which expressed itself during the interviews and from the documents as well. A history of difficult cooperation does not mean that a process cannot start, but it does influence the level of level of trust. Also, when stakeholders worked together before, they already have a certain degree of mutual understanding about each other's interest and ambitions. This can ease the collaboration as well. This was confirmed by the respondents from the case of Garyp.

Contextual factors do vary for each case. However, they have influence on the stakeholders interaction, what the strategy is in their process, and what their point of view is concerning the issue which is addressed in the collaborative governance process. The municipalities who applied for the fieldlabs of PAW were mostly predecessors concerning sustainable ambitions. Especially the socio-economic context came forward as important for this research. Policy windows for this transition did not operate as introduced in the literature. The stakeholders operated more on the basis of co-opportunities to take disconnecting from natural gas into

account. This works on different scale levels, both for large implementations such as renovations, but also for the residents more on human scale level like changing to a different house or do renovations at their property.

To answer the research question: all starting conditions were present in both cases. If there are minor imbalances in resources between the stakeholders, incentives to participate and positive experience of cooperation in the past, this had a positive effect and influence on the progress of the process. If this is not the fact, this still can mean that the process is taking place, but with more apparent difficulties. Also, a policy window is often more expressed as a co-opportunity to start the process and the contextual factors, and identity of the stakeholders and case influences the process.

5.2 Drivers

Which drivers positively influenced the collaborative governance process?

Drivers are the elements which ensure that the process successfully unfolds and are different from starting conditions due to the fact that they directly influence the process.

Clear institutional design and leadership expressed itself as important drivers to positively influence the collaborative governance process. Concerning the institutional design, especially transparency and clear definition of roles are elements which influence the process positively. As the respondent of PAW addressed as well, it could be helpful to bundle the information gatherings on the process with all stakeholders. In this way the stakeholder has a clear image who is represented. On the other hand, clear rules within the process are not mentioned as the important element. However, if the rules or the way of doing is unclear, this does influence the process negatively. Therefore, in this research it is concluded that when everyone knows what the strategy entails, this garners a positive attitude and influence on the process. Also, the use of deadlines and planning were not mentioned as very important in this research. What was mentioned was the conventional way of focussing on achieved numbers (in this case, houses disconnected from natural gas), whereas this process is too complex and other outcomes can be appointed as successful as well.

Quality of leadership and clear leadership came forward in this research as important as well. For all professional and non-professional stakeholders it should be clear what this leadership role entails. In this way, stakeholder residents also know who to address for questions concerning the process. The stakeholders who were aware of their interdependency had difficulties to start the collaborative governance process. It did give them insights on the process and which stakeholders were involved. One could argue that this is also an intermediate outcome. When the process had a high uncertainty, stakeholders were less willing to commit to the process.

To summarize, a clear institutional design, low uncertainty, low interdependency and good and clear quality of leadership are drivers that influence the collaborative governance process positively.

5.3 The elements of collaborative governance

Which elements of collaborative processes contributes to successful outcomes?

Collaborative governance is a complex process and multiple elements come forward in this process.

Based on this research, one could argue that trust is an element which is intertwined with many other elements in advance of and within the collaborative governance process. Time to build trust can happen in two ways, because of previous collaboration the stakeholders are already familiar and established a level of trust. Or by scheduling time where the stakeholders can get acquainted with one another. Both involves time and therefore one could argue that time and trust go hand in hand.

The other elements are discussed separately below.

Commitment to the process

When high levels of trust are established, and it is clear for stakeholders what is expected from them in the process, and they feel responsible over the process, they feel more likely to commit to the process. Especially low uncertainty and high trust turned out to be important

for stakeholders to commit. When the stakeholders commit, there will be intermediate outcomes which boosts the process.

Mutual understanding

Based on this research it became clear that mutual understanding is also intertwined with several elements of the collaborative governance process. Transparency is necessary to get insight in each other's interest in the process, but also ambitions and values. For most stakeholders it is important to substantiate why certain choices are made in a process. Good institutional design can incorporate transparency in the process. With transparency, stakeholders are also more likely to trust each other and come forward with their interest. This, again, influences the commitment to the process.

Intermediate outcomes.

Positive tangible and intangible outcomes have a positive influence on the progress of the collaborative governance process. Negative outcomes often delayed the process.

Face-to-face dialogue

Due to the COVID-19 situation, the influence of face-to-face dialogue became quite clear according to the stakeholders. Without meetings with the residents, it was more difficult to tell the story and increase the mutual understanding. Between the professional stakeholders, due to the fact that they speak the same language or jargon, physical face-to-face dialogue was not necessary as much. For them, meetings through digital platforms seemed sufficient. However, when involving the non-professional stakeholders, such as the residents of the fieldlabs, it was much more difficult to get them fully informed and involved. Also, quick and easy interaction was missed.

Legitimacy

Trustworthy and credible stakeholders, but also a credible process is considered important for the legitimacy of the process. In response to this research, it is difficult to base conclusions on this subject because for the case of Garyp stakeholders were very favourable over the different stakeholders. Due to the fact that the stakeholders were trustworthy and credible,

people wanted to commit to the process because they believed it would lead to a good results. However, in the case of the Van der Pekbuurt, these elements were unilateral. Therefore, it is difficult to base a conclusion on this subject. One could say that the process in Garyp has a high legitimacy and for the case in Van der Pekbuurt the opinions on this vary.

5.4 Interrelatedness of the concepts

How do the elements of collaborative governance relate to each other for the transformation to gas-neutral neighbourhoods?

Collaborative governance is a complex process with multiple elements. This research tried to gain an understanding of how these elements interrelate. In figure 8 the complete conceptual framework conducted from this research is visualized.

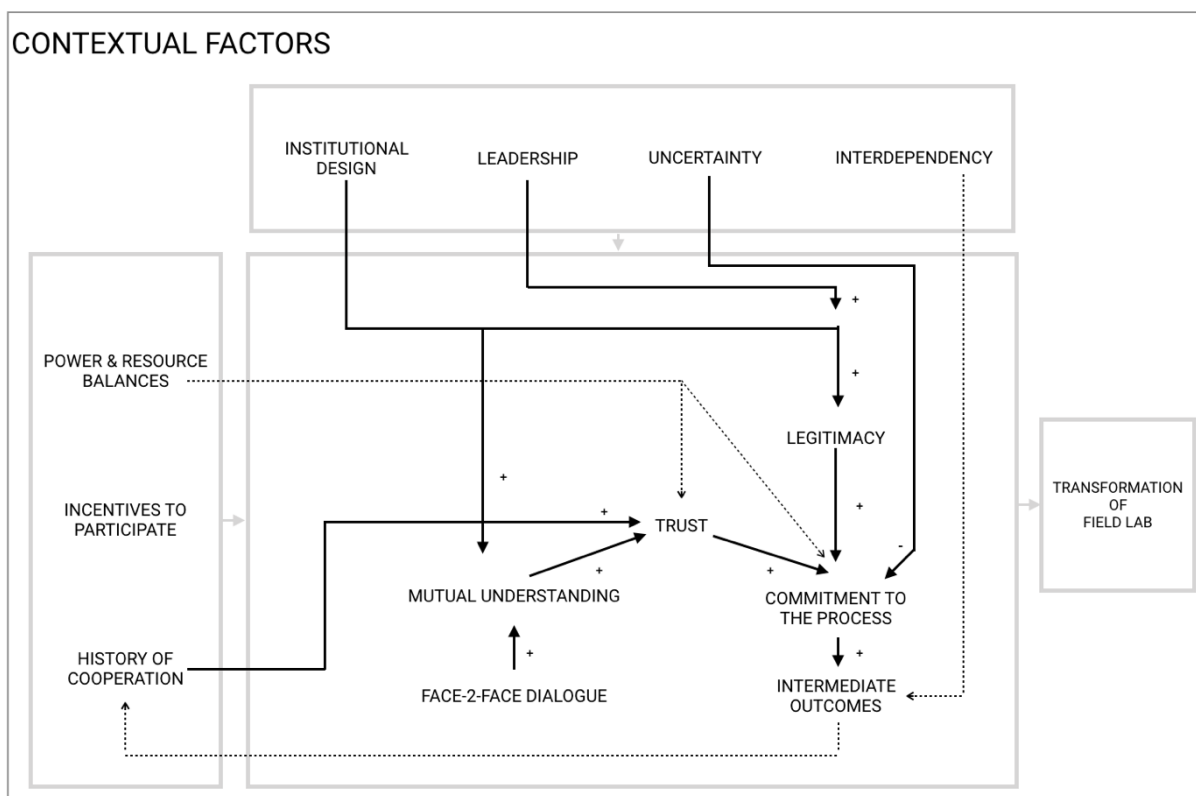


Figure 8: Complete conceptual model as result from research

Derived from this research, the starting conditions influence elements within the process. First of all, contextual factors and documents are mentioned by the respondents as highly important. They are intertwined with the process. A possible history of cooperation between stakeholders does influence the trust-building in the process. When stakeholders worked

together in the past, they have had time to build a relationship. Especially successful cooperation influences the level of trust *positively*. Resources and knowledge balance were addressed as important, however it was found not to have a strong relation to other elements. This might influence the trust-building and the commitment to the process.

As introduced in par. 5.2, good institutional design, clear leadership and low uncertainty and low interdependency influenced the process *positively*. Also, in this research there is an attempt made to find interrelatedness between the different drivers and elements in the process. Good institutional design influences mutual understanding and legitimacy *positively* due to clear rules, good definition of roles and transparent stakeholders. The process becomes more credible and trustworthy and the stakeholders get insight in each other's interest. Good leadership influences legitimacy because it makes both the process and the stakeholders more credible when a good leader invests time and energy in the process. High uncertainty has a *negative* influence on the commitment to the process, since people are less willing to commit if they do not know what is expected from them in the process. There *might* be a relation between interdependency and intermediate outcomes. While this is not very clear, if stakeholders are aware of their interdependency, they try to make an effort to get to know the other stakeholders. This can result in tangible and intangible outcomes, such as a strengthened relationship, increased social cohesion and learning from experiences.

The elements of collaborative governance are also interrelated. Mutual understanding influences the trust level, because stakeholders have insight in each other's interest, values and ambitions. With high levels of trust, stakeholders are more willing to commit to the process and invest in this process. Legitimacy influences commitment to the process because people are more likely to participate when the process is credible and the stakeholders are trustworthy. Face-to-face dialogue mostly influences mutual understanding, which results in higher levels of trust. The last relationship which was discovered with the process is the fact that if people commit to the process, intermediate outcomes are achieved which in turn boost the process or might delay when they are *negative*. Also, there *might* be a relationship between outcomes and history of cooperation in a new decision round. As collaborative governance processes take a lot of time, good experience might influence the standpoints between the stakeholders towards each other.

5.5 Main question

Which starting conditions and drivers express themselves as important for collaborative governance to happen and which elements within this process contribute to successful outcomes in the transformation to gas-free neighbourhoods in the Netherlands?

Based on this research, the starting conditions which expressed themselves as important were the fact that power and resources were balanced between the stakeholders and the context and identity of the case and stakeholders were very important for successful outcomes but also to initiate the collaborative governance process. Next to this, a clear institutional design, low uncertainty, low interdependency and good and clear quality of leadership will have a positive influence on the process of collaborative governance. And the elements within the process, which were indicated as most important, were trust-building and mutual understanding, which eventually result in commitment to the process. This is a necessity to achieve positive outcomes.

6 Discussion

6.1 Recommendations for collaborative governance processes

This research brought different insights to the concept of collaborative governance and therefore I would like to make some practical recommendations for professionals in this field.

1) Understand your case and stakeholders

In this research I worked with cases that were quite different, and this showed that the contextual factors are a very important starting condition for the rest of the process. Society is too complex nowadays and therefore blueprint planning and policy implementation is an impossible task and out-of-date. Even within a city, one neighbourhood can differ greatly from another. Understand what the context is of your case, who the stakeholders involved are, and what their ambitions are, what their role within the process is. Also discuss these ideas and interpretations with the stakeholders. Take into account that the process is time-consuming.

2) Disconnecting from natural gas is a challenge

Many stakeholders are involved. What makes the issue this complex is the fact that these stakeholders are involved on different scale levels. Both the national government, as well as regular residents are involved in this topic. Next to this, how to disconnect from natural gas and which strategy the stakeholders prefer, is situation-specific and therefore recommendation 1 (see above) is important. Also, disconnecting from natural gas is intertwined with different themes in spatial planning: it is a physical intervention and therefore looking at the edges of the issue other challenges can be taken into account as well, such as renovations or upgrades of public space. This can contribute to broadening the support for the issue at hand. Keep in mind that disconnecting from natural gas demands a new strategy which impacts both professionals as residents.

3) The importance of the institutional design of the process

From this research, institutional design as a driver, which can influence the process positively, came forward as important. Define clear rules and roles and also discuss this with the stakeholders involved on different scale levels and in different decision rounds.

4) Make the process human and accessible

This might seem like a technical transition, however these are implementations which take place behind residents' doorstep, and therefore this transformation is for a large part a social transition as well. It is new and complex, so ensure that stakeholder residents are informed and involved in an accessible way. Successful examples showcased that the human touch to the process and great examples where residents could transfer information are key for supportive stakeholders.

6.2 Reliability, validity and limitations

Due to the fact that the main results of this research were discussed with external experts, who thought many of the results from this research were also relevant in their experience, I consider that the main conclusions also can be generalized with other cases. However, the fieldlabs from PAW are a learning program and they also have their own learning department that tries to take lessons from the fieldlabs and inform future fieldlabs. However, results are time related, things can change because it is still an ongoing process.

Also, for this research the main stakeholders from each case were interviewed. However, the executive actors were not respondents in these interviews because, advised by other respondents, they are more executive and are not involved in decision-making. For the case Van der Pekbuurt it would have been interesting to also interview another housing cooperation, even though Ymere is taking the lead in renovations. Combining this with disconnecting the buildings from natural gas, it would have been interesting to see when other housing corporations are taking this step, especially now when the renovations are delayed. A limitation for this case was the fact that this process is not on-hold due to the delay of renovating the buildings.

Furthermore, to not disturb collaborations between the fieldlab Garyp and WoonFriesland, WoonFriesland was not interviewed.

6.3 Reflection

6.3.1 Theoretical reflection

The theory introduced that starting conditions are forming the starting points for the collaborative governance process and that drivers can influence the process positively or negatively. However, these concepts do have a certain overlap. Also, starting conditions can influence the process and do not only set the direction.

As introduced in the conclusion, the elements of collaborative governance, which expressed themselves in the research very clearly, were trust-building and mutual understanding. What is interesting to conclude is that the interrelations between the elements for this research are different than the relations introduced by the model from Ansell and Gash. While they emphasized on a circular relation between face-to-face dialogue to trust-building to commitment to the process to shared understanding to intermediate outcomes to face-to-face dialogue again (figure 5), in this research the relation between trust and commitment to the process is similar. Yet, the other elements relate differently to each other. For the collaborative governance process, mutual understanding by a good institutional design influence trust-building, which contributes to commitment to the process which results in intermediate outcomes. Legitimacy was added and this also influenced the commitment to the process. The element of face-to-face dialogue was only one relation found with mutual understanding (figure 8). With this knowledge derived from this research it further confirmed the relation between trust and commitment to the process.

Elements which could be elaborated more on were the short lines between the stakeholders, and whether this is a contextual factor or this is related to the strategy of the involved stakeholders. This is similar for the element accessibility for the process. Another element which was difficult to locate were the interdependencies with agreements and ambitions outside the process of the fieldlab. This might be because the collaborative governance process should be approached more like Emerson et al., with multi-layered approach, especially due to the closer involvement of the national government from time to time at the fieldlabs.

6.3.2 Methodology reflection

Lots of data was gathered by the use of triangulation. In future research many elements from the collaborative governance process would also be possible to gather through a survey. Semi-structured interviews contributed to gain an understanding of the relations between the different elements, and respondents could emphasize what they view as important in the process and why.

Due to some sensibilities, lack of time and contact details or low involvement not all stakeholders which were introduced in the report of EIB were interviewed for this research.

What a very interesting feature of this research was, was to explore dilemmas from the two case studies with other experts who are also involved in the fieldlabs of the PAW programme but not involved in these specific case studies. This confirmed some of the findings in this research.

6.3.3 Scientific relevance

This research strengthened the knowledge on collaborative governance, with focus on new complex challenge concerning sustainability challenges. This research contributed especially to the insights of what elements drive collaborative governance processes with a positive influence. Also, this research introduced a strong relationship between mutual understanding and trust-building and commitment to the process within the collaborative governance processes. This research also generated insights in the complexity of the sustainability challenges and what role governance can play in this transformation.

6.3.4 Suggestions for further research

For future research I suggest testing out the derived framework from this research on other case studies. For this research only two fieldlabs from the first round of PAW were researched. However, in 2021 PAW is starting with the third round of fieldlabs. It might be interesting to find out how the collaborative governance process have changed over time. Also, The Netherlands is planning to disconnect all buildings from natural gas by the year 2050, therefore this topic and also this concept (collaborative governance is a very time-consuming process) would be interesting to study in a longitudinal research to see how the process

changes over time. What lessons are learned concerning collaborative governance and what challenges are still present?

Bibliography

Altman, J.A. & Petkus, E. (1994). Toward a stakeholder-based policy process: An application of the social marketing perspective to environmental policy development. *Policy Sciences*, 27, 37-51.

Ansell, C. (2012). Collaborative Governance in Levi-Faur, D. (Ed.). (2012). *The Oxford handbook of governance*. Oxford University Press.

Ansell, C. & Gash, A. (2007). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, 18 (4), 543–71

Booher, D. E. (2004). Collaborative governance practices and democracy. *National Civic Review* 93: 32–46

Bouw, K., de Boer, A. M., Elbert, S.P. & Wiekens, C.J. (2021). Sociale factoren in de wijkaanpak: Garijp, rapportage data-analyse. Groningen.

Bryson, J.M., Crosby, B.C., Middleton Stone, M., (2006). The Design and Implementation of Cross-Sector Collaborations: Propositions from the Literature. *Public Administration Review*. December, 44-55

BZK (2021). *Kamerbrief bewonerstevredenheidsonderzoek en de derde ronde proeftuinen*. Retrieved on <https://www.rijksoverheid.nl/documenten/kamerstukken/2021/06/29/kamerbrief-over-bewonerstevredenheidsonderzoek-en-derde-ronde-proeftuinen>

BZK. (n.d.). *Convenant Grootchalige proeftuin met ee aardgasvrije wijk*. Retrieved on <https://www.rijksoverheid.nl/onderwerpen/aardgasvrije-wijken/documenten/convenanten/2019/03/21/amsterdam---convenant-over-grootchalige-proeftuin-met-ee-aardgasvrije-wijk-kopie>

Cohen, M.D, J.G. March & J.P. Olsen. 1972. 'A garbage can model of organizational choice,' *Administrative Science Quarterly* 17, 1, 1–25.

Doberstein, C. (2016) Designing Collaborative Governance Decision- Making in Search of a 'Collaborative Advantage', *Public Management Review*, 18(6), 819-841.

EIB (2021). *Proeftuinen aardgasvrije wijken, Een maatschappelijke-economische analyse van de proeftuinen*. Retrieved on <https://www.eib.nl/publicaties/proeftuinen-aardgasvrije-wijken/>

EKG (n.d.) *Energzyhûs*. Retrieved on <https://aardgasvrijgaryp.nl/energzyhus/>

Emerson, K., Nabatchi, T., & Balogh, S.B. (2011). An Integrative Framework for Collaborative Governance. *Journal of Public Administration Research and Theory*, 22, 1-29.

Emerson, K. & Gerlak, A.K., (2014). Adaptation in Collaborative Governance Regimes. *Environmental Management*. 54. 768-781

Emerson, K. & Nabatchi, T. (2015). Evaluating the Productivity of Collaborative Governance Regimes: A Performance Matrix, *Public Performance & Management Review*, 38:4, 717-747

Gemeente Amsterdam¹. (2018). *Aanbiedingsbrief aanvraag aardgasvrije proeftuin*. Retrieved on <https://www.rijksoverheid.nl/onderwerpen/aardgasvrije-wijken/documenten/convenanten/2019/03/21/amsterdam---convenant-over-grootschalige-proeftuin-met-een-aardgasvrije-wijk-kopie>

Gemeente Amsterdam². (2018). *Uitvoeringsplan proeftuin aardgasvrije wijken*. Retrieved <https://www.rijksoverheid.nl/onderwerpen/aardgasvrije-wijken/documenten/convenanten/2019/03/21/amsterdam---convenant-over-grootschalige-proeftuin-met-een-aardgasvrije-wijk-kopie>

Gemeente Tytsjerksteradiel¹. (2018). *Aanbiedingsbrief aanvraag aardgasvrije wijken gemeente Tytsjerksteradiel*. Retrieved on <https://www.rijksoverheid.nl/documenten/convenanten/2019/01/29/tytsjerksteradiel---convenant-over-grootschalige-proeftuin-met-een-aardgasvrije-wijk>

Gemeente Tytsjerksteradiel². (2018). *Collegebesluit aanvraag proeftuin aardgasloze wijken Garyp*. Retrieved on

<https://www.rijksoverheid.nl/documenten/convenanten/2019/01/29/tytsjerksteradiel---convenant-over-grootschalige-proeftuin-met-een-aardgasvrije-wijk>

Gemeente Tytsjerksteradiel³. (2018). *Uitvoeringsplan aardgasvrij Garyp*. Retrieved on <https://www.rijksoverheid.nl/documenten/convenanten/2019/01/29/tytsjerksteradiel---convenant-over-grootschalige-proeftuin-met-een-aardgasvrije-wijk>

Gray, B. & Wood, D.J. (1991). Collaborative Alliances: Moving From Practice to Theory. *Journal of Applied Behavioral Science*. 27 (1). 3-22

Hooghe, L. & G. Marks. 2003. Unraveling the central state, but how? Types of multilevel governance. *The American Political Science Review* 97(2): 233-243.

Innes, J.E. & Booher, D.E. (1999). Consensus Building and Complex Adaptive Systems, *Journal of the American Planning Association*, 65:4, 412-423

Kingdon, J.W. (2013). *Agendas, Alternatives, and Public Policies*. Second edition. Harlow: Pearson.

Klijn, E.H. (2008). Governance and Governance Networks in Europe, *Public Management Review*, 10:4, 505-525.

Klimaatakkoord. (2019). *Afspraken van het klimaatakkoord*. Retrieved on <https://www.klimaatakkoord.nl/klimaatakkoord>

Lauwers, W. (2019). *Proeftuin uitgelicht: Garyp*. Retrieved on <https://aardgasvrijewijken.nl/nieuws/1402569.aspx?t=Proeftuin+uitgelicht%3A+Garyp>

Mintzberg, H., D. Raisinghani & A. Therot. 1976. 'The structure of unstructured decision processes,' *Administrative Science Quarterly* 21, 2 (June), 246-75.

PAW¹. (2019). *Verslag Garyp*. Retrieved on <https://www.rijksoverheid.nl/documenten/convenanten/2019/01/29/tytsjerksteradiel---convenant-over-grootschalige-proeftuin-met-een-aardgasvrije-wijk>

PAW². (2019). *Verslag van der Pekbuurt*. Retrieved on <https://www.rijksoverheid.nl/onderwerpen/aardgasvrije-wijken/documenten/convenanten/2019/03/21/amsterdam---convenant-over-grootschalige-proeftuin-met-een-aardgasvrije-wijk-kopie>

PAW. (2020). *Proeftuin uitgelicht: Van der Pekbuurt, Amsterdam*. Retrieved on <https://www.aardgasvrijewijken.nl/nieuws/1562081.aspx>

PAW (n.d.). *Proeftuinen op de kaart*. Retrieved on <https://aardgasvrijewijken.nl/proeftuinen/huidigeproeftuinen/default.aspx>

Wittkämper, L. & Bakker, W. (2020). *Oplegnotitie tussenevaluatie Van der Pek*. RICO

Taylor, L. (2016). Case Study Methodology. In N. Clifford, M. Cope, T. Gillespie, S. French (Red.), *Key Methods in Geography* (pp. 581 - 595). London: SAGE Publications

Teisman, G.R. (2000). 'Models for research into decision-making processes: On phases, streams & decision-making rounds', *Public Administration* 78(4): 937–56.

Teisman, G.R. & van Buuren, A. (2013). Models for research into decision-making processes: On phases, streams, rounds and tracks of decision-making in Aralal Jr., E., Fritzen, S., Howlett, M., Ramesh, M., Wu, X. (Red.), *Routledge Handbook of Public Policy*. Oxon: Routledge.

Teisman, G.R. & J. Edelenbos. 2011. "Towards a perspective of system synchronization in water governance: a synthesis of empirical lessons and complexity theory." *International Review of Administrative Science* 77(1): 101-118.

Van Buuren, A. & Gerrits, L. (2008). Decisions as Dynamic Equilibriums in Erratic Policy Processes, *Public Management Review*, 10 (3), 381-399

Van den Berg, J. (2021). Na twee jaar experimenteren in 'aardgasvrije wijken' zijn slechts 206 huizen van het gas af. *De Volkskrant*, 18-01-2021. Retrieved on <https://www.volkskrant.nl/nieuws-achtergrond/na-twee-jaar-experimenteren-in-aardgasvrije-wijken-zijn-slechts-206-huizen-van-het-gas-af~bf523a4d/>

van Popering-Verkerk, J., & van Buuren, A. (2015). Decision-Making Patterns in Multilevel Governance: The contribution of informal and procedural interactions to significant multilevel decisions. *Public Management Review*, 1-21.

Van Thiel, S. (2014). *Research Methods in Public Administration and Public Management*. Abington: Routledge.

Yin, R.K. (2003). *Applications of Case Study Research*. 2nd. Sage Publications: United States of America.

Ymere (2021). *Aanpak Van der Pekbuurt vertraagt*. Retrieved on <https://www.ymere.nl/media/2071/nieuwsbrief-februari-2021.pdf>

Appendix

Appendix 1: Indicator table

Concept	Definition	Dimension	Indicator
Starting conditions	The political, legal, socio-economic context and conditions which allow the collaboration process to happen and the resources the stakeholders bring in where the collaboration process is built upon, together with the incentives which moves them to participate and their previous collaboration (derived from a combination of Ansell and Gash, 2007; Emerson et al. 2011)	1. Equal power & resource balances between stakeholders	1.1 The stakeholders have time to participate
			1.2 The stakeholders have the knowledge to participate
			1.3 The stakeholders share the same information
			1.4 The stakeholders are representative for the whole stakeholder group
		2. Incentives to participate	2.1 The stakeholder only benefits from the outcomes if he participates in the process
			2.2 The stakeholder is aware that his participation is necessary for the success of the collaborative governance process
		3. History of collaboration between stakeholders	3.1 Previous experiences of collaborations influence the current collaborative governance process
		4. Contextual factors	4.1 The political, legal or socio-economic context of the stakeholders allow the collaborative governance process to happen
4.1 A policy window allows the collaborative governance process to happen			
Drivers	Drivers are the elements which ensure that the process successful unfolds and are different from starting conditions due to	5. Institutional design	5.1 The initiator of the process includes all stakeholders and ensures that the group is representative

	<p>the fact that how they operate can influence the process (Emerson et al., 2011).</p>		5.2 The collaborative governance process is the way to influence the outcomes of the process
			5.3 There are clear rules for the process
			5.4 The process is transparent
			5.5 There is a clear definition of roles
			5.6 The scope of the process is defined by deadlines and a planning
		6. Leadership	6.1 There is a stakeholder/organisation who takes the lead
			6.2 Energy and means are invested in the process
			6.3 Facilitating leadership
			6.4 Mediating leadership
			6.5 Intervening leadership
		7. Interdependency	7.1 The amount of interdependency that drives the stakeholders to collaborate
		8. Uncertainty	8.1 The amount of uncertainty that drives the stakeholders to collaborate
<p>Elements of collaborative governance process</p>	<p>A process of public decision-making that involves stakeholders from public, private and civic spheres that aim to implement a public policy or manage a public program and depends on several elements (Derived from a combination of Ansell & Gash, 2007; Emerson et al., 2011).</p>	9. Trust	9.1 There is mutual trust between stakeholders
			9.2 There is enough time to build a relationship between the stakeholders
		10. Commitment to the process	10.1 The amount of trust between the stakeholders
			10.2 The amount of mutual respect for each other's interests
			10.3 The amount of shared responsibility

			10.4 The stakeholders are aware of their interdependency
		11. Mutual understanding	11.1 The stakeholders share a goal
			11.2 The stakeholders have shared values
			11.3 The stakeholders agreed upon the objectives
			11.4 The stakeholders understand each other's interest due to transparency
			11.5 The stakeholders understand the need to collaborate to achieve the objectives
		12. Intermediate outcomes	12.1 The number of intermediate outcomes which influence the process (both tangible and intangible)
		13. face-to-face dialogue	13.1 There is a direct form of communication
			13.2 Direct communication contributes to mutual understanding
			13.3 Direct communication contributes to trust-building
		14. Legitimacy	14.1 The stakeholders can motivate why they participate in the process
			14.2 The stakeholders are trustworthy
			14.3 The stakeholders are credible
			14.4 The process is credible

Appendix 2: Analysed documents

General		
<u>Nature of document</u>		<u>Reference in text</u>
Proeftuinen aardgasvrije wijken, een maatschappelijke-economische analyse van de proeftuinen.		EIB (2021)
Kamerbrief bewonerstevredenheidsonderzoek en de derde ronde proeftuinen		BZK (2021)
Case specific		
<u>Case</u>	<u>Document</u>	<u>Reference in text</u>
Garyp	Proeftuin uitgelicht: Garyp	Lauwers (2019)
Garyp	Aanbiedingsbrief aanvraag aardgasvrije wijken gemeente Tytsjerksteradiel	Gemeente Tytsjerksteradiel ¹ (2018)
Garyp	Collegebesluit aanvraag proeftuin aardgasloze wijken Garyp	Gemeente Tytsjerksteradiel ² (2018)
Garyp	Uitvoeringsplan aardgasvrij Garyp	Gemeente Tytsjerksteradiel ³ (2018)
Garyp	Verslag Garyp	PAW ¹ (2019)
Garyp	Sociale factoren wijkaanpak: Garijp	Bouw et al. (2021)
Van der Pekbuurt	Proeftuin uitgelicht: Van der Pekbuurt	PAW (2020)
Van der Pekbuurt	Convenant Grootschalige proeftuin met een aardgasvrije wijk	BZK (n.d.)
Van der Pekbuurt	Aanbiedingsbrief aanvraag aardgasvrije proeftuin	Gemeente Amsterdam ¹ (2018)

Van der Pekbuurt	Uitvoeringsplan proeftuin aardgasvrije wijken	Gemeente Amsterdam ² (2018)
Van der Pekbuurt	Verslag Van der Pekbuurt	PAW ² (2019)
Van der Pekbuurt	Oplegnotitie tussenevaluatie Van der Pek	RICO (2020)

Appendix 3: List of respondents

	Respondent	Fieldlab
R1	Municipality Tytsjerksteradiel	Garyp
R2	Project leader EKG	Garyp
R3	OVG & resident	Garyp
R4	Resident	Garyp
R5	Resident	Garyp
R6	Municipality of Amsterdam	Van der Pekbuurt
R7	!Woon	Van der Pekbuurt
R8	Vattenfall	Van der Pekbuurt
R9	Ymere	Van der Pekbuurt
R10	Board tenants association & resident	Van der Pekbuurt
R11	Chair VVE & resident	Van der Pekbuurt
R12	PAW	Extern
R13	Project leader fieldlab Purmerend	Extern

Appendix 4: Topic list

Informatie vooraf

- *Bedankt voor jullie tijd*
- *Start met het uitleggen van het doel van dit onderzoek: Ik doe onderzoek naar elementen van 'collaborative governance', dit is een vorm van besturen waarbij alle belanghebbende betrokken worden in het samenwerkings- en besluitvormingsproces. Na aanleiding van het 'Paris Agreement' en het 'Klimaatakkoord' zijn in Nederland verschillende proeftuinen gestart om huizen van het gas af te halen. De case 'Van der Pekbuurt'/Garyp waarvoor ik u interview is hier een van.*
- *Elementen van 'collaborative governance' waar ik onderzoek naar doe zijn de starting conditions, drivers, elements of collaborative governance process die resulteren in de transformatie naar aardgasvrije wijken*
- *Er is geen goed of fout! Het gaat erom hoe jullie vanuit jullie rol als belanghebbende bij de proeftuin het samenwerkingsproces hebben ervaren en wat jullie hier van belang voor achten.*
- *Geeft u toestemming voor het opnemen van dit interview, het interview wordt getranscribeerd en het transcript wordt vervolgens alleen gebruikt voor dit onderzoek*

Achtergrond

- Kunt u, uzelf introduceren? Functie, achtergrond
- Hoe bent u betrokken bij de transformatie van Proeftuin 'Van der Pekbuurt'/Garyp

Small talk, understand background of stakeholder, background info on fieldlab

Starting conditions

Starting conditions gaan over de condities die voorafgaand aan het proces zorgen dat de gezamenlijke besluitvorming, dus het betrekken van alle belanghebbende, plaats vindt.

- *Waarom vindt het aardgasvrij maken van proeftuin juist nu plaats?*
 - *Onder welke condities (legal, social, economic) en waarom juist deze case*
- *Wat zijn de redenen voor u als belanghebbende om mee te doen aan dit proces?*
 - *Incentives*
- *Heeft u/uw organisatie vaker samengewerkt met deze belanghebbende bij de proeftuin van [case]?*
 - *Doorvragen of dat invloed heeft gehad op de huidige samenwerking?*
- *Welke condities denkt u dat het belangrijkste bij [case] waarom de transformatie naar aardgasvrije wijken in deze proeftuin wel in gang gezet kan worden?*

To answer RQ1, get insight in context, history of cooperation, incentives to participate

Drivers

Drivers gaat over de elementen die het besluitvormingsproces positief of negatief kunnen beïnvloeden

- Kunt u wat vertellen over hoe het design van het proces, hoe zit het proces in elkaar, welke elementen?
 - *Doorvragen over rolverdeling, tijdsplanningen, deadlines, regels*
 - *Gaat het besluitvormingsproces via één platform? In andere woorden, werken er nog andere partijen parallel ook aan dit project?*
- Wie zijn de nemen de leiding in dit proces?
 - *Doorvragen waarom, wat hun rol is, hoe dit zich uit*
 - *Facilitation, mediation or intervene?*
- Waarom is het zo'n moeilijk proces?
 - *Complexity and interdependency*
- Welke drijvers denkt u dat het gezamenlijke besluitvormingsproces positief beïnvloeden?

To answer RQ2, ask questions about possible institutional design, leadership, complexity and role of these drives to influence process positively

Collaborative governance process

Deze laatste categorie gaat echt over het besluitvormingsproces, dus hoe alle belanghebbende (of misschien zijn sommige keuzes niet door alle belanghebbende gezamenlijk gemaakt) tot bepaalde keuzes zijn gekomen en hoe dit leidt tot een succesvolle uitkomst van het proces. In dit geval aardgasvrij maken van [case]

- Wat acht u van belang voor het gezamenlijke besluitvormingsproces
 - *Doorvragen naar de relaties van de stakeholders onderling (trust, face-to-face dialogue, commitment to the process)*
- Wat zijn de uw belangen als stakeholder? Wat zijn de belangen van alle stakeholders samen, hebben jullie een gezamenlijk doel?
 - *Doorvragen over hoe zo'n proces dan gaat*
- Wat zijn de belangen van de andere stakeholders? Kan u zich daarin vinden? Bent u het overal mee eens?
 - *Doorvragen over waarom wel/niet, hoe daar dan mee om wordt gegaan*
- Wat zijn de uitkomsten die al behaald zijn
 - *Doorvragen naar tangible en non tangible*
 - *Doorvragen waarom dit belangrijk is*
- Wat denkt u dat er in het gezamenlijke besluitvormingsproces de belangrijkste elementen zijn waarom jullie in jullie [case] wel succesvolle uitkomsten hebben?

To answer RQ3/4, ask about different elements within collaborative governance, relation between elements and what is considered most important

Afsluitend

- Zijn er nog elementen die we niet hebben besproken, maar wel aanwezig zijn?

- Wat hoopt u voor de toekomst van dit proces?
- Heeft u nog belangrijkste stakeholders die ik zou moeten spreken?
- Zijn er nog documenten binnen uw organisatie die mij meer inzichten kunnen geven in de elementen die wij besproken hebben vandaag?
- Bedanken, nog vragen?

End of interview, ask if there is anything to add, if there are other documents and respondents which would be relevant for this research

Appendix 5: Recognition words for coding

Starting conditions		Recognition words Dutch	English translation
1. Equal power & resource balances between stakeholders	1.1 The stakeholders have time to participate	Tijdsintensief, tijd, arbeidsintensief, uren aan kwijt, geen zin in, druk, andere dingen aan je hoofd, in vrije tijd	Time intensive, time, men hours, not willing to, other things more important, spare time
	1.2 The stakeholders have the knowledge to participate	Ervaring, professionaliteit, bekwaam, kunnen, gedreven, meebeslissen, meedenken, opgeleid, portefeuille. Aannames, professionele partijen, mandaat, deskundigheid, kennis	Experience, professionalism, able to, decide upon, educated, assumptions, professional organization, mandate, knowledge
	1.3 The stakeholders share the same information	Delen van informatie, meekijken, adviezen krijgen, begeleiden, duidelijk voor iedereen, informatie niet gedeeld, afhaken, ontbreken, moeilijk	Sharing of information, receiving insights, getting advice, guiding, clear for everyone, information not shared, dropping out, difficult
	1.4 The stakeholders are representative for the whole stakeholder group	Alle organisaties, afgevaardigden, eigen inwoners, representatief, kritische groep, een kern, vooruitstrevend	All organisations, delegates, own inhabitants, representative, critical group, one core, progressive
2. Incentives to participate	2.1 The stakeholder only benefits from the outcomes if he participates in the process	Leren, subsidies, stimulans, interessant, samen gaan, deelnemen, meemaken, koppelen aan	Learning, subsidies, stimuli, interesting, together, connecting
	2.2 The stakeholder is aware that his participation is necessary for the success of	Elkaar beïnvloeden, elkaar nodig, samen, mee besluiten, afhankelijk,	Influence each other, together, decide, depend

	the collaborative governance process	doel bereiken, instemming, externe doelstellingen	upon, achieve goal
3. History of collaboration between stakeholders	3.1 Previous experiences of collaborations influence the current collaborative governance process	Veel samengewerkt, intensief, vaker, reputatie, successen, eerder, dynamiek, lastig, historie, niet soepel, dingen gebeurd, ervaringen werken door	Worked together, intensive, successes, often, history, dynamics, difficult, things happened, experiences
4. Contextual factors	4.1 The political, legal or socio-economic context of the stakeholders allow the collaborative governance process to happen	In het dorp, verenigingen, sociale cohesie, bereidheid, draagvlak, ambitieus, korte lijntjes, enthousiast, lokaal, toegankelijk, woningcorporaties, de overheid, betrokken, duurzaamheid, arm, lastig, type buurt,	In the village, associations, willingness, support, ambitious, short lines, local, accessible, housing corporations, sustainability, poor, difficult, type of neighbourhood
	4.1 A policy window allows the collaborative governance process to happen	Beschikbaar, toevallig, natuurlijk moment, renovatie, kansrijk, aanleiding, voorbereidingen	Available, by accident, rennovation, natural moment, possibility, occasion, reason, preparations
Driver			
5. Institutional design	5.1 The initiator of the process includes all stakeholders and ensures that the group is representative	Iedereen, in het dorp, belanghebbende, meenemen van stakeholders, meekrijgen, betrekken	Everyone, within the village, stakeholders, actors, get involved
	5.2 The collaborative governance process is the way to influence the outcomes of the process	Overleggen, centraal platform, essentieel, op andere niveaus, doorwerken	Consult, central platform, essential, different scale levels, influence

	5.3 There are clear rules for the process	Afgesproken, we hebben gezegd, besloten, geen regels, geen afspraak, regelgeving, het is nieuw, rules	Rules, we told each other, no agreements, no rules, deciding
	5.4 The process is transparent	Klein groepje, samen bepalen, transparantie, openheid, zichtbaar, communiceren, businesscase, open, boven water komen, eerlijk zijn	Small group, together, transparency, open, visibility, communicate, businesscase, open, comes to the surface, be honest
	5.5 There is a clear definition of roles	Rollen, wie doet wat, leiding nemen, ondersteunend, structuur, geen rolverdeling, taken	Roles, who does what, taking the lead, support, structure, no roles, tasks
	5.6 The scope of the process is defined by deadlines and a planning	Aantallen, planning, op het juiste spoor, uitvoeringsplan, per jaar	Numbers, planning, be on track, per year
	6. Leadership	6.1 There is a stakeholder/organisation who takes the lead	Projectleider, leider, aanspreekpunt, leiding, sturend, geen duidelijke leider, regisseur
6.2 Energy and means are invested in the process		Enthousiasme, intrinsieke motivatie, winsten, investeren, in het dorp landen, baten, middelen, tijd, in rekening nemen	Enthousiasm, intrinsic motivation, costs and benefits, land in the village, means, take for their account
6.3 Facilitating leadership		Faciliteren, traditioneel, ondersteunen, helpen, aanleveren	Facilitate, traditional, support, help, deliver
6.4 Mediating leadership		Sparren, inzicht krijgen, bij elkaar brengen, omgaan met	Discussing, insights, bringing together, handle
6.5 Intervening leadership		Actief beslissen, aan de slag, doen, keuzes maken, zeggen wat moet, hiërarchie, top down	Active decision-making, working on it, tells you what to do,

			hierarchy, top-down
7. Interdependency	7.1 The amount of interdependency that drives the stakeholders to collaborate	Wat is er nodig, veel vragen van, wie zijn er nodig, capaciteit, monitoren, afhankelijk	What is necessary, many questions, who needs to be involved, capacity, monitor, dependent
8. Uncertainty	8.1 The amount of uncertainty that drives the stakeholders to collaborate	Onzeker, onduidelijk, niemand weet waar je aan toe bent, open eindjes, onwetend, dingen veranderen, geen idee, wat moet er worden geïnvesteerd, angst	Insecure, unclear, nobody knows, open ends, unclarity, things change, no idea, what needs to be invest, unawareness, anxiety
Elements of collaborative governance process			
9. Trust	9.1 There is mutual trust between stakeholders	Vertrouwen, in elkaar geloven, weten waar je aan toe bent met elkaar, klik, goede voedingsbodem, gemeenschap, zij kunnen dat, institutioneel vertrouwen, onderling	Trust, believe in each other, know what is coming, connection, good starting point, community, they are able, institutional trust, mutual
	9.2 There is enough time to build a relationship between the stakeholders	Versnellen, tijd, elkaar beter leren kennen, intensief, goed met elkaar kunnen vinden	Accelerate, time, get to know each other, intensive, like each other
10. Commitment to the process	10.1 The amount of trust between the stakeholders	Er is vertrouwen, wij vertrouwen elkaar	There is trust, we trust each other
	10.2 The amount of mutual respect for each other's interests	Begrijpen, inzicht krijgen, vertellen wat je wilt, accepteren, er bij neerleggen	Understand, insight, tell what you want, accept, agree
	10.3 The amount of shared responsibility	Samen, uitdragen, medewerking van,	Together, present, working

		verantwoordelijkheid, gezamenlijk, wie draagt verantwoordelijkheid	together, shared responsibility, who is responsible
	10.4 The stakeholders are aware of their interdependency	Hebben elkaar nodig, getriggered, keuzes nog niet maken, meenemen in proces, niet meedoen	We need each other, triggers, don't make choices, don't participate
11. Mutual understanding	11.1 The stakeholders share a goal	Bereiken, samen, doel, gezamenlijk, neuzen dezelfde kant op	Achieve, together, goal, shared, in the same direction
	11.2 The stakeholders have shared values	Belangrijk, normen en waarden, ambities, het dorp, de wijk, gezamenlijke afspraken, eigen belangen, het leeft niet	Important, norms and values, ambitions, the neighbourhood, agreed upon, shared agreements, own interest, people are not aware
	11.3 The stakeholders agreed upon the objectives	Samen besloten, hoge ambities, zoeken wat we willen, draagvlak, tegenstrijdig	Decide together, high ambitions, what are we looking for, support, contrasting
	11.4 The stakeholders understand each other's interest due to transparency	Elkaar vertellen, overleggen, eerlijk zijn, onderbouwen, je weet van elkaar, delen met elkaar	Tell each other, discuss, be honest, support, know from each other, share
	11.5 The stakeholders understand the need to collaborate to achieve the objectives	Elkaar willen helpen, elkaar nodig hebben, regelmatig contact, delen van informatie, netwerk	Want to help each other, need each other, be in touch, share information, network
12. Intermediate outcomes	12.1 The number of intermediate outcomes which influence the process (both tangible and intangible)	Positief, negatief, stroef, makkelijk, woningen, van het gas af, elkaar leren kennen, gevoel van saamhorigheid, verbeteren,	Positive, negative, difficult, buildings, easy, learn from each other, social

		ambassadeurs, elkaar vertellen, leven, bewust worden, tijd, leren	cohesion, improve, ambassadors, life, be aware, time
13. face-to-face dialogue	13.1 There is a direct form of communication	Informatiebijeenkomsten, vergaderingen, bijeenkomsten	Information gatherings, meetings,
	13.2 Direct communication contributes to mutual understanding	Elkaar vertellen, mond op mond reclame, bereidheid, toegankelijkheid	Tell each other, mouth to work, willingness, accessibility
	13.3 Direct communication contributes to trust-building	Elkaar begrijpen, elkaar leren kennen, klik krijgen	Get to know each other, click
14. Legitimacy	14.1 The stakeholders can motivate why they participate in the process	Willen, deelname belangrijk, duurzaamheidsambitie, weten, begrijpen hoe	Want to, participate, sustainable ambitions, understand
	14.2 The stakeholders are trustworthy	Zijn te vertrouwen, doen goede dingen, hebben reputatie, poppetjes, organisaties, wantrouwen,	They are trustworthy, achieve good things, reputations, players, organisations, distrust
	14.3 The stakeholders are credible	Weten hoe ze het moeten doen, betrokken, investeren, fanatiekelingen	Know what to do, involve, invest, fanatics
	14.4 The process is credible	Iedereen is gelijk, doel op een bepaalde manier, omstandigheden zijn goed, overlegorganen, eerlijk, duidelijke aanpak, lastig, niet eerlijk	Everyone is equal, conventual way of doing, circumstances, consultative bodies, honesty, clear strategy, difficult, unfair

Appendix 6 Abstract Dutch Translation

Dit is een diepteonderzoek naar gezamenlijke besluitvormingsprocessen (*Collaborative Governance*). In 2018 presenteert de Rijksoverheid verschillende proeftuinen om te experimenteren met de transitie naar aardgasvrij op zowel technisch als sociaal vlak. Na drie jaar leren blijkt het een lastig proces te zijn, ook op bestuurlijk niveau. *Collaborative Governance* gaat over het samenbrengen van belanghebbende en hen betrekken bij besluitvorming. Het raamwerk wat voor dit onderzoek gebruik is, is een combinatie van Ansell en Gash (2007) en Emerson et al. (2011) en gaat uit van start condities, drijvers en het *collaborative governance process* voor succesvolle implementatie van de proeftuinen. Het onderzoek is uitgevoerd doormiddel van kwalitatief casestudie onderzoek bij de proeftuinen Garyp en Van der Pekbuurt. Resultaten laten zien dat succesvolle samenwerking uit het verleden kan bijdragen aan een soepel verloop van de huidige samenwerking, omdat er al een bepaalde vertrouwensrelatie is opgebouwd. Daarnaast is het van belang dat de stakeholders beschikken over een gelijkmatige basis van kennis met betrekking tot het proces, met name tussen de professionele en niet professionele partijen, zoals de inwoners. De professionele belanghebbende hebben hier een belangrijke rol in om dit te verzorgen. De drijver die een positieve invloed heeft op het proces is vooral een goed institutioneel ontwerp voor het proces; duidelijke regels, rolverdeling en verwachtingen moeten worden geschept tussen de verschillende stakeholders. Een hoge mate van transparantie draagt hieraan bij en werkt ook verder door in het proces. Wanneer stakeholders transparant zijn, wordt meer wederzijds begrip gecreëerd voor elkaars ambities, doelstellingen en waarden. Dit resulteert in meer vertrouwen waardoor alle belanghebbende zich sneller zullen committeren aan het proces. Er is in dit onderzoek dan ook een relatie gevonden tussen deze elementen.

Aanbevelingen zijn dan ook om de context van de case en belanghebbende volledig te doorgronden en begrijpen, zorg dat iedereen wordt betrokken met hetzelfde informatieniveau bij het proces. De uitdaging is complex en daarom is een duidelijk institutioneel ontwerp essentieel voor het proces, maar ook de aandacht voor het feit dat het om mensen gaat en dat daarom het proces ingestoken moet worden met een menselijke maat en toegankelijk zijn voor alle belanghebbende.